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Master of International Health

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**An Assessment of the Coverage, Boosters and Barriers of the
Out-patient Therapeutic Care for Severe Acute Malnutrition
in Albay Province, Philippines**

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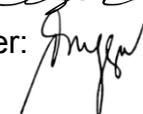
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CERTIFICATE OF ACCEPTANCE OF THESIS

The thesis attached hereto, entitled “**An Assessment of the Coverage, Boosters and Barriers of the Out-patient Therapeutic Care for Severe Acute Malnutrition in Albay Province, Philippines,**” prepared and submitted by **ARLENE P. CALLEJA**, in partial fulfillment of the requirement for the degree **Master of International Health** with specialization in Health Service Development is accepted.


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Accepted as partial fulfillment of the requirements for the degree of

MASTER OF INTERNATIONAL HEALTH


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APPROVAL SHEET

We, the members of the oral examination panel for **ARLENE P. CALLEJA** unanimously approved the thesis entitled “**An Assessment of the Coverage, Boosters and Barriers of the Out-patient Therapeutic Care for Severe Acute Malnutrition in Albay Province, Philippines.**” The thesis attached hereto was defended on August 27, 2021 at UPOU Los Baños, Laguna for the degree of Master of International Health is hereby accepted.

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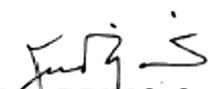
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ABSTRACT

Background: Severe acute malnutrition prevents a child from developing normally and increases mortality risk. It remains to be a major global health problem in children under 5 years of age. The community-based management of acute malnutrition (CMAM) is a nutrition intervention aimed at the early diagnosis and management of these children at the community level through the provision of therapeutic foods coupled with facility-based management for those with medical complications. In 2015, the Philippine Integrated Management of Acute Malnutrition (PIMAM) program was established to manage acute malnutrition in Filipino children of less than 5 years of age. Evaluating coverage which is one of the important indicators of CMAM program performance as well as identifying its boosters and barriers were imperative. The study aimed to assess the coverage, boosters, and barriers of the PIMAM Out-patient Therapeutic Care (OTC) in the province of Albay, Philippines.

Methods: This is a mixed method explanatory sequential research design adopting the Semi-Quantitative Evaluation of Access and Coverage (SQUEAC) tool. Accrual period was from January 2019 to present. Collection and analysis of quantitative routine program data from all the cities and municipalities of Albay followed by qualitative data collection through community assessment, key-informant interviews, informal group discussions and directly observing OTC processes were done. A small area survey to validate hypotheses regarding areas with high or low coverage was subsequently conducted.

Results: Analyses of secondary routine program data showed that only two out of the 18 cities and municipalities in Albay had complete program data where Municipality C had high coverage and Municipality K had low coverage in 2019. Qualitative methods identified the main boosters to program coverage which include (1) support from the Local Government Unit and the Municipal Health Officer; (2) presence of a well-trained OTC personnel; (3) OTC services are made available at the barangay level; (4) provision of door-to-door screening, follow-up and dispensing of nutrition commodity; (5) community health workers' willingness to learn and be trained; (6) supervision of the community health workers by the OTC personnel; (7) presence of community mobilization practices; (8) support of the barangay council; (9) acute malnutrition is not stigmatized; and (10) caregivers' awareness and acceptance of the PIMAM program. Barriers on the other hand appeared to be more significant which include (1) limited budget from the Local Government Unit; (2) Ready-to-Use Therapeutic Food (RUTF) stockouts; (3) inadequate number of trained OTC personnel; (4) gaps in anthropometric measurements; (5) insufficient community mobilization; (6) community health workers' lack of knowledge and training on PIMAM; (7) community's lack of knowledge on malnutrition and the PIMAM; (8) caregivers' laziness and indifference on their child's condition; (9) RUTF feeding difficulties; and (10) COVID-19 pandemic stopped community mobilization and OTC admissions. The small area survey results showed low coverage in both near and far barangays in Municipality C.

Conclusions and Recommendations: The study was able to present the level of PIMAM implementation in the different municipalities in Albay and was able to evaluate program data completeness and accuracy. Boosters can be considered as groundworks where opportunities to strengthen program access coverage rest. Barriers which validate coverage failure shall be addressed such that bridging gaps and augmenting inadequacies, together with adaptations to program protocols must be prioritized for an effective program implementation. The unavailability of RUTF and the COVID-19 pandemic could have explained the low coverage in both near and far barangays in Municipality C in the small area survey. The study therefore recommends the following: (1) provide measures to improve program data quality; (2) strengthen ownership of the PIMAM program by the Local Government Unit; (3) increase the number of PIMAM-trained personnel; (4) intensify OTC services at the barangay level together with the training of the community health workers on PIMAM; (5) increase the number and quality of community mobilization activities; (6) address shortage of RUTF; (7) consider program adaptations to PIMAM implementation during the COVID-19 pandemic; and (8) more research on the evaluation of the PIMAM in other regions of the country.

Keywords: Severe Acute Malnutrition, Community-based Management of Acute Malnutrition, Out-patient Therapeutic Care, program evaluation, access and coverage, boosters and barriers.

CHAPTER I

INTRODUCTION

Background of the Study

Acute malnutrition or wasting prevents a child from developing normally, robs them from achieving their full potential as an adult and even increases mortality risk. In 2018, 7.3% or 49 million children under five years old worldwide had acute malnutrition where two-thirds lived in Asia and a quarter lived in Africa (UNICEF, WHO, World Bank, 2019). Severe acute malnutrition (SAM) affects approximately 19 million of these children, accounting for 400,000 deaths annually (WHO, 2019). This global condition necessitates sustained and effective nutrition interventions. The community-based management of acute malnutrition (CMAM) is an intervention aimed at the early diagnosis and proper management of acute malnutrition in children less than 5 years of age at the community level through the provision of therapeutic foods coupled with facility-based management for those SAM children with medical complications (WHO, WFP, UN, UNICEF, 2007). In the East Asia and the Pacific Region, where SAM treatment coverage is low at less than two percent the Integrated Management of Acute Malnutrition (IMAM) – equivalent to the CMAM – has been proposed to be included in the national health programs in this region (UNICEF, 2015). The Philippine Integrated Management of Acute Malnutrition (PIMAM) program was then launched in 2015 under DOH Administrative Order 2015-0055 to manage acute malnutrition in Filipino children under five years (UNICEF & DOH,

2015). This is to reduce the country's wasting prevalence - recorded at 7.1% in 2015 (FNRI, 2016) - to less than five percent by 2025 as one of the targets set by the World Health Assembly (International Food Policy Research Institute, 2015). The program has four components namely: (1) Community Mobilization; (2) Out-patient Therapeutic Care (OTC); (3) In-patient Therapeutic Care (ITC); and (4) Targeted Supplementary Feeding Program (TSFP). PIMAM was envisioned to be incorporated and made available in routine primary health care services in the country.

As with any other health programs, monitoring and evaluating the effectiveness of CMAM programs worldwide were imperative to study and document their performance, generate evidence-based data and information that are essential to feed program design and inform decision-making. Coverage is one of the most important indicators of CMAM program performance as it measures acceptability and accessibility (Action Against Hunger, n.d.) and therefore, is often evaluated. It is the percentage of children with acute malnutrition who are enrolled and successfully managed by the program in a particular area (Action Against Hunger, n.d.). Furthermore, a complete and good CMAM program evaluation also entails identifying factors which may positively (boosters) or negatively (barriers) influence coverage. Several CMAM programs worldwide have already been evaluated as to their access and coverage, boosters and barriers. However in the Philippines, after the establishment of the PIMAM program in 2015, no assessment research has been done yet so far on the program's access and coverage and under normal or non-emergency contexts.

Albay was one of the first provinces in the Philippines to implement the PIMAM program to address the high prevalence of acute malnutrition among *Albayano* children less than 5 years recorded at 10.5% in 2015 (FNRI, 2016) which could easily worsen in times of natural disasters and emergencies common in the province. The Department of Health Bicol sponsored extensive training of municipal health officers and nutritionists on the PIMAM program starting 2017. With the agency's support, the program was urged to be incorporated in the routine health services at the municipal level. The In-patient Therapeutic Care (ITC) was then established at the Bicol Regional Training Hospital and Out-patient Therapeutic Care (OTC) units were put up with disparate capacity and levels of implementation and coverage among the different cities and municipalities. Subsequently, favorable factors or boosters to coverage were observed through DOH's support in terms of training and provision of supplies, motivated OTC staff and community health workers, and a strong referral system between service delivery units. However, just like any other health programs, challenges and issues called barriers affecting coverage were more apparent during the early stages of its implementation. These include busy and indifferent caregivers, long distance from home to the OTC, and weak active case finding of children with acute malnutrition. Conducting an assessment research on the PIMAM program in Albay would therefore be imperative and timely to identify OTCs with high and low coverage and areas for improvement and uncover influencing factors affecting coverage in order to impart valuable baseline data for evidence-based decision-making and refinement in program policies and implementation.

Statement of the Problem

The Philippine Integrated Management of Acute Malnutrition (PIMAM) program was established in 2015 to address acute malnutrition in Filipino children less than 5 years and has been incorporated in routine health care services in the country. Like any other health programs, monitoring and evaluation are crucial. An efficient evaluation tool has to be specifically used to provide needed data which would reflect its performance and effectiveness. CMAM programs specifically are evaluated in terms of their access and coverage and the SQUEAC is a validated available tool used in low resource settings.

To approach the problem of whether the PIMAM program has effectively achieved its goals, this research was done in order to assess its access and coverage and identify boosters and barriers influencing coverage. This assessment research was done at the local level specifically in the province of Albay in the Philippines where CMAM training took place and a PIMAM program was implemented to address its high prevalence of acute malnutrition. It was a timely research done in Albay to gather evidence-based data on likely boosters and on barriers on program coverage which were already perceived at its early stages. Has the PIMAM program achieved high coverage in the province of Albay or has it failed to meet the minimum performance standards for coverage?

This research aimed to fill the gap in the present literature by contributing data from a lower middle-income country on how the PIMAM

program has performed in terms of access and coverage and provide additional inputs on factors affecting them. It is a sample assessment research in the Bicol region of which other program implementers can emulate or build upon. It provides valuable baseline data on PIMAM program implementation in the Philippines. The research recommends measures in order to refine the program design in the country to improve its access and coverage and consequently, its effectiveness.

Generally, the research sought to answer if the Philippine Integrated Management of Acute Malnutrition (PIMAM) program became accessible and was able to achieve substantial coverage through the Out-patient Therapeutic Care units in the province of Albay, Philippines. Specifically, it answered these research questions:

1. What is the status of the routine program data of the Albay Province PIMAM OTCs in terms of program coverage?
2. What are the barriers and boosters perceived by different stakeholders in the community that pertain to the general household and community context?
3. What are the barriers and boosters perceived by different stakeholders in the community that directly affect PIMAM OTC implementation?
4. Are the hypotheses formed as to whether some areas in each of the two chosen municipalities have high or low program coverage validated?

Objectives of the Study

Generally, this study aimed to assess the coverage, boosters and barriers of the PIMAM Out-patient Therapeutic Care (OTC) for severe acute in the province of Albay, Philippines. Specifically, it aimed to:

1. Identify which among the OTCs in the province of Albay have high or low program coverage using the secondary routine program data;
2. Determine the barriers and boosters perceived by different stakeholders in the community that pertain to the general household and community context in terms of:
 - a. Sociodemographic profile, social norms, traditional and religious beliefs
 - b. Community volunteer networks
 - c. Communication channels
 - d. Seasonal variations
 - e. OTC accessibility;
3. Deconstruct the barriers and boosters perceived by different stakeholders in the community that directly affect PIMAM OTC implementation terms of:
 - a. Local Government Unit support
 - b. OTC processes
 - c. Community mobilization practices
 - d. Community health worker capacity
 - e. Community knowledge of SAM and PIMAM
 - f. Caregivers attitude and capacity; and

4. Validate the hypotheses formed as to whether some areas in the two chosen municipalities have high or low coverage.

Significance of the Study

The results of the study provide new information on how the PIMAM Out-patient Therapeutic Care has performed in terms of access and coverage in the province of Albay. The identified boosters and barriers illustrate a perspective on why the coverage may be low or high in the OTCs and provide the basis for future action planning.

For the Department of Health

This research presents valuable data for the program of the Department of Health in terms of its specifically on its performance--access and coverage. The results of this study can also be used to identify the program's strengths and weaknesses, as well as guide the department on what aspect of the program it should strengthen, may it be for training, logistic, support, and financing. Improving access and coverage may increase cure rates from severe acute malnutrition. The rise in the cure rates will help the country reach the 2025 target of reducing the prevalence of wasting to less than 5%.

For the PIMAM Program Planners and Managers

The study enumerates boosters and barriers to coverage which will guide program planners and managers to refine the protocol or formulate new

action plans in order to improve access and coverage. The assessment results can also be used as a basis for future improvements in program design or implementation.

For Other Out-patient Therapeutic Care Units

This research gives way for the proper conduct of future evaluation of OTCs in the province of Albay. Furthermore, its results may guide the OTC supervisors to see areas with low coverage and be able to mitigate and address barriers, and strengthen boosters to access and coverage. Lastly, this study is a sample evaluation research on the PIMAM program for other OTCs in the Philippines to emulate in order for them to improve their program coverage as well.

For the Community, Households and Children with SAM

The conduct of the research helped in sensitizing the community on severe acute malnutrition and informing them about the PIMAM program. Through the recommendations from the research, services may become more accessible for them hence may benefit the families especially children suffering from severe acute malnutrition. Ultimately, improvement in coverage leads to high cure rates from acute malnutrition.

For the International CMAM Programmers

The data provided by the study contribute to the international body of knowledge on how a CMAM program specifically the Philippine Integrated

Management of Acute Malnutrition (PIMAM) from a lower middle-income country performed in terms of access and coverage. This also presented data on factors influencing coverage. Lastly, the data from the study may be utilized by CMAM program planners globally for comparison, as well as to guide them in the improvement of their respective programs.

For Other Researchers on CMAM

As it is an assessment research on the PIMAM program, this study may also serve as a starting point for other researchers to emulate and build upon. The results generated may be used by future researchers on CMAM both locally and internationally as secondary data or for comparative analysis. The study also recommends further research in this field.

Scope and Delimitation of the Study

The study assessed the coverage, boosters and barriers of the PIMAM Out-patient Therapeutic Care (OTC) units of the cities and municipalities of the province of Albay. The quantitative data collection covered routine program data from January 2019 to December 2019 while the qualitative data collection covered responses applicable from January 2019 to the present. After analyzing the quantitative routine program data of all included OTCs, considering limitations in time, resources and logistics, only two from these OTCs – one with high coverage and one with low coverage – underwent qualitative data collection in order to identify factors contributing to a program's high coverage (boosters) and factors contributing to low coverage (barriers). Since quantitative analysis from the routine program data was

required, OTCs of cities or municipalities with no or significantly incomplete program data required (<50%) were excluded from the study.

The Targeted Supplementary Feeding Program (TSFP) component of PIMAM was not evaluated and included in the study as TSFP activity has not been established in any of the towns and cities of Albay up to this date. As yet, there is only one In-patient Therapeutic Care (ITC) in the province of Albay which is at the Bicol Regional Training and Teaching Hospital (BRTTH) in Legazpi City. The ITC and OTC of BRTTH cater to SAM patients not only residing in the province of Albay but also from neighboring provinces in the Bicol Region and have no exclusive geographical jurisdiction, thus, was not evaluated. The data only included the Out-patient Therapeutic Care units, their catchment areas in the cities, and municipalities of the province of Albay, Philippines for the period January 2019 to the present.

CHAPTER II

THEORETICAL BACKGROUND

Review of Literature

Acute malnutrition or wasting in children is a global health problem that needs effective and sustained nutrition interventions. The scenario is dismal as children with moderate acute malnutrition (MAM) have three times higher mortality risk, while those with severe acute malnutrition (SAM) have an 11.6 times mortality risk than well-nourished children (USAID, 2019). Therefore, the management of these children is crucial for their survival and their long-term development into productive adults. In the past, treatment of childhood acute malnutrition involved admitting them to feeding facilities or malnutrition wards with the use of therapeutic milk. This scenario posed several problems such as occurrence of cross-infection due to longer hospital stay, high opportunity cost for the family, longer recovery periods from malnutrition, and high health system resource spending (USAID, 2019). This hindered effective treatment and coupled with low access and coverage to services, resulted in its poor impact. In the early 1990's, the introduction of the Ready-to-Use Therapeutic Food (RUTF) which is used to treat children with severe acute malnutrition in the community paved the way to the establishment of the Community-based Management of Acute Malnutrition (CMAM) which was first used in the year 2000 during a humanitarian emergency (USAID, 2019). The concept of CMAM - the early diagnosis and management of acute malnutrition at the community level coupled with in-patient management of

SAM patients with medical complications and large-scale implementation - was supposed to improve access and coverage (WHO, WFP, UN & UNICEF, 2007). CMAM programs have been adopted in many countries either as an initiative of a country's Ministry of Health, or through aid from an international Non-government Organization. Though implementation varies among different geographical contexts and program managers and implementers, all CMAM programs shall be composed of four components: (1) community outreach and mobilization; (2) out-patient treatment of SAM without medical complications; (3) in-patient management of SAM with medical complications; and (4) services to treat moderate acute malnutrition (USAID, 2019). Scaling up of CMAM activities were also done to cover more areas and to intensify community mobilization efforts to improve access and coverage. However, monitoring and evaluation of these initiatives using efficient tools to gauge effectiveness and success of process also needs to be emphasized (Schofield et al., 2010).

CMAM monitoring and evaluation tools are already being used in the past, one was a two-stage cluster sample survey which had several limitations in providing an estimate of a program's coverage (FANTA & USAID, 2012). Another tool was the Centric Systematic Area Sampling (CSAS) which was found to be restrictive as it consumes more time and resources hence, failing to use it as an evaluation tool on a regular basis (Guevarra, 2010 & Schofield et al., 2016). To address the challenges of monitoring CMAM programs especially with its recent expansion of being part of national basic health care services, a more appropriate monitoring and evaluation tool was necessary. Thus, the Semi-Quantitative Evaluation of Access and Coverage (SQUEAC)

was developed by multiple agencies such as Valid International, UNICEF and Action Against Hunger in order to provide a low-cost and user-friendly guide in the execution of the evaluation in low-resource settings (FANTA & USAID, 2012). Another tool is the Simplified Lot Quality Assurance Sampling Evaluation of Access and Coverage (SLEAC). Though it fails to give detailed information on barriers to coverage, it can be used to complement the SQUEAC as it gives an estimate of CMAM program coverage over wide areas such as at the regional or national level (FANTA & USAID, 2012).

Program coverage is one of the most important indicators of CMAM program performance as it measures acceptability and accessibility (Action Against Hunger, n.d.). It is the percentage of children with acute malnutrition who are enrolled and successfully managed by the program in a particular area (Action Against Hunger, n.d.). Using the Sphere minimum standards for performance indicators, a good coverage should be more than 50%, 70% and 90% for rural, urban, and camp sites respectively (Save the Children & HIF, 2015). A complete and good CMAM program evaluation also entails identifying factors which positively (boosters) or negatively (barriers) influence coverage. Having knowledge on boosters and barriers will guide program managers to revise the program design geared towards improving coverage and eventually the program impact. In this regard, it is necessary to utilize a mixed-methods research design in doing program assessment to be able to achieve a more comprehensive account of the whole program scenario. The quantitative data will suggest levels of program coverage while the qualitative data will provide depth and bolster to the quantitative data through rich

information as to its influencing factors. Consequently, the SQUEAC presents a good option to use in assessing CMAM program coverage.

In order to assess the PIMAM program's coverage, boosters, and barriers under a setting of limited resources, the Semi-Quantitative Evaluation of Access and Coverage (SQUEAC) would be the most appropriate and easiest tool to use. It consists of procedural stages and a set of user-friendly tools used to identify and explore on the coverage of a particular CMAM program and factors influencing it. It uses a mixture of quantitative data from routine program data, small area survey or small survey, and qualitative data from interviews and group discussions on possible barriers and boosters to program coverage (FANTA & USAID, 2012). Additional qualitative data are also being used specifically analysis of environmental and community contexts such as seasonal variations in weather, agriculture, food consumption and diseases, sociodemographic profile of the community, and volunteer and communication networks. The SQUEAC is iterative as the investigation process is not fixed and may be modified as new knowledge is acquired. The tool is also innovative as it may be used variably depending on a particular context and skill of the researcher (FANTA & USAID, 2012). The SQUEAC method is comprised of 3 distinct evaluation stages (Action Against Hunger, n.d.):

1. Stage 1 – Starts with quantitative routine program data collection and analysis which may identify a service delivery unit that is likely to have either high or low coverage. It also involves qualitative data collection

through community assessment, interviews, and group discussion to describe barriers and boosters to coverage.

2. Stage 2 – Setting and testing the hypothesis formed in Stage1 on the program coverage through small surveys, small area surveys or small studies using the Lot Quality Assurance Sampling (LQAS) technique.
3. Stage 3 - This is an additional stage which may be performed only if appropriate and required. This stage also aims to provide an overall program coverage estimate using Bayesian techniques.

Several countries have already been using the SQUEAC in evaluating coverage of CMAM programs and in identifying barriers and boosters influencing coverage which showed varied results. Rogers and his colleagues (2015) did a study that involved reviewing data gathered from 44 CMAM programs in 21 countries from Africa and Asia during the period 2012 to 2013 where coverage was evaluated with the support of the Coverage Monitoring Network using the SQUEAC and SLEAC. Results of their study showed that majority of the programs had low coverage which was computed at an estimated mean of only 38.3% for all the programs (Rogers, et al., 2015). This low coverage rate was also observed in other evaluation studies done in Africa. CMAM program coverage was noted to be low at 45.7% from a study done in January 2019 in an urban area in Damboa, Nigeria (Kanja, 2019) and only 36.7% from a study done in 2012 in Twic County, Republic of South Sudan (ACF International, 2012). In Asia, the evaluations which were found to have a low coverage were those from Nusa Tenggara Timur, Indonesia in 2016 at 25% (Action Against Hunger & UNICEF, 2016), and in the Philippines in North Cotabato in 2013 at 33%, and in Compostela Valley in 2013 at <50%

(Amin, 2013). In contrast, other countries from Africa and Asia were also found to have an acceptable or high CMAM program coverage rates. SQUEAC evaluations done in Sinazongwe District, Zambia in 2010 and in Tigray region in Ethiopia in 2009 were both noted to be acceptable at more than >50% (Guevarra, 2010; Schofield et al., 2010). A high coverage rate was also recorded at 90% in Galkayo camps in Mudug, Somalia in 2016 (Yerrow, 2016) and 70.9% in Sittwe Township, Myanmar in 2014 (ACF International, 2014). An evaluation done in the Democratic People's Republic of Korea (DPRK) in 2018 also showed a high coverage rate (Binns & Guerrero, 2018). Additionally, UNICEF (2012) also did an evaluation of the CMAM program from the five districts in Nepal where the number of admissions of SAM cases and treatment outcomes exceeded Sphere minimum standards (UNICEF, 2012).

As per the observations, varying coverage rates were noted from the aforementioned countries regardless of their geographic and economic contexts. Two lower middle-income countries in South East Asia – Myanmar and the Philippines – showed contrasting coverage rates which was also reflected in Africa. Therefore, it is imperative to evaluate coverage and to explore on barriers and boosters affecting the coverage in each specific area to improve their own program methods and impact. In the previous evaluations done using the SQUEAC, several barriers and boosters were identified. The most common and prominent booster mentioned was improved community mobilization with active case finding of children with acute malnutrition (UNICEF, 2012; Rogers, 2013; Binns & Guerrero, 2018; Kanja, 2019). Other noted boosters include the following: a) the presence of a nearby

service delivery unit or health center (Action Against Hunger & UNICEF, 2016; ACF International, 2012); b) community awareness of malnutrition and an available CMAM program (Kanja, 2019; Rogers, 2013); c) motivated and visible CMAM health worker with good attitude on the CMAM program (More et al, 2018; Rogers, 2013); d) good technical training of CMAM staff and health workers (Action Against Hunger & UNICEF, 2016); e) adequate CMAM supplies and equipment at the treatment centers (Rogers, 2013) and; f) incentives to caregivers (Kanja, 2019). In the DPRK, the integration of CMAM in primary health services was one of the important contributing factors for its high coverage rate (Binns & Guerrero, 2018).

In the literature, barriers influencing coverage were found to be more significant. The most common identified barriers were the caregivers' ignorance on malnutrition and on the CMAM program (Action Against Hunger & UNICEF, 2016; ACF International, 2014; Guevarra, 2010; Rogers et al, 2015; Schofield et al, 2010) and the long distance from the child's home to the treatment centers (Kanja, 2019; Action Against Hunger & UNICEF, 2016; ACF International, 2014; Amin, 2013; Rogers, 2013). Other barriers noted were busy caregivers (Kanja, 2019; Amin, 2013); high opportunity cost for the family (Rogers, 2015; Rogers, 2013); inadequate community mobilization practices (ACF International, 2012; Rogers, 2013); insufficient technical knowledge of CMAM staff (Rogers, 2013); inadequate number of CMAM staff (Kanja, 2019); insufficient supplies and equipment at the treatment centers (Amin, 2013); and lack of support from the local government unit (Rogers, 2013).

In the Philippines, NGOs have implemented CMAM programs during emergencies when children become vulnerable to acute malnutrition. Its principles have also been used with success in a local government unit-initiated management of children with SAM in Davao City (UNICEF & DOH, 2015). Patterned from the CMAM and derived from the guidelines of the Integrated Management of Acute Malnutrition (UNICEF & DOH, 2015), the Philippine Integrated Management of Acute Malnutrition (PIMAM) was launched with the help of UNICEF and World Food Programme as the government's initiative to meet targets set by the World Health Assembly to reduce wasting prevalence to less than 5% by 2025 (International Food Policy Research Institute, 2015). It was reflected in the previous Philippine Plan of Action on Nutrition (PPAN) 2011-2016, in the present PPAN 2017-2022, and in the Strategic Framework for Comprehensive Nutrition Implementation Plan 2014-2025 (UNICEF & DOH, 2015). As a public health strategy, its national protocol is to be used nationwide in both normal and emergency contexts and to be integrated as part of routine health care services. Just like the CMAM, it has four components to detect and manage children with acute malnutrition effectively, namely: (1) Out-patient Therapeutic Care (OTC) for the management of children with severe acute malnutrition (SAM) without medical complications and with good appetite; (2) In-patient Therapeutic Care (ITC) for the management of SAM children with medical complications and poor appetite; (3) Targeted Supplementary Feeding Program (TSFP) for the management of children with moderate acute malnutrition (MAM); and (4) Community Mobilization where sensitization and SAM or MAM case findings happen in the community (UNICEF & DOH, 2015). The four components are

implemented simultaneously and are strongly linked to each other for referral and follow-up of patients. Since its establishment in 2015, efforts have been made to incorporate the program in routine health care services particularly at the city, municipal, and barangay levels through training of implementers have been achieved on a wide scale national level.

In the Philippines, the SQUEAC was used in 2013 to evaluate CMAM programs initiated by international NGOs in post-emergency and armed-conflict settings showing low coverage in Cotabato and Compostela Valley in Mindanao (Amin, 2013; Rogers, 2013). To date, no recorded assessment or evaluation research has been done so far in any of the service delivery units (SDU) in the Bicol region where PIMAM program is available after its establishment. As a health program within a health system, evaluating and learning from its implemented policies are crucial. This can be viewed within the premise of a health policy and systems research where data and accurate evidence produced from this research can inform decision-making and in turn refine health policies (WHO & Alliance, 2007). Conducting an assessment research on the PIMAM program would therefore be valuable to assess how it has performed by measuring its coverage and identifying its influencing or determining factors. Is the coverage also low as it had been in the other SQUEAC evaluated CMAM programs in Mindanao and in other South East Asian countries like Indonesia because of its similar economic contexts and foreseeable barriers? Is the coverage high or acceptable because the program has been incorporated in the routine health care services just like that in the DPRK? Is it also high because the prevalence of acute malnutrition in children under 5 years in the Philippines decreased to 5.6% in 2018 from

what had been recorded at 7.1% (Vargas, 2018) in 2015? Specifically, in the province of Albay where prevalence of acute malnutrition dropped to 4.39% in 2018 (NNC, 2018) from a high of 10.5% in 2015 (FNRI, 2016). Are foreseeable boosters and barriers similar to those identified in previous studies? Doing this research in the province of Albay where a CMAM training was done and where one of the first PIMAM programs was implemented is a sample evaluation in the country for other service delivery units to build upon. Its findings recommend solutions and guide program managers to formulate action plans to improve program coverage. This also fills the gap in the literature by contributing to the international body of knowledge on how a CMAM program from a lower middle- income country performed in terms of access and coverage.

Conceptual Framework of the Study

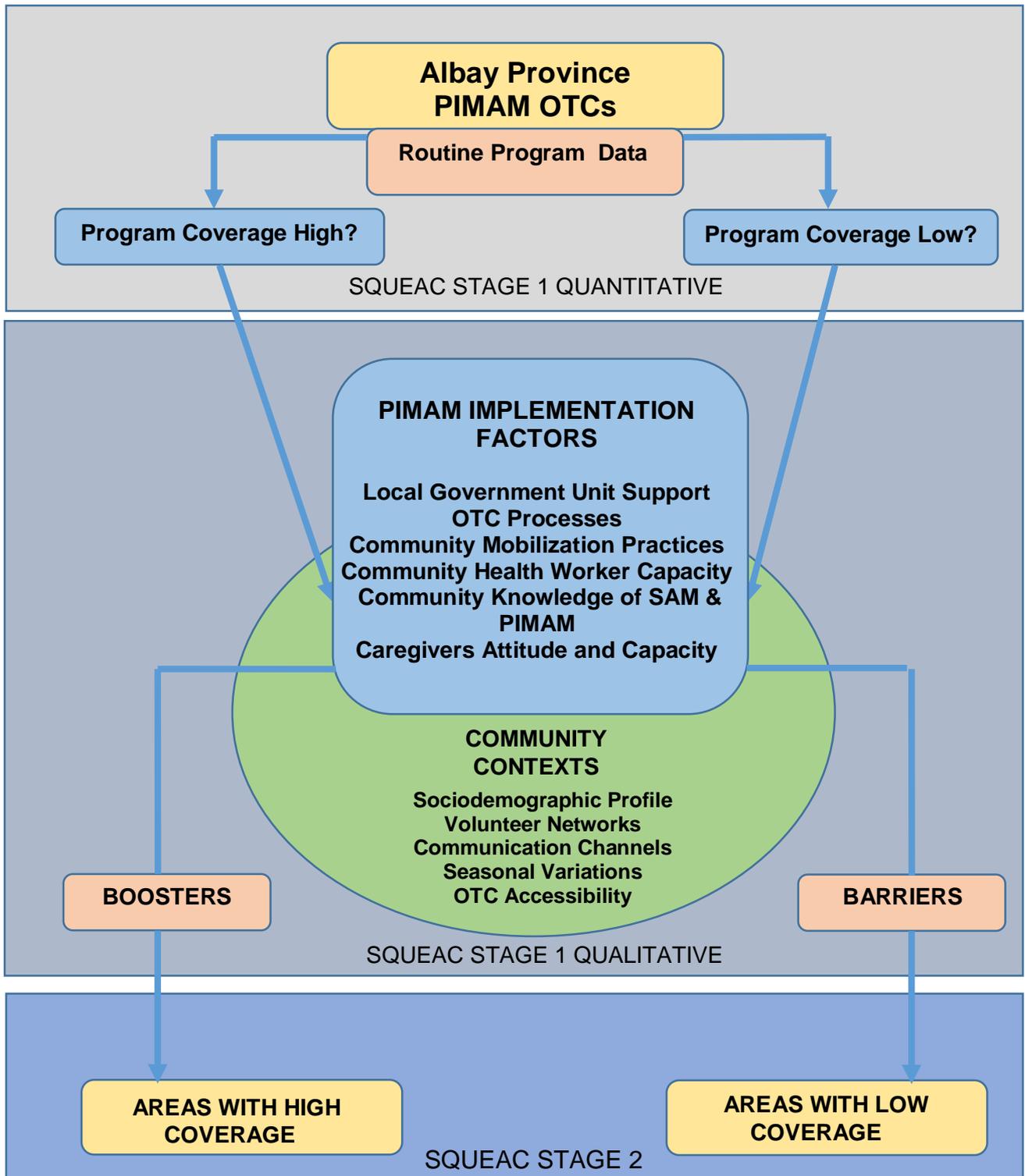


Figure 2.1. Conceptual framework

Figure 1 shows the conceptual framework of this study. Analyzing the quantitative routine program data of the different PIMAM OTCs in the province of Albay in the SQUEAC Stage 1 depicts OTCs with high coverage and OTCs with low coverage. Stage 1 further identified factors influencing coverage by gathering qualitative data through community assessment, key informant interviews, and informal group discussions. Factors pertaining to PIMAM OTC implementation that might influence program coverage were grouped into major categories such as local government unit support, OTC processes, community mobilization practices, community health worker capacity, community knowledge on SAM and PIMAM, and caregivers' attitude and capacity. Community assessment also identifies contexts influencing the program coverage. Community contexts considered were seasonal variation, socio demographic profile of the population, volunteer networks, communication channels, and OTC accessibility. Positive factors or boosters, lead to high program coverage. Negative factors or barriers, on the other hand, lead to low program coverage. SQUEAC Stage 2 validates hypotheses formed in Stage 1 as to whether some areas in the municipalities have high or low program coverage.

Operational Definition of Terms

Acute Malnutrition: characterized by rapid weight loss or nutritional edema due to inadequate food intake, illnesses, inappropriate child practices or a combination of these factors (UNICEF & DOH, 2015). Acute Malnutrition has two forms:

Severe Acute Malnutrition (SAM): a form of undernutrition with a diagnostic criterion of weight for length or height of $< -3SD$, and or Mid-Upper Arm Circumference (MUAC) of < 11.5 cm, and or presence of bilateral pitting edema (UNICEF & DOH, 2015)

Moderate Acute Malnutrition (MAM): a form of undernutrition with a diagnostic criterion of weight for length or height of $< -2SD$ to $-3SD$ and/or Mid-Upper Arm Circumference (MUAC) of < 12.5 cm to 11.5 cm and the absence of bilateral pitting edema (UNICEF & DOH, 2015)

Mid Upper Arm Circumference (MUAC): an anthropometric measurement reflective of muscle wasting which has the highest correlation with the mortality risk among SAM children as compared to the other anthropometric indicators. It is an independent measure of SAM (UNICEF & DOH, 2015)

Limited or No-Touch Simplified Criteria for SAM Case Finding: a technique to identify children from 6 months to 5 years of age with severe acute malnutrition using only the Mid-Upper Arm Circumference and presence of edema as criteria for detecting SAM. This may also be utilized in the time of COVID pandemic to minimize the risk of infection

Community-Based Management Of Acute Malnutrition (CMAM): a proven approach to manage children under five years of age diagnosed with SAM and MAM which increases access, coverage, and effectiveness of treatment of acute malnutrition (USAID, 2019). CMAM has four components: (1) Community Outreach and Mobilization, (2) Out-patient management of SAM without medical complications, (3) In-patient management of SAM with medical complications, and (4) Services or programs to manage MAM

Philippine Integrated Management of Acute Malnutrition (PIMAM): a national protocol patterned from CMAM and developed for the management of acute malnutrition primarily in children less than 5 years. This protocol focuses on its integration in routine health and nutrition services at all levels while striving for maximum coverage through a strong community component (UNICEF & DOH, 2015). Like the CMAM, PIMAM also has four components:

Community Mobilization: involves engagement in the community to promote knowledge on acute malnutrition, services offered, and the identification of acute malnutrition at the community level for widespread early detection to increase program coverage and effectiveness

Out-patient Therapeutic Care (OTC): is where diagnosed SAM patients without medical complications and with passed appetite test are enrolled and managed

In-patient Therapeutic Care (ITC): is where diagnosed SAM patients with medical complications, failed appetite test, and grade 3 edema are admitted and managed

Targeted Supplementary Feeding Program (TSFP): implemented for the management of MAM

Ready-To-Use Therapeutic Food (RUTF): a medicinal food prepared and pre-packaged to treat a child with SAM. It tastes like peanut butter and contains all the calories and nutrients that a child diagnosed with SAM needs to recover (UNICEF & DOH, 2015)

Treatment Outcomes: resulted conditions of a child diagnosed with acute malnutrition in response with treatment at the OTC measured upon his exit in the program (UNICEF & DOH, 2015). It may either be the following:

Cured: when a patient achieves the criteria as cured for two (2) consecutive weeks or visits at the OTC. (Criteria for discharged to be classified as CURED: weight x height \geq -2 Z score and MUAC \geq 12.5 cm and no edema for 14 days and clinically well)

Transfer to ITC: when a patient while being treated at the OTC develops medical complications or fails the appetite test has been transferred to the ITC

Dead: the patient died during his treatment at the OTC

Defaulter: the patient has not returned for three consecutive visits at the OTC and the patient is confirmed not to be dead

Non-cured: when the patient does not meet the discharge criteria as cured within four months at the OTC and all referral and follow-up options have been exhausted

Semi-Quantitative Evaluation of Access and Coverage (SQUEAC): a coverage assessment method developed by Valid International, FHI 360/FANTA, UNICEF, Concern Worldwide, World Vision International, Action Against Hunger, Tufts University, and Brixton Health for the evaluation of CMAM programs (Action Against Hunger, n.d.). It makes use of both quantitative data from routine program monitoring activities and qualitative data from informal group discussions and interviews enabling the identification of boosters and barriers to access services and gives a final program coverage estimate (Action Against Hunger, n.d.; FANTA & USAID, 2012)

Coverage: it is the percentage of children with acute malnutrition who are enrolled and successfully managed by the program in a particular area. It is computed as the: number of children with SAM who are being treated/total number of children existing in the community with SAM. This is also known as the “Treatment Coverage”. (UNICEF & DOH, 2015)

Minimum Performance Standards for Coverage:

Rural areas - >50%

Urban areas - >70%

Refugee camps - > 90%

High Coverage: Coverage meeting the minimum performance standards

Low Coverage: Coverage below the minimum performance standards

Access: the timely use of CMAM health facilities and services to achieve the best treatment outcome

Geographical Access: the number of health facilities in an area which offer management of SAM services as a percentage of all health facilities in SAM implementation/target areas. It is also called “Geographical Coverage”. (UNICEF & DOH, 2015)

Barriers: actors that can reduce coverage

Boosters: factors that can improve coverage

Service Delivery Unit (SDU): a unit where PIMAM services are offered such as an OTC, ITC, or TSFP

Case Finding: the process of identifying children with acute malnutrition in the community which aims to ensure that children are screened regularly to identify acute malnutrition in its early stages when it is most easily treated (UNICEF & DOH, 2015). Types of case finding include:

Active Case Finding: the deliberate act of looking for a case of SAM in the community usually by doing house-to-house or door-to-door search

Active-Adaptive Case Finding: a modified version of active case finding wherein the health worker may visit every say third house instead of house-to-house in search for a case of SAM and asks the visited household any known case of SAM in the neighborhood

Passive Case Finding: the act of identifying a case of SAM during a child's visit to the health center or nutrition program activities for some other purposes but is screened for SAM

Small Area Surveys: a method of testing the hypothesis in SQUEAC when certain geographic locations are hypothesized to have high or low coverage. It is done by visiting the different locations then locating all SAM children and identifying which ones are or are not enrolled in the program (Action Against Hunger, n.d.)

Small Surveys: a method of testing hypotheses in SQUEAC when certain population groups are hypothesized to have high or low coverage. It is done by visiting the same number of families in each population group and determining how many SAM children in each are or are not enrolled in the program (Action Against Hunger, n.d.)

Small Study: a method of testing the hypotheses in SQUEAC when a certain coverage process is operating well in one area and not in another area. An investigation of the process in done in both areas is the same way (Action Against Hunger, n.d.)

Triangulation: a qualitative research strategy to test the validity of data and develop a comprehensive understanding of a phenomena through the convergence of information gathered from different sources (triangulation by source) or methods (triangulation by method) (Carter et al., 2014)

Barriers, Boosters and Questions (BBQ) Tool: a tool which allows the researcher to organize key factors which may improve or reduce coverage in a table format and triangulate each factor by source and by method. Each factor is given a weighted score – those with higher periodicity are weighted more than factors mentioned occasionally - such that prioritization of the barriers or boosters occur and determine their weight or impact on program coverage (Action Against Hunger, n.d.)

Mind-Map: is a diagram used to organize thoughts and concepts visually using tree structures. In SQUEAC, the main idea or central theme is placed in the middle, the data sources radiate from the central theme and the individual findings are placed on the periphery. It summarizes the findings of SQUEAC assessment and is drawn and modified as the investigation proceeds (Action Against Hunger, n.d.)

Concept Map: a graphical tool for organizing concepts and knowledge. Specifically, when done for SQUEAC, it is a diagram of boxes or circles of boosters and barriers to coverage which are connected by arrows representing relationships among them (Action Against Hunger, n.d.)

Lot Quality Assurance Sampling (LQAS) Technique: a relatively rapid and inexpensive statistical methodology used for data collection in public health to

gauge how a program indicator is performing (USAID & PEPFAR, nd.). This technique is most useful in SQUEAC when small sample sizes, such as cases of SAM in a population, are used to classify coverage accurately. It can be used to accept or disprove the hypothesis formed using the data collected from the small survey, small area survey, and small study (Action Against Hunger, n.d.)

Hypotheses/Assumptions

1. There are PIMAM OTCs in the province of Albay that have high coverage and there are OTCs that have low coverage.
2. There are general household and community contexts which are positively (boosters) and negatively (barriers) influencing access and coverage of the PIMAM OTC in the province of Albay.
3. There are boosters and barriers pertaining to PIMAM OTC implementation which influence program access and coverage in the province of Albay.
4. Coverage may be below or above the Sphere minimum standard among the selected barangays in the two chosen municipalities in the province of Albay.

CHAPTER III

RESEARCH METHODOLOGY

Research Design

This study assessed the Philippine Integrated Management of Acute Malnutrition (PIMAM) Out-patient Therapeutic Care in the province of Albay, Philippines.

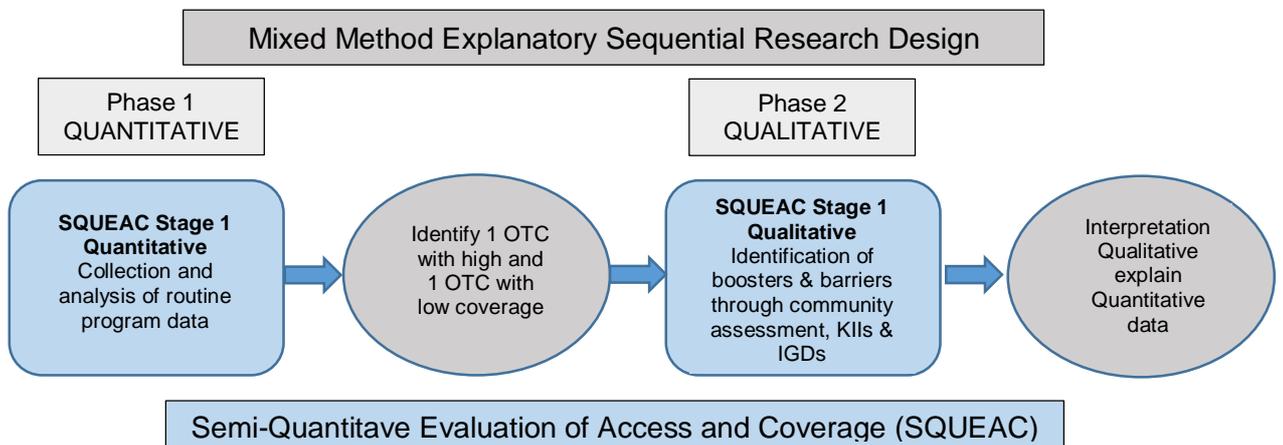


Figure 3.1. Mixed method explanatory sequential research design adopting the SQUEAC

This research utilized a mixed method explanatory sequential (two-phase) research design adopting the Semi-Quantitative Evaluation of Access and Coverage (SQUEAC) tool as illustrated in Figure 3.1. The phase 1 quantitative part (SQUEAC Stage 1 Quantitative) consisted of collection and analysis of routine program data and some additional quantitative data from each of the included OTCs. This first phase identified OTCs with high coverage and OTCs with low coverage. In order to expand and explain

findings in phase 1 quantitative as to why coverage may be high or low, phase 2 qualitative data collection was done specifically to identify boosters and barriers affecting program coverage. The phase 2 qualitative part (SQUEAC Stage 1 Qualitative) consisted of community assessment by gathering information on factors affecting coverage from a variety of informants through key-informant interviews, informal group discussions and observations of diagnosis and treatment at the OTC. It was deemed necessary to utilize a mixed method explanatory sequential research design in conducting program assessment to be able to achieve a more comprehensive account of the whole program scenario. The quantitative data suggested levels of program coverage and the qualitative data provided depth and bolstered the quantitative data with rich information as to its influencing factors.

The SQUEAC tool further consisted of additional data collection through its SQUEAC Stage 2 Small Area Survey in order to validate hypotheses formed in SQUEAC Stage 1.

Research Setting



Figure 3.2. Map of the Philippines with focus on Albay province

The study was done in the province of Albay, in the Bicol region, southeastern part of the island of Luzon in the Philippines (Figure 3.2). The province consists of 3 cities and 15 municipalities. Its land is generally mountainous with fertile plains and valleys while the climate is tropical experiencing rainy season mostly during the second half of the year (Province of Albay, n.d.). Agriculture is its main industry while the major source of rural income is handicraft making, and the main livelihood along coastal towns is fishing (Province of Albay, n.d.). The presence of an active Mayon volcano which lies at the center of the province and the location of Albay along the typhoon belt makes it prone to natural hazards.

The prevalence rate of acute malnutrition in the province of Albay was recorded at 10.5% in 2015 (FNRI, 2016) and went down to 4.39% in 2018 where 1.33% of the cases were severe acute malnutrition (NNC, 2018).

Extensive PIMAM training for all city and municipal health officers and their nutritionist-dietitians were rolled out from 2017 to 2018 by the Department of Health Region V such that each unit is encouraged and expected to have its own Out-patient Therapeutic Care (OTC) in partnership with the local government unit (LGU). An OTC is a distinct area in a municipal health office where children with severe acute malnutrition without medical complications and with good appetite found through active and passive case finding are being enrolled and managed. The OTC chart (see Appendix A) for each patient and SAM Registry Logbook (see Appendix B) were the standard data recording tools. Routine and standard program data were required from each OTC and these are submitted on a monthly basis using the PIMAM OTC Monthly Reporting Form (see Appendix C) to the Department of Health Regional Office V (DOH-ROV). Once enrolled, SAM patients are given Ready-to-Use Therapeutic Food (RUTF) and other routine medications. They were also instructed to follow-up weekly wherein patients are being re-assessed and supply of RUTF is replenished. This is done until a patient is discharged reaching the criteria as cured. Defaulters are home-visited by OTC health care workers to assess the reason for defaulting.

Each city or municipality comprises villages known as *barangays*, which are further divided into smaller communities known as *puroks*. The barangay is headed by a chieftain called the barangay captain and where the appointed barangay health workers (BHW) and barangay nutrition scholars (BNS) are the frontline community health workers (CHW). BHWs and BNSs, aside from providing other health services, see to it that SAM patients comply with the treatment at home and report new cases of SAM identified in the

community to the OTC. Together with an OTC staff and a deployed municipal nutrition action officer (MNAO), CHWs may conduct outreach activities and community sensitization on malnutrition. Other significant community actors such as traditional healers, birth attendants, teachers, social workers, and NGO representatives who may be directly or indirectly involved in SAM case finding were also present.

Participants

1. The city and municipality PIMAM OTCs in the province of Albay were eligible to be included in the study. They were comprised of the Tabaco City, Legazpi City and Ligao City Health Office OTCs, and the Municipal Health Office OTCs of the towns of Tiwi, Malinao, Malilipot, Bacacay, Santo Domingo, Daraga, Camalig, Rapu-rapu, Manito, Guinobatan, Polangui, Oas, Pio Duran, Jovellar, and Libon
2. Community stakeholders such as caregivers of SAM children, community health workers, health center/OTC personnel, teachers, traditional healers, and birth attendants who were interviewed or have joined informal group discussions in the collection of qualitative data
3. Purposively chosen barangays in one municipality where a small area survey was conducted
4. Caregivers of the identified SAM children from the SAM case finding during the Small Area Survey

Inclusion Criteria

1. City and municipality PIMAM OTCs in the province of Albay were eligible to be included in the study
2. Selected community stakeholders who were interviewed or joined informal group discussions in each of the selected two OTCs and the catchment area in their community were included in the study
3. Purposively chosen barangays assessed in the small area survey were included in the study
4. Caregivers of SAM children identified during the SAM case finding in the small area survey

Exclusion Criteria

1. City and municipality OTCs in the province of Albay which did not provide consent to participate were excluded from the study
2. PIMAM OTCs in the province of Albay with no or significantly incomplete program data required (<50%) were excluded from the study
3. Community stakeholders who did not consent to be interviewed nor join in the informal group discussions were excluded from the study
4. Caregivers of SAM children identified in the SAM case finding who did not consent to be interviewed were excluded from the study

Sampling Method and Sampling Frame

There were several sampling methods employed throughout the two stages of the study. Stage 1 employed two sampling methods. First, after

gathering and analyzing quantitative routine program data from all of the included OTCs in the province of Albay, purposive sampling was done to select two OTCs – one with evidently low program coverage and another one with high program coverage - to undergo SQUEAC Stage 1 Qualitative and SQUEAC Stage 2. The sampling frame included the following:

- Legazpi City Health Office OTC
- Ligao City Health Office OTC
- Tabaco City Health Office OTC
- Tiwi Municipal Health Office OTC
- Malinao Municipal Health Office OTC
- Malilipot Municipal Health Office OTC
- Bacacay Municipal Health Office OTC
- Santo Domingo Municipal Health Office OTC
- Daraga Municipal Health Office OTC
- Camalig Municipal Health Office OTC
- Manito Municipal Health Office OTC
- Rapu-rapu Municipal Health Office OTC
- Guinobatan Municipal Health Office OTC
- Polangui Municipal Health Office OTC
- Oas Municipal Health Office OTC
- Pio Duran Municipal Health Office OTC
- Jovellar Municipal Health Office OTC
- Libon Municipal Health Office OTC

Second, the qualitative data collection sampling matrix (see Appendix E) was utilized in the selection of participants in the key-informant interviews and informal group discussions which ensured that far and near barangays were represented, and that participation was equitable. Participants were chosen on the basis of their first-hand experience or expected knowledge of PIMAM implementation. The sampling frame was as follows:

- Caregiver of a SAM child (male or female)
- Community Health Worker: BHW, BNS or MNAO
- Health center/OTC personnel
- Teacher
- Traditional Healer/Birth Attendant

Stage two of the study employed purposive sampling wherein 2 barangays which were near (< 5 km) and 2 barangays which were far (\geq 5 km) from the OTC were chosen where small area survey was done in order to prove or disprove the hypotheses formed in Stage 1.

Data Collection Procedure

The assessment study employed a mixed method explanatory sequential research design adopting the Semi-Quantitative Evaluation of Access and Coverage (SQUEAC) tool. The quantitative routine program data collection covered the period from January 2019 to December 2019 while the qualitative data collection considered responses applicable from January 2019 to the present. The actual conduct of the research or the data collection

took place in the context of COVID-19 pandemic. As such, the researcher and the research assistants observed strict infection prevention and control (IPC) measures at all times during the data collection through observing social distancing, wearing personal protective equipment (PPE) and using hand sanitizers. Collection of routine program data was done either through visiting the Municipal Health Office OTC or through telephone calls to point persons and e-mailing of the data to the researcher and research assistants. Key-informant interviews were also done in open spaces or well-ventilated rooms with observance of minimum health standards. Informal group discussions were held in well-ventilated rooms observing social distancing and IPC measures. These were likewise observed during in-community case finding in SQUEAC Stage 2. Informed consent was secured from all participants prior to the start of secondary data collection, key-informant interviews, and informal group discussions.

Utilizing a mixed method explanatory sequential research design and adopting the SQUEAC tool, quantitative and qualitative data were collected in three distinct stages (Action Against Hunger, n.d.):

SQUEAC Stage 1 Quantitative (Mixed Method Explanatory Phase 1)

This was done to assess and identify an OTC with high coverage and an OTC with low coverage through the use of secondary routine program data.

1. City and municipality OTCs in the province of Albay were invited to join the study. A formal letter of invitation (see Appendix O) was given

personally or via e-mail by the researcher. A written informed consent was undertaken from all the city or municipal health officers who agreed to join the study (see Appendix P.1).

2. Collection of quantitative routine program data applicable for the period January 2019 to December 2019 from each of the included OTCs was done. Codes (letters A to R) were assigned to each of the Municipalities through a lottery participated by the researcher and the four research assistants. These were used as identifiers in all of the subsequent data collection. Most of the data were collected by visiting the Municipal Health Offices which were facilitated by the Municipal Nutrition Officers.

Secondary data were gathered from official PIMAM OTC forms:

- (1) Patient Individual OTC Chart (see Appendix A)
- (2) OTC Registry Form (see Appendix B); and
- (3) OTC Monthly reporting form (see Appendix C)

The data gathered included:

- Number of admissions (monthly and for the whole period)
- OTC discharge rates as a percentage (monthly and for the whole period: Cured, Non-cured, Transfer to ITC, Defaulter, and Dead)
- Number of defaulters (monthly and for the whole period)
- MUAC measurements on admission and at discharge cured and discharge defaulter
- Patient length of stay in weeks in the program discharged cured and on default

- Home barangays of admitted and defaulting cases
- Patient referral source, if available

The data gathered were recorded in the data collection forms and subsequently entered in an Excel file. Municipalities with no existing OTC, whose OTC data showed significant inconsistencies and discrepancies, and those with no or incomplete program data of more than 50% were excluded from the study.

Data gathered from this step were used to identify an OTC that should have been likely to have high or low coverage. These two OTCs underwent the subsequent data collection procedures: collection of additional quantitative data and SQUEAC Stage 1 Qualitative data collection. SQUEAC Stage 2 was only conducted in one municipality.

3. Collection of additional quantitative data where it is deemed applicable was done based on the initial data gathered from the routine program data. These included:

- Time-to-travel and distance-to-travel between the barangays and the OTC
- Number of community health workers (barangay health workers or barangay nutrition scholars) in the OTC catchment areas and number of outreach activities

SQUEAC Stage 1 Qualitative (Mixed Method Explanatory Phase 2)

This stage was done in order to explain and provide more depth and understanding into the findings from Stage 1 Quantitative specifically as to why program coverage was high or low.

1. Collecting qualitative data was done through a community assessment to understand the different contexts in the general household and the community which may have influenced PIMAM program access and coverage. Community assessment was conducted through recording of the secondary data from the municipal profile provided by the municipal public information office, the agriculture office, and the social welfare office. Other community information was gathered from casual conversations with Municipal and RHU personnel and from the KIIs and IGDs. These included activities such as:

- Describing the sociodemographic profile, social norms, traditional and religious beliefs, perceptions, and taboos of the population in the community.
- Identifying existing community volunteer networks and other community actors such as teachers, leaders, social workers, and NGOs and their main activities.
- Mapping out communication channels utilized by the program to relay messages to the target population which may also serve as a learning tool for future improvement.

- Describing seasonal variations regarding weather, agriculture, food availability and illnesses.
2. Further collection of qualitative data was conducted to identify barriers and boosters pertaining to OTC implementation influencing coverage through the following three methods below. The qualitative data collection sampling matrix (see Appendix E) was used in the selection of the participants to ensure that far and near barangays were represented, and that participation was not biased. Data was organized using the Barriers, Boosters, and Questions Tool (see Appendix K). A written informed consent (see Appendix P.2 to P.7) was also acquired from all participants.
- Key informant semi-structured interviews with the following informants who were expected to have knowledge or who have first-hand experience of the PIMAM program were done using interview guides (see Appendix H). The informants were visited in their place of work or residence. Two participants from each of the groups of informants below were included: one from a nearby barangay and one from a far barangay from the OTC were interviewed.
 - Caregiver of a SAM child
 - Community health worker: 1 BHW and 1 BNS
 - Health center/OTC personnel/MNAO
 - Teacher (Day Care Child Development Worker)
 - Traditional Healer and Birth Attendant

Codes were assigned to each of these KII participants distinguishing them as coming from a particular municipality and from either a near (1) or far (2) barangay from the OTC. The interview was tape recorded where transcription of the interviews was subsequently done.

- Informal group discussions were also conducted with the following groups below. These were held in well-ventilated rooms observing social distancing and IPC measures at all times. Eight (8) participants were targeted to be included in each group. Again, codes were assigned to each of the participants in the IGDs.
 - Caregivers of enrolled SAM children
 - Health center/OTC personnel
 - Community health workers such as barangay health workers and barangay nutrition scholars

The researcher facilitated the discussion while the research assistants did the note taking and tape recording. Transcription of the IGDs was also prepared.

- Direct observation by the researcher and the research assistants were done on how diagnosis and treatment are implemented at the OTCs.

3. Field Notes during the data collection were generated and recorded.

SQUEAC Stage 2

This is an additional stage in the SQUEAC tool which was done to set and test the hypotheses formed in Stage 1 in order to confirm areas of high and low coverage in the OTCs' catchment areas. This was done through the following methods.

1. The quantitative data gathered from the routine program data and the qualitative data from the interviews, informal group discussions, and direct observations at the OTC provided information as to where coverage was likely to be high or low. This information provided was used to form a set of hypotheses that can be tested.
2. The hypotheses once stated, were tested. The method used was influenced by the nature of the hypotheses formed:
 - If the hypotheses state that certain locations (barangays) have high or low coverage due to the distance from the OTC or other factors affecting coverage, then a small area survey shall be done by visiting the different barangays and locating all SAM children.
 - If the hypotheses state that certain population groups such as religious groups or sects and indigenous peoples have high or low coverage, then a small survey shall be done by visiting the same number of families in each population group.

- If the hypotheses state that certain processes such as community mobilization practices are running well in one area and not in another area, then a small study shall be done in both areas and examine the process in the same way.
3. The research team was able to conduct a small area survey in only one municipality wherein four barangays – 2 near (< 5 km from the OTC) and 2 far (\geq 5 km) were purposely chosen where in-community SAM case finding was done.
 4. In-community case finding for all SAM children less than 5 years who were and were not enrolled in the program was done using a modified active-adaptive case finding technique. The COVID-19 pandemic and its restrictions prevented the research team from implementing house-to-house activity to do the active-adaptive case finding. Instead, the results of their most recent Operation Timbang (OPT) were used as guides to select children who will be screened. All children who were marked underweight, stunted, and wasted were included. The barangay health workers were also asked to identify thin or undernourished children and children who had edema from their *purok* who may not have been marked in the OPT results. The identified children were brought by their caregivers to the designated areas: covered court in the two barangays and a large well-ventilated room in the other two barangays. To avoid crowding, children were brought one at a time per *purok*. Weight, height, and MUAC were measured and the presence of edema was checked. IPC

measures were observed at all times. Findings were recorded and an assessment was immediately done to identify SAM children.

5. Interview of caregivers of identified SAM children who were and who were not enrolled in the program using a questionnaire (see Appendix N) were done. Social distancing and IPC measures were implemented at all times.
6. Because of the surge of COVID-19 cases in the province of Albay during the latter part of data collection, the conduct of SQUEAC Stage 2 SAM case finding was not permitted in one of the two chosen municipalities which had a medium average daily COVID-19 attack rate and has been placed under general community quarantine.

Data Analysis

The research utilized a mixed method explanatory sequential design adopting the SQUEAC tool. As such, the quantitative and the qualitative data were initially analyzed separately, producing 2 sets of databases. These databases were subsequently merged and analyzed together in a step called integration.

Mixed Method Phase 1 Quantitative (SQUEAC Stage 1 Quantitative)

- a. Quantitative data from the routine program data from all municipalities were compiled and tabulated in an excel sheet. Municipalities with no functioning OTC, no available OTC data, and those who had less than

50% available required routine program data were excluded from the study.

- b. Descriptive analysis of the routine program data from the remaining Municipalities was done using tables, graphs, and charts to investigate and demonstrate trends on program activity and coverage. The research team further analyzed the available data and decided which two municipalities, one with high and one with low coverage, will undergo SQUEAC Stage 1 Qualitative and SQUEAC Stage 2.
- c. Mapping of the beneficiary home locations and areas of health workers' outreach activities on the two municipalities to visually analyze the actual catchment areas reached by the program was also done.

Mixed Method Phase 2 Qualitative (SQUEAC Stage 1 Qualitative)

In order to explain the findings in Phase 1 quantitative as to why coverage in the two chosen municipalities were either high or low, Phase 2 Qualitative was conducted and data were analyzed using the following:

- a. Qualitative data analysis was done using the boosters, barriers and questions (BBQ) tool. Hence, validation of findings using the triangulation by source and by method was undertaken. Subsequently, each barrier and booster was assigned a weight or a score depending on their impact on program coverage in an activity called "Weighting" (see Appendix K).

Data Analysis and Identification of Key Results

- 1) Voice recording after each KII and IGD was transcribed. Each transcript once available was immediately analyzed in the presence of the whole research team consisting of the researcher and 4 research assistants. The researcher read the transcript out loud with the whole team and once a booster or a barrier was identified and agreed upon by the whole group, a research assistant wrote it down on the BBQ tool using an Excel sheet.
- 2) The process was repeated until all transcripts were read and analyzed. Data from other sources and methods – community profiling, secondary data for the sociodemographic profile, direct observation at the OTC and the field notes - were also analyzed and barriers and boosters identified were also added to the BBQ tool.
- 3) Boosters and barriers were classified into major themes: community contexts, LGU support, OTC processes, community mobilization practices, community health worker capacity, community knowledge of SAM and PIMAM, caregivers attitude and capacity, and others. Questions or factors which needed clarifications were noted and answers were sought by further inquiry during subsequent data collection.
- 4) Validation of the barriers and boosters was done using triangulation by source and by method. This was done by identifying and converging the source or the participant (health care personnel,

caregiver of a SAM child, community health worker, teacher, traditional healer/birth attendant, field notes, secondary data) from whom the factor was gathered and the method on how it was collected (KII, IGD, direct observation, field notes) and noting these across every factor.

- 5) The weighting activity was done to identify the boosters and barriers which had more impact on program coverage. This was done by the whole research team wherein each one simultaneously assigned a weighted score (1 to 6, with 6 being the highest) to each factor depending on its periodicity of occurrence and each perception on its impact in affecting program coverage. Each score from every member of the research team was added to find the final score for each booster and barrier.

- b. Qualitative data were also analyzed using Concept Maps to show relationships between identified boosters and between barriers.

Subsequently, in order to summarize the findings from both quantitative and qualitative data, mind maps were used in order to show how each contributed positively or negatively to PIMAM OTC program coverage.

SQUEAC Stage 2

To disprove or validate the hypotheses formed in Stage 1, the simplified Lot Quality Assurance Sampling (LQAS) technique was used in one of the two chosen municipalities.

Study Outcome

The following were the outcomes of the study after its completion:

1. Municipalities in the province of Albay with and without a functioning OTC were distinguished. Subsequently, among those with functioning OTCs, those with high and low program coverage were identified.
2. Barriers and boosters affecting program coverage were deconstructed.
3. Certain barangays in one of the two chosen municipalities were found to have low coverage.
4. Recommendations were presented to enhance boosters and address barriers in order to refine program design and augment local capacity which in turn improve program access and coverage.

Data Management

The researcher took responsibility in the collection, management, and sharing of the research data. The data collected after the study is owned by the researcher, the University of the Philippines Open University (UPOU), the Bicol Regional Training and Teaching Hospital (BRTTH) and the Department of Health Bicol, Family Health Cluster (DOH Bicol). The types of data collected included quantitative routine program data from the selected OTCs in the province of Albay, some additional quantitative data, and qualitative data from the community assessment, interviews, group discussions and direct observation at the OTCs. These were organized and analyzed using

Excel and some tools used in SQUEAC such as the Barriers, Boosters and Questions (BBQ) tool, concept maps, mind maps and the simplified Lot Quality Assurance Sampling (LQAS) technique.

Hard copies of the raw data were stored safely in a locked filing cabinet at the BRTTH Department of Pediatrics office. The final paper hard copies were also compiled in the respective offices of the UPOU, BRTTH and DOH Bicol. Soft copies of the data and the final paper were stored securely in a labeled USB flash drive, and external hard drive in Excel file, MS Word format, and portable document format (PDF).

The results of the study were already presented to the DOH Bicol Family Health Cluster. Data will be shared to the other stakeholders of the program including the two chosen Municipal Health Office OTCs, the Provincial Health Office of Albay, and UNICEF Philippines. Further research dissemination will be done by providing a copy to the Philippine Pediatric Society, Inc. and publishing it in local and international peer-reviewed journals.

Limitations of the Study

The conduct of the research took place in the context of the COVID-19 pandemic which posed some limitations. First, although the researcher and her assistants were careful to emphasize the scope of the study, some responses from the participants may not have reflected the actual condition prior to the pandemic. Second, barriers to access and coverage may have been exacerbated by the conditions brought about by the pandemic.

Pandemics worsen food insecurity, hunger and acute malnutrition. This might have increased the number of SAM cases in the community who are not enrolled in the program which was recorded in SQUEAC Stage 2 SAM case finding in one municipality. Lastly, the latter part of the data collection was affected by the second surge of COVID-19 cases in the province of Albay by which authorities laid lockdown rules and activity restrictions. As such, the researcher and her team were not able to do SQUEAC Stage 2 in one of the two chosen municipalities.

Ethical Considerations

Ethical principles in accordance with the Declaration of Helsinki, the ICH-GCP, and the National Ethical Guidelines for Health and Health-Related Research 2017 were observed in the study. Ethical approval was granted by the BRTTH Institutional Review Board on November 23, 2020 with IRB Protocol number 2020-025. The IRB Chair, Dr. Marlyn Daguno with contact number +639193305977 and the researcher Dr. Arlene P. Calleja with contact number +639177959458 may be contacted in case of problems or queries. Components of the ethical considerations are found in Appendix Q.

Research Funding

Funding was provided by the Department of Health Bicol, Family Health Cluster.

CHAPTER IV

RESULTS AND DISCUSSIONS

The study was done to assess the Philippine Integrated Management of Acute Malnutrition (PIMAM) program Out-patient Therapeutic Care (OTC) Units in the province of Albay, Philippines. A mixed-method explanatory sequential research design to determine access and coverage was used through the Semi-Quantitative Evaluation of Access and Coverage (SQUEAC) tool to answer the specific objectives of the research, namely:

- 1) Stage 1 quantitative secondary routine program data collection.

Specific Objective no. 1: To determine which among the OTCs in the province of Albay have high or low coverage using the secondary routine program data

- 2) Stage 1 qualitative where barriers and boosters to program coverage were determined through community assessment, interviews and group discussions to explain and provide more depth and understanding on the findings in Stage 1 Quantitative as to why program coverage was high or low.

Specific Objective no. 2: To determine the barriers and boosters perceived by different stakeholders in the community that pertain to the general household and community context

Specific Objective no. 3: To deconstruct the barriers and boosters perceived by different stakeholders in the community that directly affect PIMAM OTC implementation

- 3) Stage 2 testing the hypotheses formed in Stage 1 as to whether some barangays in the catchment areas of the 2 chosen municipalities have high or low coverage.

Specific Objective no. 4: To validate the hypotheses formed in Stage 1 as to whether some areas in the two chosen municipalities have high or low coverage

SQUEAC Stage 1 Quantitative (Mixed Method Explanatory Phase 1)

Specific Objective no.1: To determine which among the OTCs in the province of Albay have high or low coverage using the secondary routine program data.

To avoid distinguishing whether a code belongs to a city or a municipality, all local government units will be called a municipality in the subsequent discussion.

Key Finding # 1: Some of the Municipalities in the province of Albay had no functioning OTC and some had incomplete and/or with inaccurate routine program data.

The summary of routine program data findings from all the Municipalities in Albay is presented in Appendix D. Table 4.1 below on the

other hand, shows a snapshot on whether a functioning OTC is present or not in a municipality and if present, whether the OTC routine program data is complete and accurate, incomplete and/or inaccurate or absent.

Table 4.1. Summary of OTC and data status in the municipalities of Albay, 2019

Municipality Code	OTC is Present	Absence of a Functioning OTC	Program Data Complete and Accurate	Program Data Incomplete and/or Inaccurate	No Data
A	√			√	
B	√			√	
C	√		√		
D	√				√
E		√			√
F		√			√
G		√		√	
H	√				√
I	√				√
J	√			√	
K	√		√		
L	√			√	
M		√			√
N	√			√	
O	√			√	
P	√				√
Q	√			√	
R		√		√	

Below are the findings based on Appendix D and Table 4.1:

1. Municipalities E, F, and M had no functioning OTC in their Municipal Health Office. The municipal health officers were not aware of the PIMAM program basically because the previous MHO did not endorse the

program or that it has not been implemented yet. No data was presented. These were excluded from the study.

2. Municipalities G and R also had no functioning OTC. However, a copy of an OTC registry form and the OTC monthly reporting form in an Excel file were given to the research team by the DOH Nutritionist-Dietitian deployed in the area. The data presented which were mostly taken from the Operation Timbang (OPT) data were incomplete and had discrepancies. Less than 50% of the required data were available thus municipalities G and R were excluded from the study.
3. Municipalities D, H, I, and P had an OTC, however, no official routine program data for 2019 were available. Municipality H OTC did not function in 2019 because of the non-availability of RUTF and just referred patients to the Bicol Regional Training and Teaching Hospital (BRTTH) OTC. Municipality I claimed that there were no SAM patients after the OPT results in 2019 were validated. Municipality P was only able to present the Operation Timbang (OPT) result in 2019. These municipalities were excluded from the study.
4. Municipalities A, L and O had functioning OTCs. However, there were no official OTC forms presented such as the patient OTC chart and OTC monthly reporting forms. For municipalities A and L, the data e-mailed were recorded on a separate form and contained less than 50% of the required data. Municipality O had SAM patients which were recorded with incomplete data entries in a logbook. Only the names of the patients, age,

birthday, weight, Z score, and number of RUTF given during the first visit only were available. These municipalities were excluded from the study.

5. Municipalities B, J, N and Q had an OTC but were not functioning fully in 2019. No individual patient OTC charts were available. The DOH deployed Nutritionist-Dietitian supplied the data - OTC Registry Form in Excel file and the OTC Monthly reporting forms to the research team but they were incomplete and with inaccuracies. Less than 50% of the required data was available. These municipalities were excluded from the study.
6. Municipalities C and K had fully functioning OTCs manned by PIMAM-trained and competent Municipal Nutrition Officers. All data sources – the Patient OTC Charts, OTC Registration Logbooks and OTC Monthly reporting forms – were presented. Therefore, Municipalities C and K were the two Municipal OTCs to undergo SQUEAC Stage 1 Qualitative and Stage 2.

The Department of Health Regional Office V sponsored training workshops to Municipal Health Officers (MHO) and Municipal Nutrition Officers on the PIMAM program in 2017. The immediate integration of an Out-patient Therapeutic Care (OTC) in the Municipal Health Office routine health services manned by a trained and competent nutrition officer and supported by the MHO were crucial for the program's successful implementation. The USAID, in its technical guidance brief on community-based management of acute malnutrition (CMAM), emphasized that one of the elements for quality

programming is the presence of a competent and responsive workforce (USAID, 2019). In-house training and cascade of information to the other staff of the municipal health office and to succeeding health managers is equally important for its sustainability. This strategy has been cited as one of the prioritised actions to increase the competence of human resources involved in CMAM by the Malawi Ministry of Health in their CMAM Operational Plan 2017-2021 which is, to conduct CMAM in-service training for all the providers in their Out-patient Therapeutic Programmes (Malawi Ministry of Health, 2016). Most of the municipal health offices in the province of Albay gradually implemented the PIMAM program through the OTC. However, if this was not prioritized, supported nor endorsed, its implementation will dwindle as observed in some municipalities who had an OTC which halted full operations in 2019.

The quality of data reported does not only reflect the competence and efficiency of the OTC staff but also the complete and correct implementation of the OTC processes such as anthropometric measurements, completeness of data gathering and filling out of forms, observance of admission and discharge criteria, and follow-up of patients. An effective and responsible health program manager or implementer will see to it that the data reported are complete, accurate and reliable. However, this is not possible if the implementer lacks full knowledge of the program at the outset and delegates the work to another health personnel. The aforementioned problem was seen in the eight municipalities in Albay. Some of the errors observed include discrepancies in anthropometric measurements on admission, and on discharge and discharge outcomes reported in the OTC registration logbook

and monthly reporting forms. Incomplete data entries on MUAC counts, date of discharge, and defaulter record were commonplace. Similar gaps in data accuracy and reliability were also experienced in other CMAM programs in other regions. Assessment of a CMAM program data quality in Nigeria also showed discrepancies in recounted data from the paper records like those pertaining to admissions and exits and those of death and defaulter rates (Tuffrey et al, 2021). Accurate data generation will result in reliable information for analysis and synthesis which are the underpinnings of decision-making across all the building blocks of the health system (WHO, 2010). Furthermore, requiring quality data may in turn result in a demand for more data leading to its improved usage and ultimately resulting in improved program guidelines and policies (Nutley & Reynolds, 2013).

Stage 1 Routine Program Data

Key Finding #2: Based on the secondary routine program data, Municipality C OTC showed high program coverage and Municipality K OTC showed low program coverage.

Municipalities C and K were the only ones which had complete and organized PIMAM OTC routine program data. OTC visit was done and the data below were the routine program data for the year 2019 gathered from the OTC chart, the OTC registry form, and the PIMAM monthly reporting form.

Number of Admissions (Monthly and for the Whole Period)

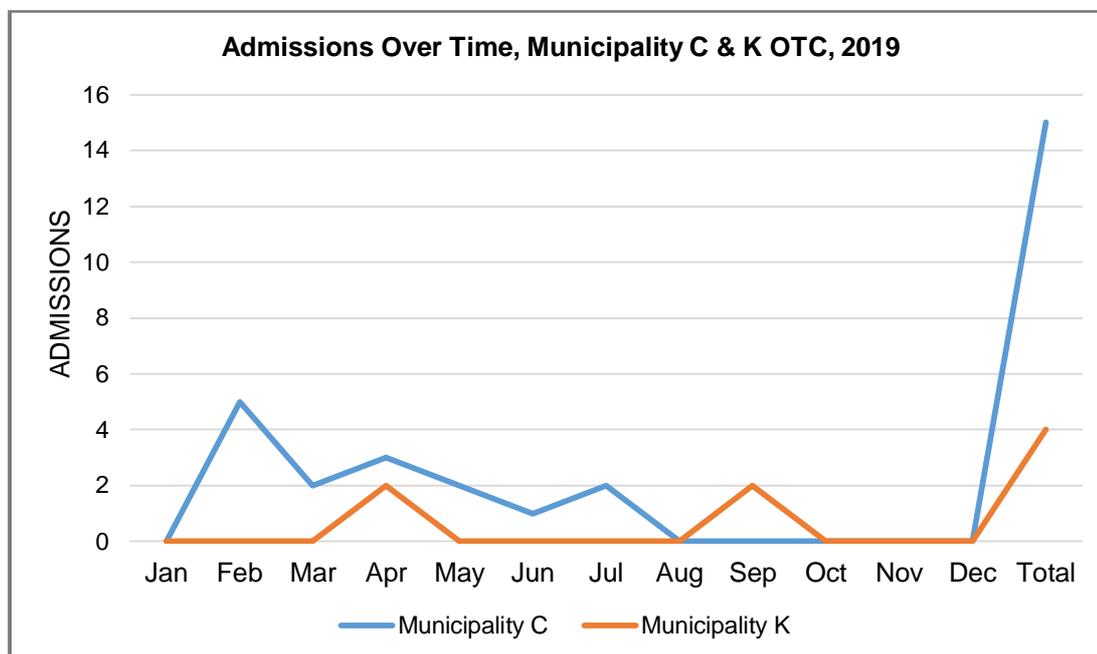


Figure 4.1. Number of admissions over time, OTC C & K, 2019

The number of admissions over time for the year 2019 for Municipalities C and K OTCs are shown in Figure 4.1. OTC C had most of its admissions (total of 10) during the first quarter of the year and slowly decreased to no admission during the last quarter while OTC K had sporadic admissions with only 2 in April and another 2 in September.

Admissions in both OTCs C and K during the first quarter were a result of the validation of their annual screening of the nutritional status of children less than 5 years in an activity called “*Operation Timbang*” (OPT). Results of the activity were submitted to the National Nutrition Council every first quarter of the year. Based on the OPT result of 2019 from the National Nutrition Council data, the prevalence of severe wasting (SAM) among children 0-59 months in Municipality C and K were 0.7% (14 children) and 1% (70 children)

respectively (NNC, 2019). If we are to compare the number of OTC admissions from the 2019 OTP results, we may deduce that Municipality C OTC has had high coverage while Municipality K OTC had low coverage.

The community health workers (CHWs): Barangay Health Workers (BHWs) and the Barangay Nutrition Scholars (BNSs), conducted anthropometric measurements monthly to children 0 to less than 2 years of age and quarterly to children 2 to less than 5 years of age. Succeeding admissions in the program were from the referrals of the CHWs from these activities. Accuracy of anthropometric measurements though is central in the detection of SAM and thereby referral and admission to the PIMAM OTC.

The number of admissions over time in a non-emergency setting varies with the incidence of severe acute malnutrition in a municipality which is affected by childhood diseases associated with acute malnutrition, unemployment, and food availability. Additionally, it may also be a reflection of the extensiveness of community sensitization, SAM case finding, and accuracy of anthropometric measurements whereby limitations in these areas may pose potential problems with the recruitment.

OTC Discharge Rates (Monthly and for the Whole Period)

Tables 4.2 and 4.3 below show the OTC discharge outcomes and rates for Municipality C and K respectively.

Table 4.2 Discharge outcomes, monthly, and for the whole period, OTC C, 2019

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Cured	0	0	5	2	3	2	1	2	0	0	0	0	15 100%
Transfer to ITC	0	0	0	0	0	0	0	0	0	0	0	0	
Non-cured	0	0	0	0	0	0	0	0	0	0	0	0	
Defaulter	0	0	0	0	0	0	0	0	0	0	0	0	
Dead	0	0	0	0	0	0	0	0	0	0	0	0	

Cured - Patient reaches criteria as cured for 2 consecutive weeks/visits at the OTC

Transfer to ITC - Patient has been transferred to the In-patient Therapeutic Care

Non Cured - Does not meet the criteria for discharge cured within 4 months of OTC stay

Defaulter - Patient has not returned for 3 consecutive visits at the OTC and is confirmed not to be dead

Dead - Patient died during his treatment at the OTC

All of the admitted cases for Municipality C OTC were discharged as cured under the standard case definition. This translates to 100% cure rate. According to the SPHERE minimum standards for CMAM discharge outcomes, cure rates should be at > 75%. A program with high cure rate and therefore with low death, defaulter and non-cure rates, has good coverage which promotes program effectiveness (Action Against Hunger, n.d.). Furthermore, a CMAM program effectiveness could be defined as the cure rate observed under a standard program treatment protocol (Myatt & Guerrero, 2013). Assuming good program effectiveness, cure rates reaching almost 100% may have had admissions of uncomplicated SAM cases or those with no medical complications, those whose admission MUAC were \geq 110 mm, and who had no or at most just a minimal edema (Myatt & Guerrero). These conditions were observed in all of the 15 admitted cases in Municipality C OTC.

Table 4.3. Discharge outcomes, monthly and for the whole period, OTC K, 2019

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Cured	0	0	0	0	0	0	0	0	0	0	0	0	
Transfer to ITC	0	0	0	0	0	0	0	0	0	0	0	0	
Non-cured	0	0	0	0	0	1	0	0	0	0	2	0	3
Defaulter	0	0	0	0	0	0	0	0	0	0	0	0	
Dead	0	0	0	0	0	0	0	0	0	0	0	0	

Cured - Patient reaches criteria as cured for 2 consecutive weeks/visits at the OTC

Transfer to ITC - Patient has been transferred to the In-patient Therapeutic Care

Non Cured - Does not meet the criteria for discharge cured within 4 months of OTC stay

Defaulter - Patient has not returned for 3 consecutive visits at the OTC and is confirmed not to be dead

Dead - Patient died during his treatment at the OTC

Table 4.3 above shows that Municipality K OTC discharge outcomes for the year 2019 were all recorded as non-cured which is defined as not being able to meet the criteria for discharge cured within 16 weeks of stay at the OTC under standard program treatment protocol. However, note that one of the admissions in April was discharged from the program classified as non-cured only after 8 weeks OTC stay. Furthermore, the 2 admissions in September were also discharged non-cured only after 8 weeks stay at the OTC. One admission in April 2019 was discharged non-cured only in July 2020 which was after 15 months stay in the program. Deviations in OTC K discharge outcomes with those of the standard program definitions may reflect some inaccuracies in the data. Nevertheless, high non-cure (non-response) rate may reflect program failure. Although 5% non-cure rate may be expected in some early admissions which could be complicated cases, high non-cure rates indicate a coverage problem (Myatt, 2013). Reasons for non-cure should always be sought and addressed. Myatt (2013) mentioned the more common reasons: (1) more severe and complicated cases on admission due to late diagnosis making treatment more difficult; (2) inability to

maximize treatment such as unavailability of RUTF; and (3) poor compliance to attendance on the part of the caregiver or refusal of the child to eat the RUTF. One of the admitted patients at OTC K had global developmental delay and unavailability of RUTF was a major challenge in 2019.

Patient Length of Stay in the Program Discharged as Cured

The average length of stay in the program of the beneficiaries may reflect the level of program coverage. The median duration of treatment would be less than or equal to 8 weeks for programs with higher coverage (FANTA & USAID, 2012).

Figure 4.2 below shows that Municipality C OTC admissions for the year 2019 length of stay was 4 to 5 weeks before discharged as cured with a median duration of treatment at 5 weeks implying good coverage. Similarly, in a CMAM SQUEAC evaluation in Sittwe Township-Rakhine State in Myanmar in 2014, the most frequent treatment duration was 4 and 5 weeks and median length of stay at 8 weeks (ACF, 2014). Short stay in the program avoids defaulting and development of medical complications and will leave a good impression about the program.

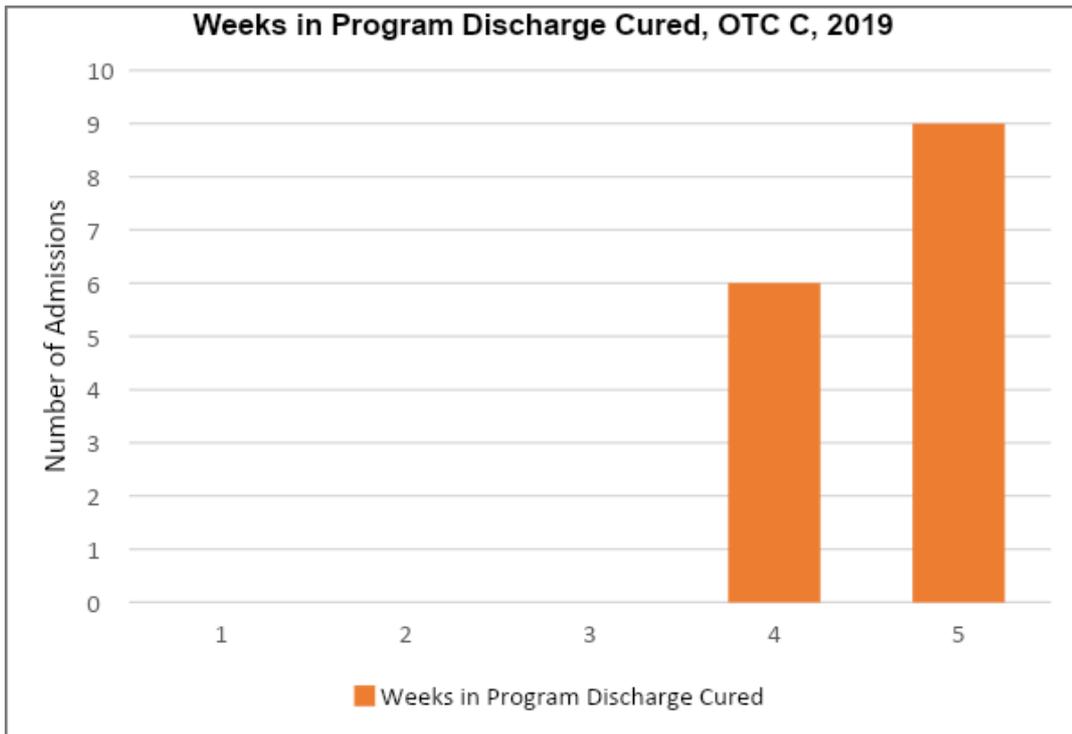


Figure 4.2. Length of stay before discharge cured OTC C, 2019

Three of the admissions in Municipality K OTC stayed in the program for 8 weeks only but were discharged as non-cured. One patient stayed in the program for 15 months and eventually also discharged as non-cured. As discussed earlier, deviations from discharge outcome definitions may reflect inaccuracies with program data. Long treatment durations which may be brought about by late admissions give negative impressions on the program and is a breeding ground for defaulters and indifference of the caregivers on the program (FANTA & USAID, 2012). Longer stay in the program and poor discharge outcomes reflect low program coverage.

Number of Defaulters

There were no defaulters for both Municipality C and K OTC during the year 2019. All patients enrolled were checked for follow-up by the community

health workers (CHWs) at the barangay level as early as 1 week if they are not returning for follow-up. This strategy was found to be effective in preventing defaulter rates since the CHWs are in close monitoring of the admissions where home visits encourage continuation in the program. In a study done in the Kita District of the Kayes region in Mali, those SAM cases who were treated by the CHWs had fewer defaulter rates (3.7%) as compared to those who were treated at a health facility-based OTC at 9.8% (Lopez-Ejeda et al., 2020).

MUAC Measurements on Admission and at Discharge Cured

Timeliness of admission can be analyzed by plotting MUAC counts on admission. High coverage programs would have MUAC counts close to the admission criteria for SAM, that is <115 mm. Much lower MUAC counts from this cut-off point reflect late admissions which may be due to the late seeking behavior of the SAM caregivers and inadequacies in case finding and recruitment (FANTA & USAID, 2012).

Figure 4.3 below shows the MUAC counts on admission and discharge cured for Municipality C OTC. Only one of the admissions had a MUAC of < 115 mm. This MUAC count of 112 mm was not far from the cut-off point of 115 mm, therefore OTC C showed timely admissions. MUAC counts at discharge cured were expected to be all normal, that is ≥ 125 mm.

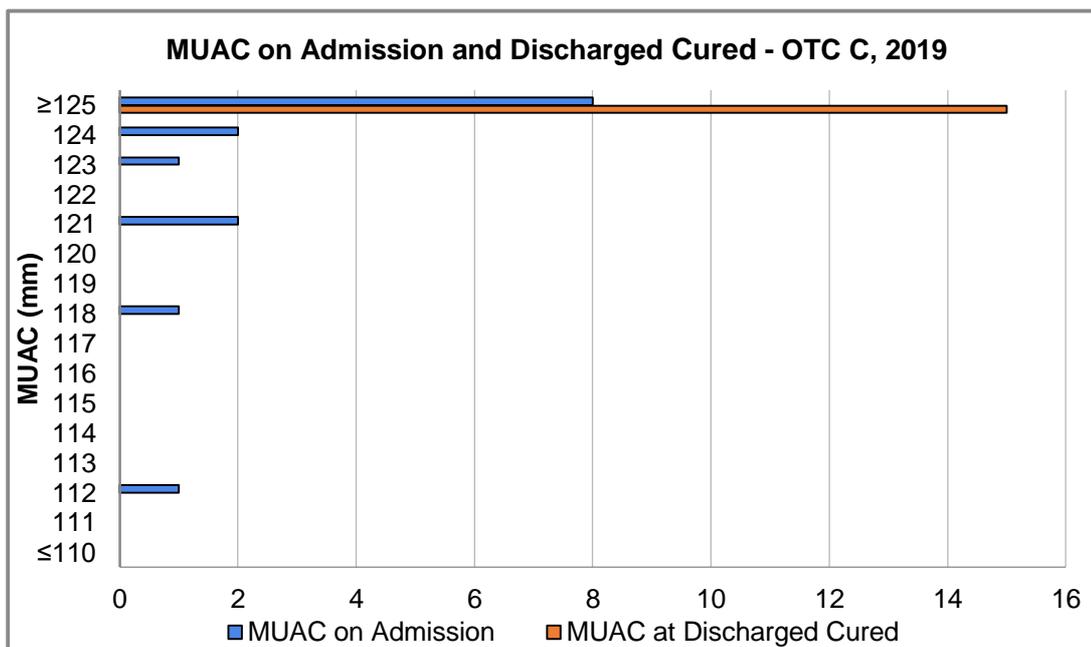


Figure 4.3. MUAC on admission and discharged cured, OTC C, 2019

Figure 4.4 below shows the MUAC counts on admission and discharge non-cured for Municipality K OTC. Only one admission had a MUAC count less than 115 mm, which was 111 mm. This was also not far from the cut-off which connotes timely admissions. Of the MUAC counts at discharged non-cured, three were normal at ≥ 125 mm. However these patients remained non-cured on the basis of their weight for length Z-scores. One of the patients had a MUAC at discharge non-cured of 119 mm from 116 mm on admission. This patient, however, only stayed in the program for 8 weeks and could have achieved a higher MUAC if allowed to maximize his stay in the program which is 16 weeks.

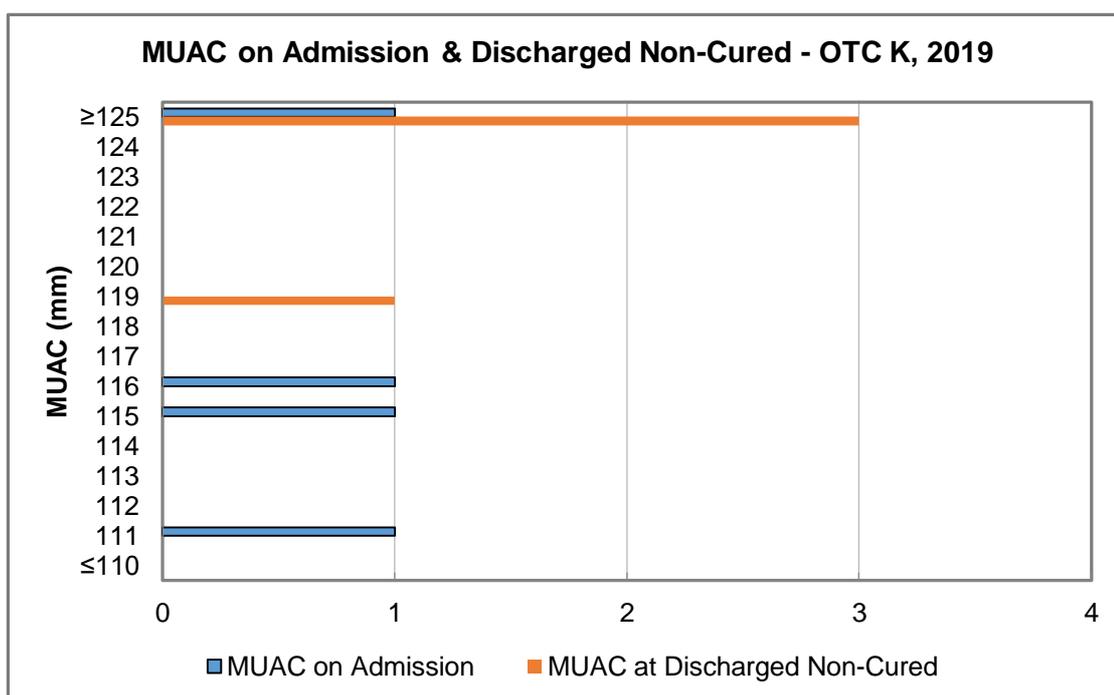


Figure 4.4. MUAC on admission and discharged non-cured, OTC K, 2019

New cases of uncomplicated SAM admissions had MUACs between 110 mm to 114 mm (ENN & CMN, 2014). Children who have been severely wasted for a longer period of time without receiving intervention had much lower MUAC counts where some reached < 90 mm which are critical SAM cases and considered as very late admissions (FANTA & USAID, 2012). Lower MUACs were found to be associated with negative outcomes in a large-scale CMAM program study in Nigeria (Chitekwe et al., 2018). MUAC counts on admission for both Municipality C and K OTC results were either normal or between 110 mm to 114 mm. Hence, both OTCs had timely admissions of uncomplicated SAM cases.

Another factor to consider in analyzing MUAC counts on admission is the duration of the program implementation. OTCs early in their implementation may have more lower admission MUACs since prevalent SAM

cases (those with very low MUACs because they have not received treatment for some time) in their catchment area would be admitted during this phase aside from the incident cases (FANTA & USAID, 2012). Both Municipality C and K OTC started their implementation in 2017 thus were expected to have better MUAC counts on admission in 2019, granted that they had good program coverage in the first 2 years of operation.

Home Barangay of Admitted Cases

The home locations or barangays of admitted cases showed the actual catchment area of the program. Geographical mapping of beneficiary home locations allowed a quick and easy analysis of the spatial coverage of the OTC.

Figure 4.5 below shows the home barangays of the program beneficiaries for Municipality C OTC in 2019. Note that home locations were both from far (≥ 5 km away) and near (< 5 km away) barangays from the Municipal OTC. However, 53% of admissions were from nearby locations wherein two of the beneficiaries were from the same barangay where the OTC is located and five just from an adjacent barangay. Seven beneficiaries (46%) were from far barangays wherein three of these came from the farthest barangay. Most of the home locations are along major roads leading to the OTC where most of the inhabitants reside. Municipality C is mostly mountainous and there are basically no people living in these areas. Although there was clustering of the home locations of admitted cases near

the OTC, based from this mapping, it can be deduced that Municipality C OTC has nearly even spatial coverage.

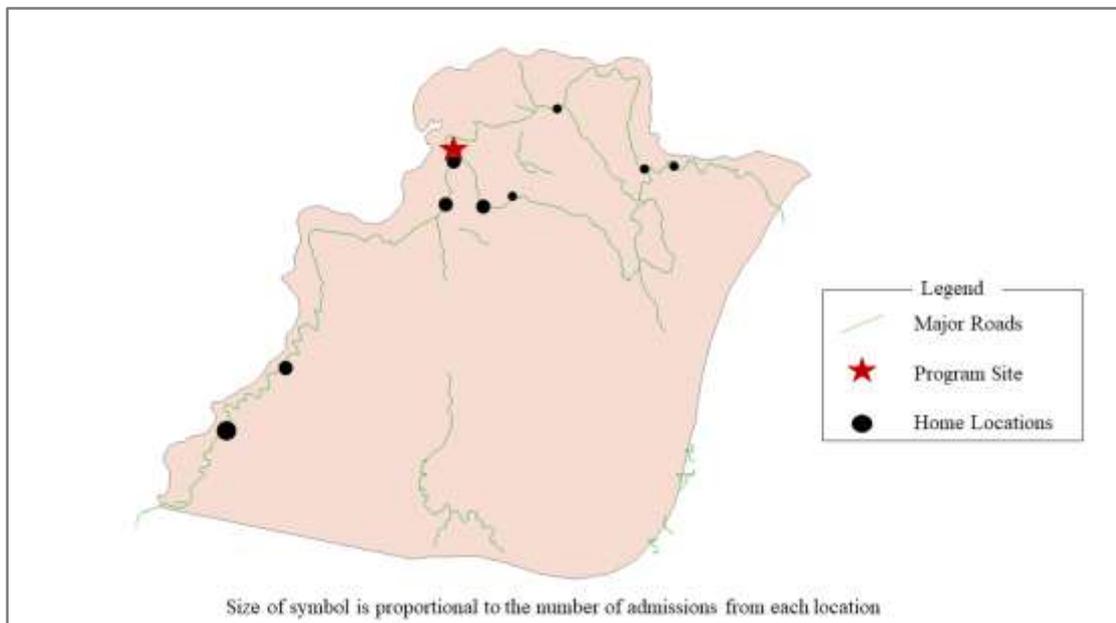


Figure 4.5. Mapping of beneficiary home locations, OTC C, 2019

Below is Figure 4.6 showing the home barangays of the beneficiaries of Municipality K OTC. There were only 4 admissions in 2019. Two beneficiaries were from nearby barangays where one is adjacent to the barangay where the OTC is. Two beneficiaries came from the same far barangay. Note that there were no admitted cases in most of the other parts of the municipality even where there are major roads and clustering of communities. From this, it can be reasoned that Municipality K OTC has limited spatial coverage.

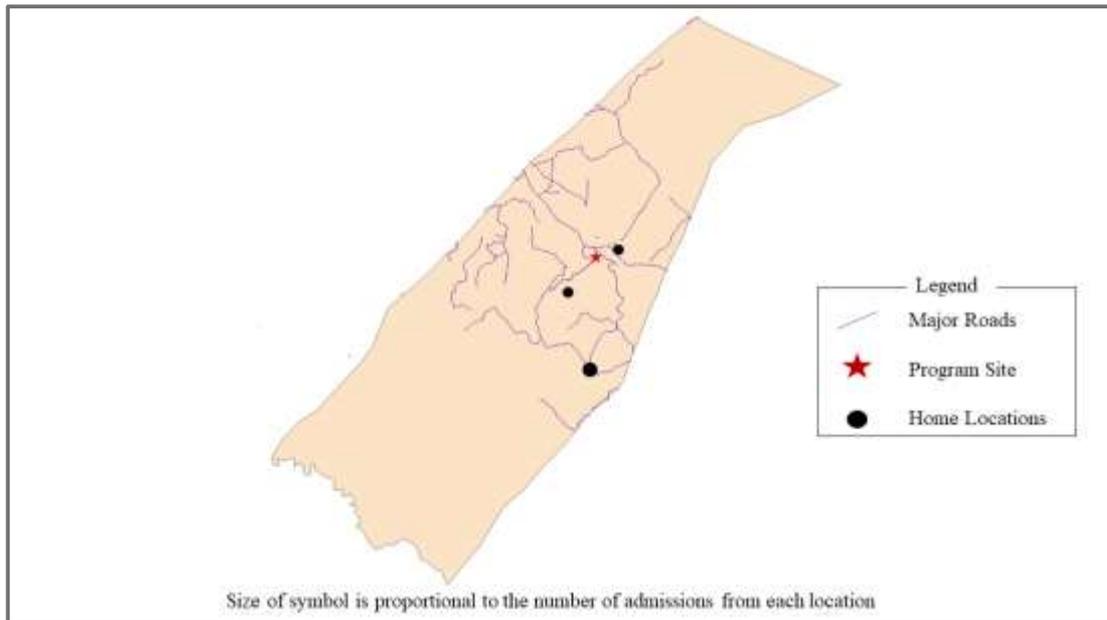


Figure 4.6. Mapping of beneficiary home locations, OTC K, 2019

Good program spatial coverage requires evenness in the distribution of admissions of SAM cases coming from both far and near barangays. This was influenced by outreach activities in the form of community sensitization and SAM case findings in all *puroks* of each barangay in the municipality to identify and recruit patients for admission. This was therefore reflective of the ability of the program to extend out across all the areas it was intended to serve. High program coverage has even or nearly-even spatial coverage (Action Against Hunger, n.d.). In other CMAM program evaluations using the SQUEAC such as those in Nigeria and Republic of South Sudan, most of the admissions were located within less than 5 kilometers from the program site, along major roads and from densely populated areas (ACF International, 2012 & Kanja, 2019).

Patient Referral Source

An understanding of the progression of SAM case finding activities and the PIMAM program knowledge by the caregivers and other stakeholders may be presented by the data on the referral source of admitted cases.

Figure 4.7 below shows a Pareto chart presenting the sources of referrals of SAM patients received by Municipality C OTC. All or 100% of the referral sources came from the community health workers (CHWs) – the barangay health workers (BHWs) and the barangay nutrition scholars (BNS). This is in line with the fact that all admissions in the program were done after the validation of the results of the OPT and the subsequent regular outreach activities and anthropometric measurements by the CHWs.

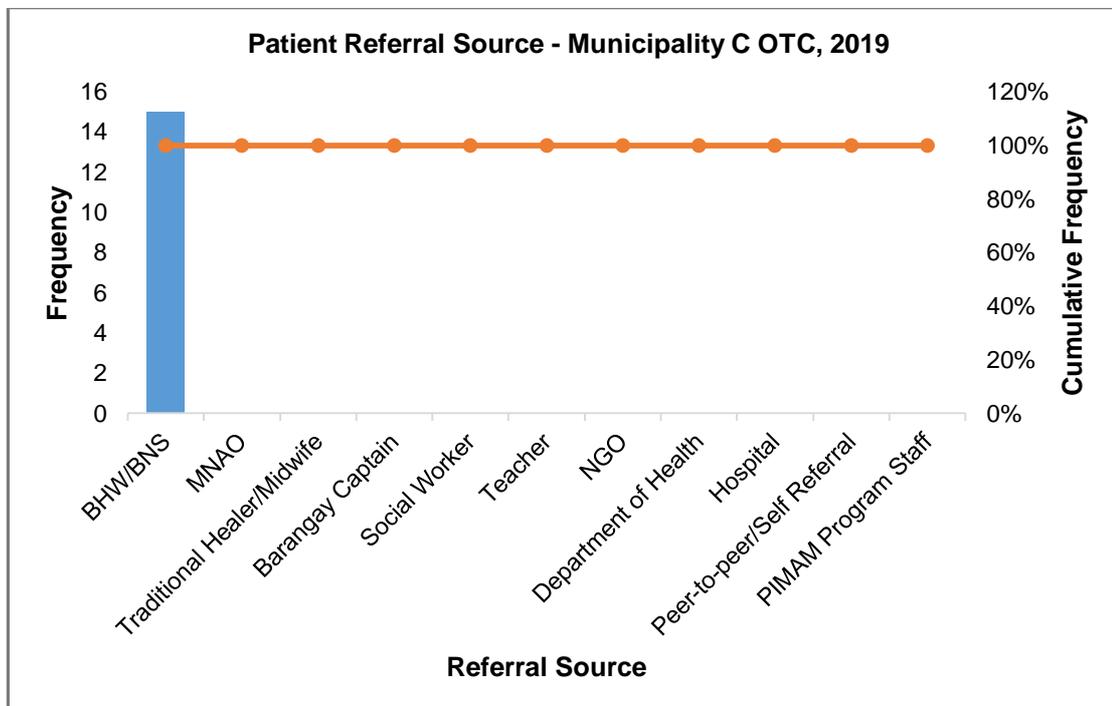


Figure 4.7. Patient referral source, municipality C OTC, 2019

Patient referral source of Municipality K OTC in 2019 is presented in the Figure 4.8 below. Three referrals came from the community health workers, also after their regular anthropometric measurements for case finding. One referral was from the Bicol Regional Training and Teaching Hospital (BRTTH) where the patient was first enrolled at the hospital's OTC and admitted at the In-patient Therapeutic Care (ITC) in November 2018 as a case of SAM with medical complications, Very Severe Pneumonia. OTC timely admissions and strict adherence to SAM treatment protocol prevent cases requiring hospital ITC care (FANTA & USAID, 2012).

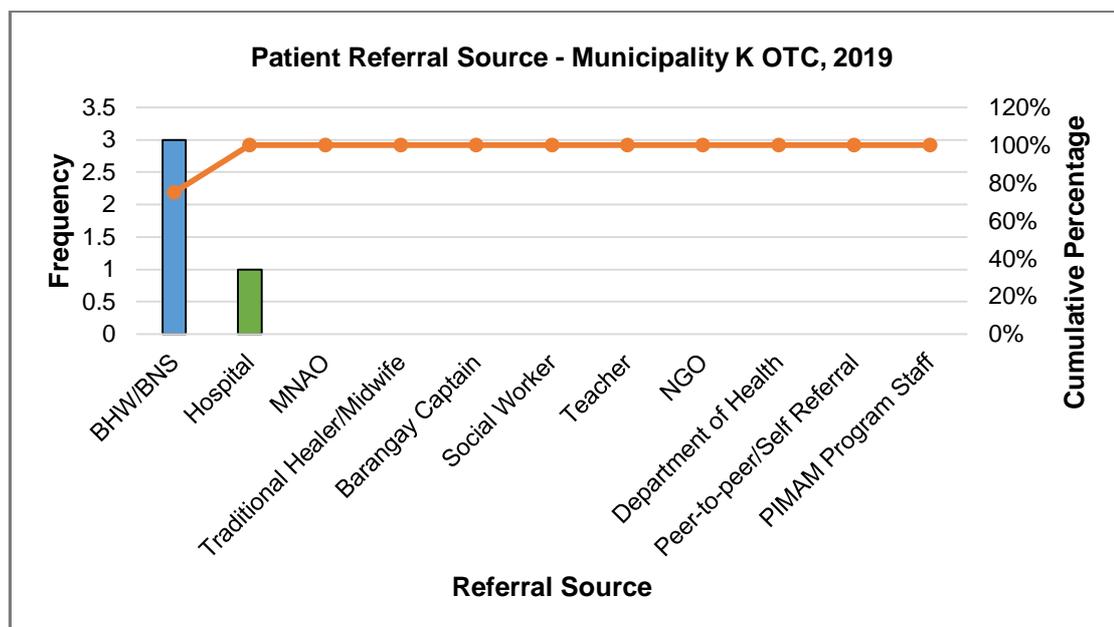


Figure 4.8 Patient referral source, municipality K OTC, 2019

The community health workers were the main source of referrals for most CMAM program admissions during the earlier phase of their operation. In an SQUEAC evaluation for the year 2012 of a CMAM program in Arakan and President Roxas in Mindanao Philippines which started in 2011, 78% of referrals were from the BNS (Amin, 2013). The same is true in Damboa Local

Government, Borno State, Nigeria, where 75% of referrals come from CHWs in a CMAM evaluation done for the year 2018 when the program was one year in operation (Kanja, 2019). This was an indication of the zealous work of outreach activities of the CHWs in the catchment areas. Both Municipality C and K OTC started their operation during the latter part of 2017 and majority or all of the referrals were from the CHWs in 2019.

As a CMAM program evolves in its operation and as a result of constant community sensitization on malnutrition and on the program itself, more and more referrals would come from the other key players in the community such as the teachers, social workers, traditional healers, barangay captains and ultimately self-referrals or peer-to-peer referrals by the caregivers themselves. This scenario would have been more ideal for both Municipality C and K. An example of this is in Sittwe Township – Rakhine State in Myanmar where in a CMAM program evaluation done after 2 years of the program implementation showed that most of the admissions (47.2%) were self-referrals which also conveys positive health-seeking behavior among the beneficiaries (ACF International, 2014).

Stage 1 Additional Quantitative Data

Time-to-Travel and Distance-to-Travel Between the OTC and the Barangay of Admitted Cases

How far and how soon beneficiaries will reach the OTC are notable factors affecting program coverage. Generally, with increasing distance- and time-to-travel, recruitment of SAM cases tends to decrease (FANTA &

USAID, 2012). These are also important predictors of the rate of defaulting cases. The farther and the longer it takes for beneficiaries to reach the OTC, the more chances they would default. Time-to-travel is particularly important to measure because it takes into consideration factors affecting travelling such as availability of transportation, quality of the roads and the land terrain (Action Against Hunger, n.d.).

The home barangays of admitted cases – near (N) and far (F) – and distance- and time-to-travel to the OTC C and OTC K were shown in Figures 4.9 and 4.10 respectively. Transportation was readily available and there were good roads in both Municipalities such that short distances proportionately allowed for a shorter time-to-travel. The number of admissions remained basically uniform regardless of the distance- and time-to-travel to the OTC.

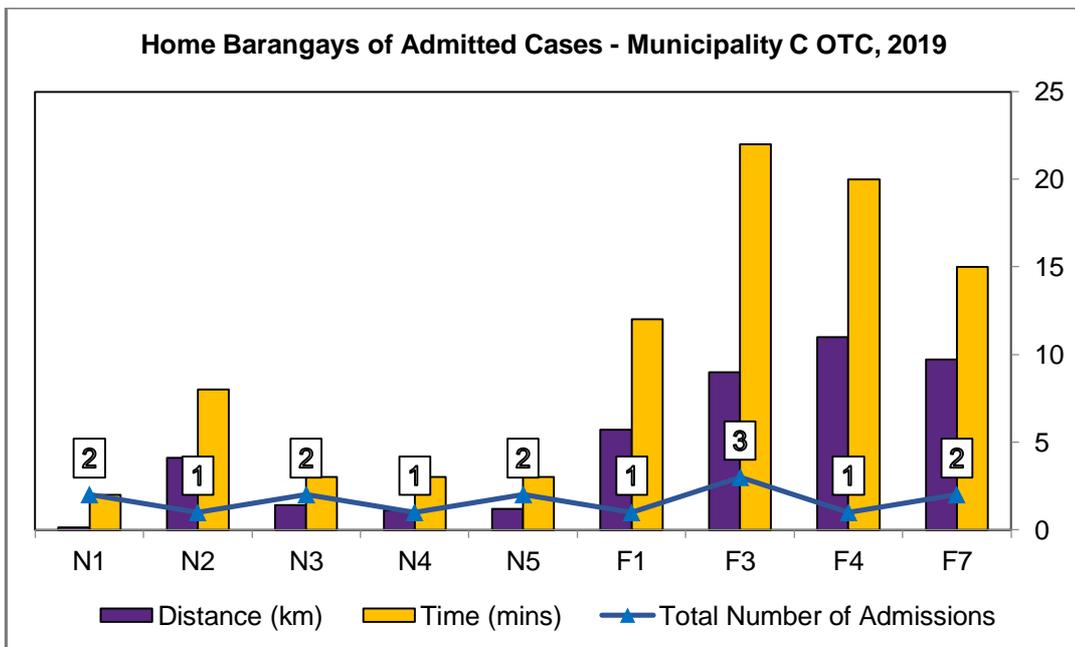


Figure 4.9. Distance- and time-to-travel from municipality C OTC, 2019

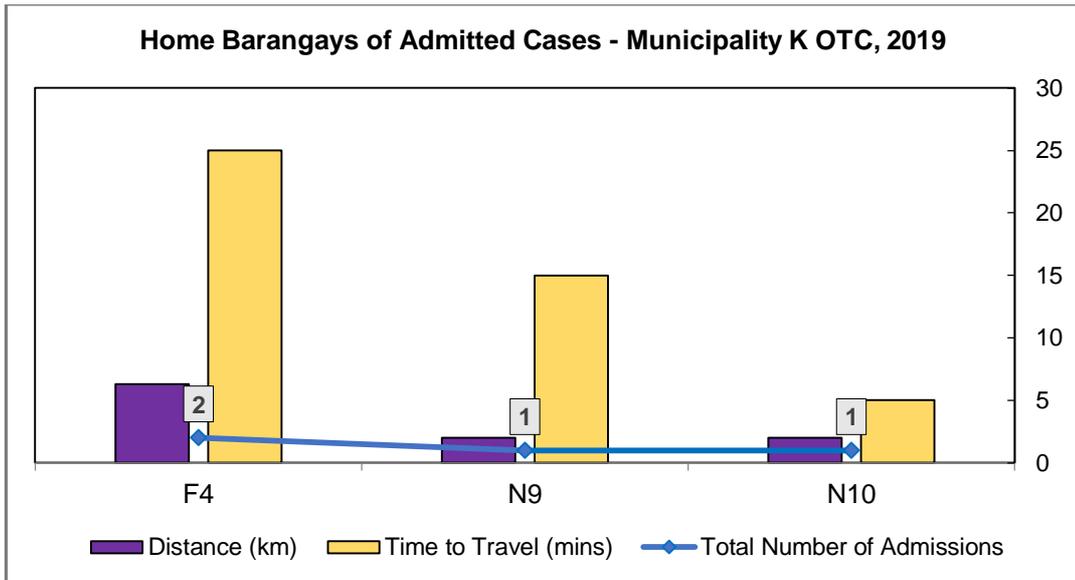


Figure 4.10. Distance- and time-to-travel from municipality K OTC, 2019

The distance and time-to-travel could have also been analyzed for defaulting cases. However, there were no defaulters noted in both Municipalities.

Number of Community Health Workers Outreach Activities in the OTC Catchment Area

Community health workers played a crucial role in the identification and recruitment of SAM children to the program. The number and distribution of their outreach activities when mapped will provide information on the extent of the activities' spatial coverage (Action Against Hunger, n.d.).

Figures 4.11 and 4.12 below shows the mapping of CHWs outreach activities in Municipality C and K respectively. It can be seen that outreach activities represented by the purple dots were present in all of the barangays in both municipalities. The Municipal Nutrition Officer and the BNS supervise

the annual *Pabasa sa Nutrisyon* (lectures on basic nutrition to caregivers of undernourished children and pregnant women), the monthly screening of children 0-<24 months of age, quarterly screening for 24 to <59 months . These events were conducted in all *barangays*. Individual efforts of the BHWs to conduct informal counseling with disparate quality and content to caregivers during their home visits also took place. However, there were no other major outreach activities made solely for the sensitization of the community pertaining to the PIMAM program.

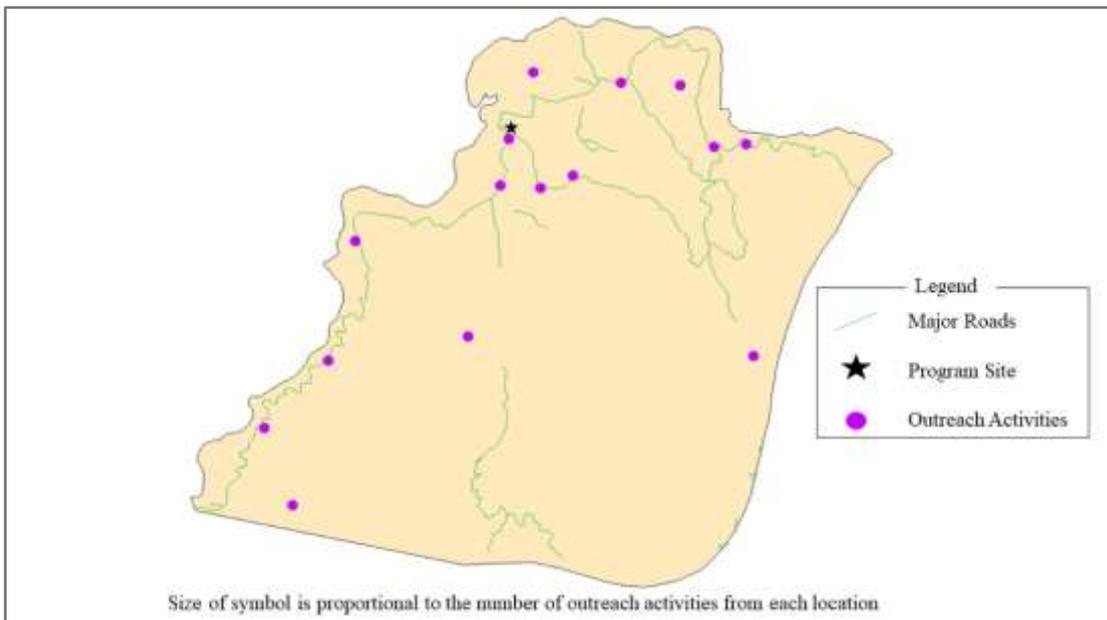


Figure 4.11. Mapping of CHWs outreach activities, municipality C, 2019

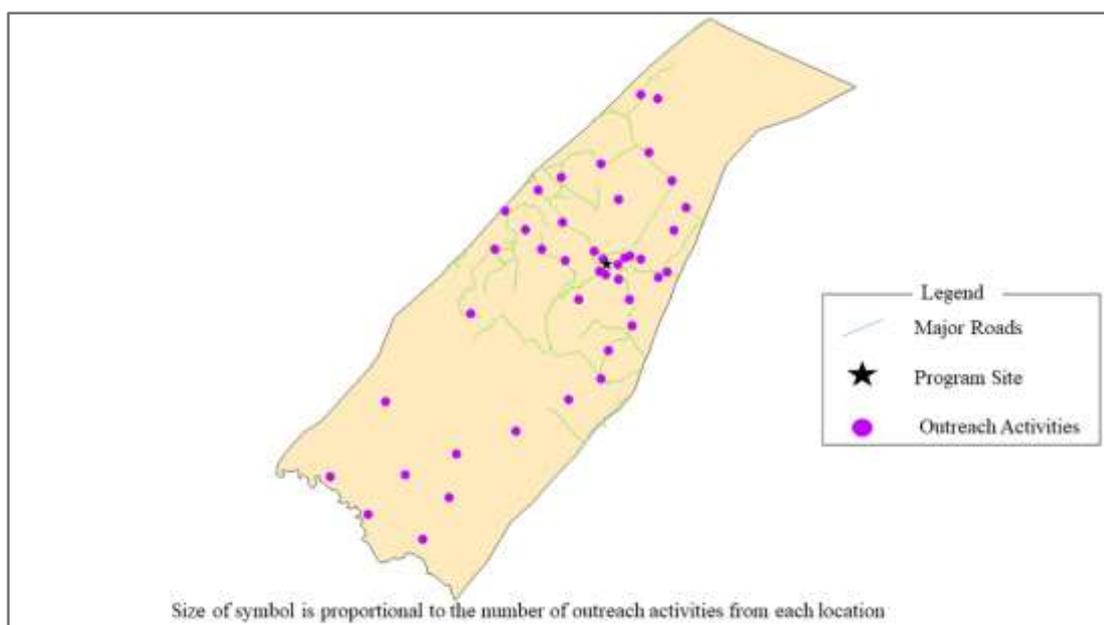


Figure 4.12. Mapping of CHWs outreach activities, municipality K, 2019

These CHWs' outreach activities could have been sufficient avenues to increase recruitment of SAM cases which may thereby improved program coverage. However, the level of training of the CHWs on the PIMAM program and on malnutrition, the accuracy of anthropometric measurements, and the quality and focus of community sensitization on the PIMAM program will impact recruitment and therefore, program coverage. A study done in a Rural Kassala Locality in Sudan in 2018 showed that despite the 67% referrals to the CMAM program from the CHWs, 94.5% of the caregivers has knowledge on the program, and that the CHWs outreach activities did a good job, strengthening the role of community outreach volunteers through training, follow-up, and motivation were still strongly recommended (Mohammed & Mosmar, 2018).

Stage 1 Quantitative Summary of Findings

Result from Mixed Method Explanatory Sequential Phase 1, Quantitative

From the analyses of the Stage 1 quantitative secondary routine program data, it can therefore be deduced that:

1. Only two municipalities (C and K) in the province of Albay had a functioning OTC with complete and organized secondary routine program data.
2. Municipality C must have had high program coverage based on the following premises:
 - a. Good pattern of admissions over time and the number of admissions matched the number of SAM cases reflected in their 2019 OPT.
 - b. All 15 admitted patients were discharge cured.
 - c. Length of stay in the program of the admitted children were 4 to 5 weeks which was even shorter than the standard 8 weeks for good coverage.
 - d. There were no defaulters.
 - e. Admission MUAC reflected timely admissions.

- f. Mapping of beneficiary home barangays showed good and even spatial coverage.
 - g. Sources of referral were all from the CHWs which is acceptable during the early phase of program implementation.
 - h. Number of admissions were uniform regardless of distance- and time-to-travel.
 - i. CHWs outreach activities, though weak, were conducted in all of the barangays.
3. Municipality K must have had relatively low program coverage based on the following grounds:
- a. There were only 4 admissions which was way lower than their reported SAM cases reflected in their 2019 OPT.
 - b. All admitted cases were discharged non-cured.
 - c. Three of the patients were discharged non-cured only after 8 weeks stay in the program which is not in accordance with discharge outcome definitions reflecting some inaccuracy. One patient was discharged non-cured after staying in the program for 15 months.
 - d. Mapping of beneficiary home locations showed limited spatial coverage.

- e. Of the four admissions, one was a referral from the BRTTH where the patient was admitted at the In-patient Therapeutic Care as SAM with medical complications.

SQUEAC Stage 1 Qualitative (Mixed Method Explanatory Phase 2)

Specific Objective No. 2: To determine the barriers and boosters perceived by different stakeholders in the community that pertain to the general household and community context.

Specific Objective No. 3: To deconstruct the barriers and boosters perceived by different stakeholders in the community that directly affect PIMAM OTC implementation.

In order to explain and provide depth and understanding into the findings of SQUEAC Stage 1 Quantitative and to deconstruct barriers and boosters to program coverage, SQUEAC Stage 1 Qualitative was done through community assessment, key-informant interviews (KIIs), informal group discussions (IGDs) and direct observations at the OTCs.

Community Assessment

Key Finding # 3: Boosters pertaining to community context include: high literacy rate, exclusive breastfeeding practices, barangay council support on nutrition programs, utilization of some communication channels, staple foods are available and accessible throughout the year, and OTC made accessible at the barangay health station. Barriers pertaining to community

contexts include: poverty, unemployment, presence of social norms, traditional practices and beliefs on food, belief in traditional healers, absence of NGO volunteer networks, typhoons and disasters were common, busy caregivers during fiestas and the holiday season.

Different contexts in the community may affect PIMAM program access and coverage making its assessment imperative.

Demographic Profile, Social Norms, and Traditional and Religious Beliefs

Poverty, unemployment, low parental educational attainment, certain social norms and adherence to traditional beliefs and misconceptions are all breeding grounds to acute malnutrition. These factors also have an effect on the caregivers' health-seeking behavior, perception on malnutrition and comprehension of counseling instructed to them which directly affect program coverage.

Table 4.4 below shows a summary of the latest available demographic data of Municipalities C and K. Data on poverty, unemployment and subsistence for Municipality K were obtained from the report on The Many Faces of Poverty Volume 8 (CBMS, 2017) and the rest from the Municipal profile secondary data.

Table 4.4. Demographic data, municipalities C and K

Indicator	Municipality C*		Municipality K**	
	Count	Proportion (%)	Count	Proportion (%)
Total Population	25,554		82,361	
Males	13,111	51.3	41,804	50.76
Females	12,443	48.7	40,557	49.24
Children 0-59 months	3,022	1.18	8,491	10.31
Wasted Children 0-59 months	11	0.36	242	2.7
Below Poverty	2,296	41.04	9,122	53
Unemployed member of the labor force	183	2.08	803	3.3
Household w/ income below food threshold	1,358	24.28	6,857	39.8
Illiteracy	234	1.19	488	0.77%

*Data 2018-2020

**Data 2014-2016

Both Municipalities had a higher proportion of households whose income lie below the poverty threshold as compared to the Philippine poverty rate - 23.3% in 2015 and 16.6% in 2018 (PSA, 2020) – for the respective year the data was extracted from. Proportions of households with income below the food threshold, also called subsistence incidence, are also higher than the average country incidences – 9.9% in 2015 and 6.2% in 2018 (PSA, 2019). Poor people by and large lacked enough income to provide the basic food needs and nutritional requirements resulting in malnutrition. Poverty was also associated with inability of the households to shoulder transportation expenses going to the Rural Health Units (RHUs) and OTCs which is a barrier to program coverage. Unemployment had always been mentioned as a barrier in the responses of the participants in the KIIs and IGDs. High literacy rate in

both municipalities may translate to the community being easily educated on correct health practices and on malnutrition, thus is a booster.

The predominant religion at more than 95% in the province of Albay is Roman Catholic hence, no special food practices nor restrictions were imposed. Practicing exclusive breastfeeding was the norm among women who give birth. Social norms and traditional beliefs in the province are one of the determinants to malnutrition and low program coverage. One specific social norm common among Filipinos which is still very strongly felt in Albay is “*hiya*” or shame which is a sense of social suitability and conforming to societal norms and behaviors. One good example which might have direct and indirect effect on malnutrition is spending more on appliances and personal belongings to ‘keep up with the Joneses’ and excessive indulgence during town *fiestas* despite their economic circumstances which compromise food on the table. Having a child who is “*payat*” or thin may be embarrassing and may cause them to lose self-esteem affecting their health-seeking behavior. Some members of the community still believe and rely on traditional healers for their first line health needs thus, delaying proper health care. Misconceptions on breastfeeding abound such as mothers cannot breastfeed when tired and stressed, women to breastfeed only from one breast because one breast supplies only water, and mothers stop breastfeeding when they have colds, to name a few.

Community Volunteer Networks and Community Actors

Community assessment showed that from 2019 to the time of data collection, there were no active non-government organizations (NGOs) involved in nutrition programs in both municipalities. Relevant community actors such as the barangay captains, teachers and social workers by and large were not aware of the PIMAM program. However, barangay councils supported nutrition programs.

Communication Channels

Analyzing how and under what settings the key players in the catchment area communicate with one another to relay key messages on malnutrition and about the program is valuable in assessing program coverage. Table 4.5 and 4.6 show the Communication Channel Matrix of Municipality C and K, respectively.

Table 4.5. Communication channel matrix in terms of communication objectives and classic communication settings, municipality C

Communication Channels	Diffusion of Messages	Opinion Leader Encourages the Action	Role Model Demonstrates the Struggle and Success	Community Engagement	Dialogue about Barriers & Solutions
Peer to peer	√	√	X	X	X
Door to door	√	√	X	X	X
Community Discussions	√	√	X	√	X
Community Theater/ Special Events	√	√	X	√	X
Mass Medias	√	√	X	X	X

■ Classic Communication Settings
 ■ Actions or communication objectives

Table 4.6. Communication channel matrix in terms of communication objectives and classic communication settings, municipality K

Communication Channels	Diffusion of Messages	Opinion Leader Encourages the Action	Role Model Demonstrates the Struggle and Success	Community Engagement	Dialogue about Barriers & Solutions
Peer to peer	√	√	X	X	X
Door to door	√	√	X	X	X
Community Discussions	√	√	X	√	X
Community Theater/ Special Events	√	√	X	X	X
Mass Medias	√	√	X	X	X

■ Classic Communication Settings
 ■ Actions or communication objectives

Note that in both municipalities, communication channels were more in the form of diffusion or dropping down their messages to the beneficiaries where there was no discussion nor consultation taking place before and after the encounter (column 1).

Another common objective was the encouragement of the action by an opinion leader such as the municipal health officer and nutrition officer, a barangay captain or a midwife. These communication channels may be considered boosters to program coverage. A better way of communication is moving towards engaging and empowering the beneficiaries through role models, community engagement and dialogues (Action Against Hunger, n.d.). In this way, community sensitization may have its maximum impact for the community to grasp and live what they have heard and learned. Though both Municipalities already have community engagements through community discussions, dialogue about barriers and boosters need to be initiated. By

using the communication channel matrix, a PIMAM program evaluator may understand the existing scenario and be able to improve and recommend a communication setting for each communication objective.

Seasonal Variations

Analyzing the municipality's seasonal variations plotted on a calendar over a period of one year explained trends in program admissions and defaulting over time. Periods of rains, calamities, childhood illnesses, unavailability of staple foods, and high prices of basic commodities may result in increased number of SAM admissions in the next few months. On the contrary, key municipal events such as town fiestas and Christmas usually resulted in lesser admissions and higher defaulting when caregivers tend to be more busy with other things.

The seasonal calendar compared with admissions over time for Municipality C was shown in Figure 4.13. The rainy season during the months of December to February when most typhoons pass Albay province may have brought the increased number of admissions in February. The high prices of basic staple foods in December of the previous year may have added up to this. Also, childhood infections may worsen acute malnutrition. The prevalence of respiratory tract infections during the first half of the year may have contributed to the number of admissions during this time. Staple foods were available and accessible throughout the year. The harvest season in April, May, August, and September assured more food availability which could have explained the decreasing number of admissions to none in the

succeeding months. October which is the month of the town *fiesta* and December were the busy months for the community which could have explained no admissions during the mentioned months. Similarly, a study in Kupang District Indonesia in 2016 showed a drastic drop of CMAM admissions in the month of December (Action Against Hunger & UNICEF, 2016).

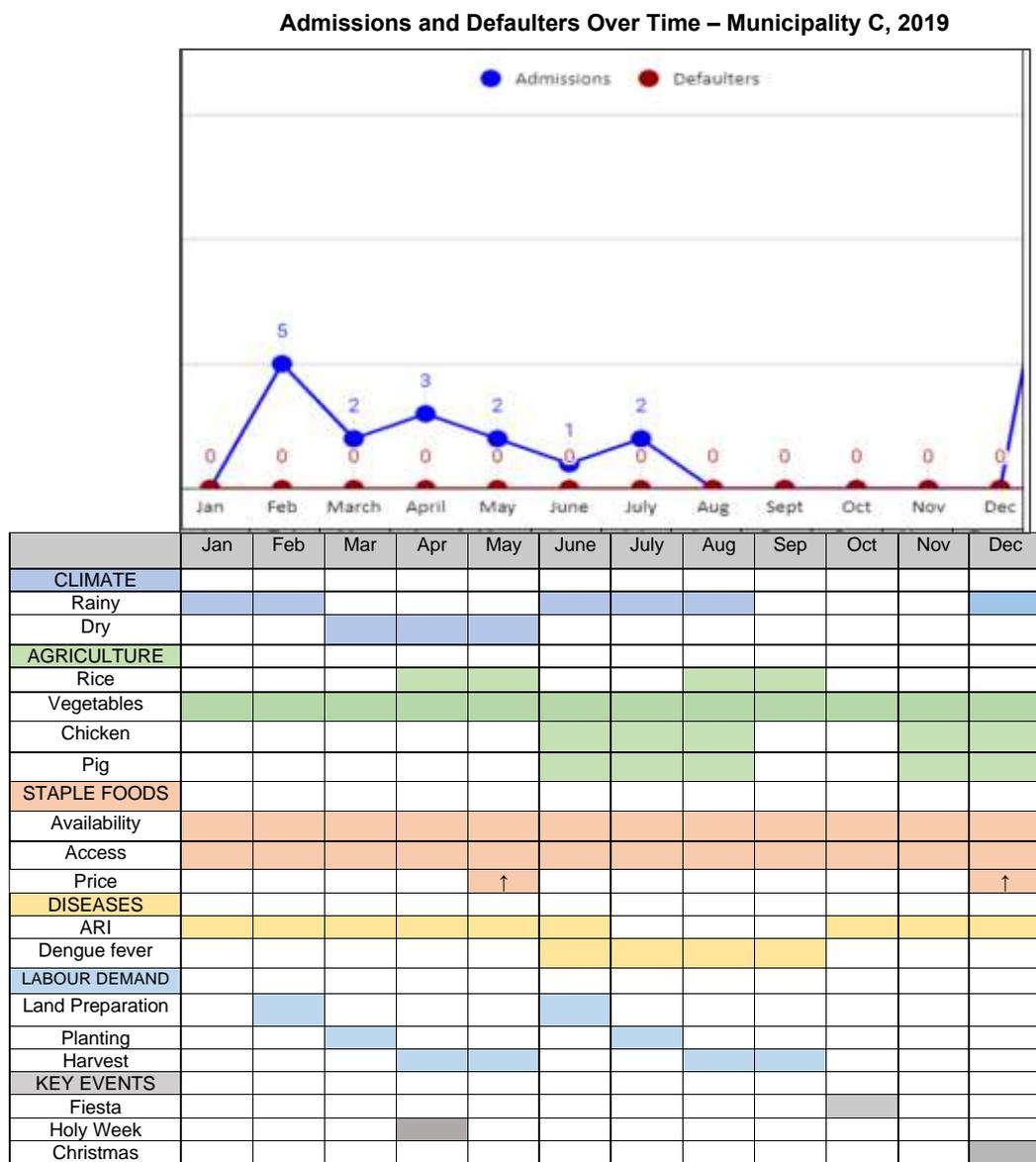


Figure 4.13. Seasonal calendar compared with admissions and defaulters, municipality C, 2019

The seasonal calendar compared with admissions over time for Municipality K was shown in Figure 4.14. There were only 4 admissions, 2 in April and 2 in September. This trend in admission over time did not show any pattern which might have been brought about by the seasonal changes during the year 2019.

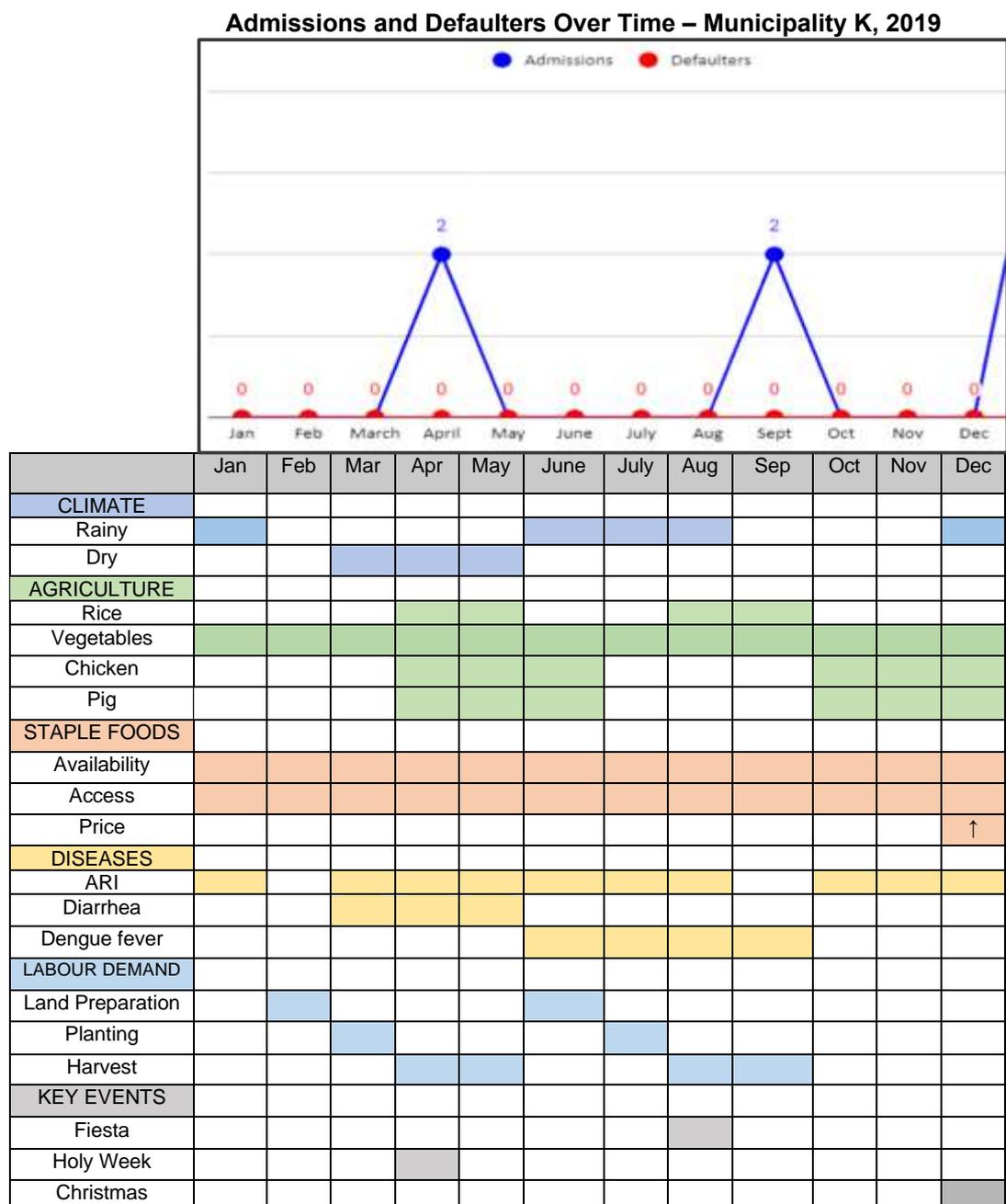


Figure 4.14. Seasonal calendar compared with admissions and defaulters, municipality K, 2019

OTC Accessibility

Although the main OTC was situated in the Municipality's RHU for both Municipalities C and K, OTC services were made available at the barangay health station making it accessible. This factor was considered a booster.

Key-Informant Interviews and Informal Group Discussions

Key Finding # 4: Boosters and barriers pertaining to OTC implementation were deconstructed for both Municipalities C and K.

A summary of the participants in the KIIs for Municipalities C and K was shown in Appendix F. Two participants from each type of respondents were interviewed; thus, there were a total of 20 KIIs. A summary of the participants in the Informal Group Discussions for both Municipality C and K is shown in Appendix G. Three IGDs consisting of a homogenous group were conducted per municipality. Eight participants for each type of respondent were targeted. However due to some emergency meetings and bad weather, IGDs in Municipality C had fewer participants.

Using interview guides (Appendix H), participants in the KIIs were conversed with, to give descriptions of the community profile, knowledge and perceptions on malnutrition and the PIMAM program, community mobilization activities, and the quality of the PIMAM program. The group discussions were informal and conversational in nature where the researcher gave the guide questions and the participants were encouraged to express themselves in their own terms. Transcripts of the KIIs and IGDs were analyzed to

deconstruct barriers and boosters to the PIMAM program access and coverage.

Direct Observation at the OTC

Directly observing the actual patient encounter, anthropometric measurements, diagnosis and treatment at the OTC may reveal some barriers and boosters to access and coverage. The activity had been an opportunity to correct errors, answer questions and discuss challenges they encountered at the OTC. Appendix I shows a summary of the findings of the activity for both Municipalities C and K.

Direct observation at the OTC gave the evaluator an idea on how the OTC staff carries out PIMAM processes by observing care and of the registers and monitoring sheets. For Municipality C OTC, boosters observed were: (1) the OTC staff was kind and accommodating, (2) accurate weight and length measurement; (3) the registers and monitoring sheets were organized, clean, filled out completely and accurately; (4) calculation of Z-scores were correct and criteria for SAM were respected; and (5) there were no defaulting cases. Barriers were more crucial which include: (1) absence of a distinct space for the OTC; (2) height board was not routinely used and the weighing scale was not calibrated; (3) patient had to wait long because there was only one trained OTC staff to attend to the child; (4) OTC staff had an error in taking the MUAC; and (5) no in-depth discussion to the caregiver on the child's condition. Absence of a distinct OTC at the RHU may have lead to its non-promotion and partial implementation especially when the OTC

personnel is not present. This was evident by the thick dust on the height boards and a weighing scale which was not calibrated. This will in turn result in missing out on SAM cases consulting at the RHU.

Directly observing OTC processes in Municipality K showed mostly boosters: (1) the OTC personnel was kind, accommodating and exhibited good rapport; (2) a distinct OTC was located at the RHU nutrition office; (3) there was accurate measurement of the weight and MUAC; (4) the registers and monitoring sheets were organized and filled out completely; (5) forms were innovated which were useful for OTC data recording; (6) calculation of Z-scores were correct and criteria for SAM were respected; and (7) there were no defaulting cases. Only two barriers were noted: (1) height measurement was done only by one person, and (2) there was no in-depth discussion of the child's condition and of the PIMAM program.

Field Notes

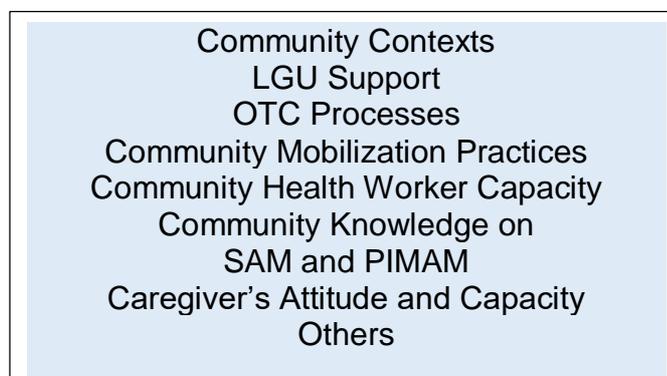
To document contextual information observed during the course of data collection, field notes were created and summarized in Appendix J. Identified booster and barriers were noted, entered into the BBQ tool and used as additional source of data for triangulation. Key observations which were considered as **boosters** were the following: (1) the barangay captain and the council were supportive of the SAM case finding activities in Municipality C; (2) the CHWs were hardworking and showed eagerness to learn and be trained; (3) caregivers during the SAM case finding were concerned of their child's nutritional status and caregivers of SAM children

showed willingness to enroll their child to the program; (4) the Municipal Health Officers were supportive of the activities pertaining to the PIMAM evaluation; and (5) the Nutrition officers were hardworking and had a good working relationship with the CHWs. Barriers on the other hand, were more notable: (1) CHWs did not know how to perform accurate anthropometric measurements; (2) caregivers lack of interest to attend sensitization activities; (3) inadequate number of trained RHU personnel to man the OTC; (4) undernourished children are common and generally accepted in the community; (5) RUTF stockouts and the pandemic stopped OTC admissions.

Qualitative Data Analysis

BBQ Tool and Triangulation by Source and Method

Data from the community assessment and transcripts from the KIIs and IGDs, description from the direct observation at the OTC, and field notes for each of the Municipalities were coded and subsequently, major themes were created:



Barriers and boosters identified under each theme were then validated using triangulation by source and by method and were analyzed using the Barriers, Boosters and Questions Tool (see Appendix K). Weighting was done wherein a weight or score is assigned to each barrier or booster depending on its importance and impact on the program by every member of the research team using a scale of 1-6, where 6 is the highest score (see Appendix K). All individual weights were added and the top barriers and boosters per theme were identified.

Boosters

The top boosters, to program access and coverage , their explanation and triangulation by source and by method for Municipality C OTC and Municipality K OTC are shown in Appendix L. Identified for both Municipalities C and K were comparable. These boosters once identified should be strengthened and promoted. They have to become opportunities and foundations for the program to bolster its implementation to improve access and coverage. All of the identified boosters were found essential. However, the most notable ones include: (1) support from the LGU and the Municipal Health Officer; (2) a well-trained OTC personnel on PIMAM; (3) bringing the OTC services to the barangay level; (4) provision of door-to-door screening, follow-up and dispensing of commodities by active and hardworking community health workers; (5) CHW willingness to learn and be trained; (6) supervision of the CHWs by the OTC personnel; (7) regular screening of children 0 to 59 months and presence of community sensitization activities; (8) barangay council support; (9) acute malnutrition is not

stigmatized in the community; and (10) caregivers' awareness and acceptance of the PIMAM program.

1. Support from the LGU and the Municipal Health Officer

There was support for the PIMAM program from Municipality C LGU whereby part of the budget on nutrition was allotted for the OTC implementation. This was also noted in Municipality K.

In an interview, K-HCP1-I said:

“Sa support ng LGU, Sanggunihan, nag susupport talaga sila” (The LGU and the members of the consultation body are really supporting).

In Municipality K, the MHO was also the Municipal Nutrition Action Officer and was active in lobbying projects for nutrition. A program to be well-implemented, sustained and effective needs strong leadership and funding. The Department of Health spearheaded capacity building and instigated the training of Municipal representatives. The implementation of the program was then delegated to the Municipal Health Office with emphasis on the need for a dedicated support of the LGU through its Nutrition Committee. Both Municipalities C and K had this patronage. The PIMAM program in its Manual of Operations has emphasized the roles of the Municipal Health Officer (MHO) or Municipal Nutrition Action Officer (MNAO) as the local PIMAM manager (UNICEF & DOH, 2015).

2. Presence of a Well-trained OTC Personnel

Both the Nutrition Officers for Municipalities C and K underwent a three-day PIMAM training in 2017. When asked if he was satisfied with the level of training, K-HCP1-I replied:

“Ah yes po kasi very comprehensive naman po ang training namin nung 2017 and dun ko natutunan yung tamang process, procedures, tapos paano gawin, sino target, and some definitions” (Oh yes, because the training in 2017 was very comprehensive and it was there where I learned the right processes, procedures, how to do it, who are the target and some definitions).

Training of health personnel who will man the OTC is crucial for its successful implementation. In fact one of the goals stipulated in many National CMAM Policies is to increase the competence of human resources involved in its service delivery through training, as exemplified in the Malawi Policy-National CMAM Operational Plan 2017-2021 (WHO, 2017). Training will assure proper screening, diagnosis, admission, treatment and discharge of SAM cases observing PIMAM OTC protocols. Furthermore, a well-trained OTC personnel would also be able to train other health workers at the RHU and the community health workers.

3. Bringing OTC Services to the Barangay Level

Once the SAM cases were validated and admitted at the Municipal Health Office OTC, the CHWs – BNS and BHW- were instructed to monitor the

children in their respective jurisdiction and entrusted the supply of RUTF. Weekly follow-up was then done at the Barangay Health Station where replenishing of RUTF ration was also done.

K-CSAM8-D: “*Surusemana indadara ko sa center tas may pigtatao sa kanya*” (I bring my child to the center (BHS) every week and they give something to her).

K-HCP2-I: “*Dun na po sa barangay sila (CHWs) na po nagbibigay (RUTF) or pinapapunta nila sa BHS*” (At the barangay, the CHWs give the RUTF or have the parents go to the BHS).

Availability of OTC services at the barangay level will bring the OTC closer to the beneficiaries. This will promote earlier admissions, regular monitoring and dispensing of commodities by the CHWs and will mitigate problems of defaulting. A study in 2020 in the Kita District of the Kayes region in Mali showed that SAM treatment being provided by the CHW resulted in earlier and less severe admissions and fewer defaulters, as compared to those provided in health facilities (López-Ejeda et al., 2020).

4. Provision of Door-to-door Screening, Follow-up and Dispensing of Commodities by Active and Hardworking CHWs

Part of the CHWs work was to visit beneficiaries in their homes to follow them up and dispense commodities. This was especially true for those who do not follow-up or those living in locations far from the BHS.

On dispensing of RUTF:

K-CSAM3-D: *“Opo pig-aano po ninda kaya direct. Minsan ngani sinda pa naghahatod”* (Yes they give it directly, at times they are the ones who deliver it to us).

The zealous work of CHWs will further bring OTC services to the homes of the beneficiaries. This will lead to even earlier admissions and referrals of complicated cases. Another advantage of this approach is the opportunity to evaluate the situation at home where the child is in, which would help in addressing the factors leading to his malnutrition. Door-to-door active case finding is a form of community mobilization used in the PIMAM program. Using this case finding strategy as a venue for weekly follow-up and dispensing of commodities should be encouraged and supported.

5. Community Health Workers' Willingness to Learn and be Trained

All of the CHWs encountered during the KIIs and most in the IGDs wanted to learn more on malnutrition and showed willingness to be trained regarding the PIMAM program.

C-CHW1-I: *“Gusto ko pang malaman ang lahat ng manungod sa malnutrisyon. Sana mabigyan kami ng training tungkol sa PIMAM”* (I want to learn more about malnutrition. I hope we will be given training regarding PIMAM).

C-CHW2-I: When asked about the PIMAM program: *“Maga training po siguro para malaman po namin”* (We need to attend training so that we will know more about the program).

The invaluable role of the CHWs in the implementation of CMAM programs has been cited in many literature. Their work as front liners in the community has to be built on a solid foundation. One way to do this is through education and training. A study by Moran and his colleagues proved that CHWs were able to treat SAM children in the community even with minimal training (Morán, et al., 2018). Their eagerness to learn and be trained should be taken as an opportunity to seriously consider them as the next cadres in the implementation of the PIMAM program.

6. Supervision of CHWs by the OTC Personnel

The OTC personnel supervised the activities of the CHWs pertaining to nutrition such as the monthly anthropometric measurements.

C-CHW2-I: *“Si NO, yung NDP mi, mga nurse, pati si Kapitan pig supervise din man kami”* (The Nutrition Officer, the deployed nurse, and also the *barangay* captain supervise us).

When asked if she is supervised by the OTC personnel, K-CHW2-I replied: *“Opo, si Nutrition Officer, kagawad on health at si doc. Suportado po ako nila. Pag may igwa po akong mga tanong, nagpupunta lang po ako sa kanila. Nagtatanong lang po ako sa kanila, pinapaliwanagan nila ako.. Pag nag-eevaluate nagpunta po sila dito”* (Yes the Nutrition Officer,

Kagawad on Health and doctor (MHO). They provide me support. When I have questions, I go to them and they enlighten me. When they evaluate, they go here).

Aside from training the CHWs, adequate supervision by a trained OTC personnel ensures that they are functioning well and performing the task in the right manner. Furthermore, it will give them a sense of importance which is an incentive to perform better. A literature review on 18 studies done in 2019 showed that to ensure the best performance of CHWs, adequate training and close supervision were essential components (López-Ejeda et al., 2019).

7. Presence of Community Mobilization Activities

A yearly “*Pabasa sa Nutrisyon*” (Reading on Nutrition) is being done in all barangays where caregivers of undernourished children and pregnant women are invited.

K-CHW2-I: “*Meron po kaming buntis class tapos Pabasa sa Nutrisyon. Every year, yung mga bagong buntis, bagong lactating mother, mother of underweight children*” (We have a class for pregnant women and Reading on Nutrition. Every year, those who are newly pregnant, lactating women and mothers of underweight children are included).

Other sensitization activities mostly included individual efforts of the CHWs to give informal counselling on nutrition to the families in their jurisdiction and to the caregivers of SAM children.

K-CHW1-I: “*Yung may mga anak na may malnutrisyon, pinapatawag po dito tas ni-lecture po*” (Those with malnourished children are being called to gather to be given lectures).

The municipalities’ regular screening to detect malnutrition among children 0 to 59 months of age through their *Operation Timbang* (OPT) services and sensitization on malnutrition through the *Pabasa sa Nutrisyon* in every barangay served as their community mobilization activities. Although the quality of anthropometric measurements and the depth and content of the lectures are insufficient and below PIMAM standards, these should be taken as occasions to improve the quality, content and incorporate PIMAM principles in the lectures and the screening activities.

8. Barangay Council Support

Majority of the barangay councils supported programs on nutrition initiated by the municipal health office. Feeding programs were made available depending on the budget of the barangay. C-CHW2-I mentioned that the Barangay Kagawad on Health assisted in the lectures on nutrition. During our SAM case finding in the 4 barangays in Municipality C, the Barangay Captains supported and were present during the activity. They formed plans to start feeding programs for those children who were found to be moderately wasted.

K-HCP2-D: “*May participation yung barangay officials then nakiki-coordinate sa Municipal Nutrition Council then they go hand in hand to*

address the problem” (The barangay officials have participation then they coordinate with the Municipal Nutrition Council then they go hand-in-hand to address the problem.).

The support on the nutrition programs by the barangay council through the barangay nutrition committee should be strengthened by increasing their budget for the PIMAM program, providing training for the CHWs, and ensuring proper logistics. In order for this booster to be further reinforced, the members of the council should be oriented on the principles of the PIMAM program.

9. Acute malnutrition is not stigmatized

When asked if malnutrition is stigmatized, most respondents said it was not as most believed that it was just a result of less food intake or a result of an illness.

C-TH2-I: *“Dae man tiguurolokan, aram na nila yan na malnourished ang aki ta kulang sa pagbigay nutrisyon, mga masasarap na pagkain”* (It is not stigmatized, since they know that malnutrition occurs because of lack of nutrition, those delicious food).

Caregivers of SAM children were not embarrassed of their child’s condition and would seek early health intervention if malnutrition is not stigmatized in the community. This has also been reported as a booster in different regions such as in Davao Oriental Philippines (Rogers, 2013), in Borno State, Nigeria (Kanja, 2019), and in Mudug, Somalia (Yerrow,

2016). On the other hand, stigmatization was still present although less of an issue in Nusa Tenggara Timur Province Indonesia (Action Against Hunger & UNICEF, 2016) and in Twic County, Warrap State, Republic of South Sudan since OTPs were for poor and irresponsible families (ACF International, 2012).

10. Caregivers' awareness and acceptance of the PIMAM program

Beneficiaries who saw improvement in their child's condition were happy about the program.

K-CSAM2-I: "*Pag nakakaon sya ki plumpy nut, nagkalaman ang braso nya. Opo i-refer ko ibang aki sa PIMAM*" (Whenever she eats Plumpy Nut, her arms would gain mass. Yes I will refer other children to the program).

When asked how the beneficiaries perceive the program:

KTBA-I: "*I-accept ninda yan*" (They accept it).

K-CSAM1-I: "*Nakakatulong naman po. Malaking tulong naman po. Kagaya ng pagbigay ng gatas*" (The program is able to help. It is of a big help. Like the provision of milk).

Although the awareness of the PIMAM program was still basically only among the caregivers of SAM, this knowledge and the acceptance and positive feedback regarding the program will trickle down by a role model type of communication action among peers and to the rest of the community thereby potentially improving program coverage.

Barriers

Appendix M shows the top **barriers** to program access and coverage, their explanation and triangulation by source and method for Municipality C OTC and Municipality K OTC.

Just like the boosters, barriers to program access and coverage for both municipalities were similar. However the barriers were more substantial in terms of affecting access and coverage than the boosters. Once identified, program managers should evaluate and assess barriers as to their causes and solutions. The most noteworthy were: limited budget of the LGU for the PIMAM program; RUTF stockouts; inadequate number of trained OTC personnel; OTC personnel handles multiple programs; gaps in anthropometric measurements; insufficient community mobilization; CHW lack of training and knowledge on the PIMAM program; community lack of knowledge on malnutrition and the PIMAM program; caregivers' laziness and indifference on their child's condition; and RUTF feeding difficulties.

1. Limited budget of the LGU for the PIMAM program

There was a budget being given to the Municipal Health Office for nutrition programs in general. Since this was limited, only a very small percent went to the PIMAM program which was not enough to fully implement it.

C-HCP1-I: *"Alam naman ni Mayor, may budget pero sobrang kulang. Ang budget para sa buong nutrition program"* (The mayor knows about the

PIMAM program. However the budget is very limited. The budget is for the whole nutrition program).

K-HCP1-I: *“Very limited ang budget na nakukuha namin sa Gender and Development Fund. Tapos sa ngayon naka 1.3 million po akong nahinging budget. Sa ibang municipality mas mataas pa sa budget namin. Dun ako nabibitin sa budget. Kaya kahit gusto ko magpurchase ng madaming supplies to cater all ng RUTF, yun nabibitin so i-istop mo na lang”* (The budget that we get from the Gender and Development Fund is very limited. Now I was able to ask 1.3 million budget. In other municipalities their budget is higher. There I experience insufficient budget. That is why even if I want to purchase enough amount of the supplies to cater for the RUTF, it is not possible so we just stop).

For both municipalities, the PIMAM program receives its budget as part of the regular budget for nutrition programs in general. As such, this is not enough to sustain the implementation of the program. Both the Nutrition Officers have emphasized in their accounts how the budget limited their planned activities for the program like training of community health workers, community sensitization activities and acquisition of commodities such as RUTF. This was also seen as a barrier in a CMAM program evaluation in Davao Oriental, Philippines way back 2013 (Rogers, 2013). The LGU, through its Municipal Health Office' ownership of the PIMAM program will assure financial sustainability. Lower class municipalities with lower annual average income however, may inevitably have shortfalls in funding nutrition programs. As such, augmentation from the national level

nutrition agencies such as the Department of Health and the National Nutrition Council is imperative. The Emergency Nutrition Network recommended that for high burden countries for acute malnutrition, to establish specific national budget lines and escalate budget allocations to scale up national CMAM programs (ENN, 2017).

2. RUTF stockouts

The free supply of RUTF from the DOH was not consistent in 2019 to almost no supply in 2020. This barrier has always been mentioned as a limiting factor in the program's implementation. The LGU's lack of budget for the program hindered the Municipality C OTC to purchase their own RUTF.

C-HCP1-I: *“Nung 2020 nga halos wala kaming stocks ng commodities, kaya nahirapan din ako kapag may nag-refer ng SAM. wala ako maibigay. Ang advice ko na lang pakainin ng masustansyang pagkain” (Last 2020, there were almost no commodities which was difficult for me when there is a SAM referral. I don't have anything to give and would just advise to feed the child nutritious food).*

K-HCP1-I: *“Ayun po ienroll po namin siya sa PIMAM, kaso pag wala po available na RUTF, wala kami pang PIMAM, tinatanong namin sila: gusto nyo pa ma-refer sa BRTTH? Sasabihin nila, COVID, ayaw” (And there we enrol a child in PIMAM, but when there is no available RUTF, we don't have anything to implement PIMAM. We ask them, would you want to be referred to BRTTH? They would say 'there's COVID, we don't want').*

A break in the supply of the primary commodity of the PIMAM OTC created a huge negative impact on program coverage. It does not only interrupt the nutritional management of SAM patients, but also increases defaulter rates hence creates a negative image on the program which may lead to halting the program implementation altogether. This shortfall mired efforts in improving the quality of the program. The same barrier was experienced in the Damboa Borno State, Nigeria (Kanja, 2019), in South Sudan (ACF International, 2012) and in Kupang District Indonesia (Action Against Hunger & UNICEF, 2016). RUTF stockouts was also the top reason for non-attendance in CMAM programs in Mali and Sierra Leone (ENN & CMN, 2014). On the contrary, adequate CMAM supplies and equipment was a booster in Davao Oriental in 2013 (Rogers, 2013). Shortages in the supply of RUTF is commonplace in many CMAM program sites globally which have been attributed to limited availability, supply-chain management gaps, poor communication between the national providers and the suppliers and insufficient reporting (Mates & Sadler, 2020). RUTF misuse and 'leakage' has been described as another obstacle in its supply chain (Mates & Sadler). There were quite a few of the respondents mentioning receiving nearly expiring RUTF.

3. Inadequate number of trained OTC personnel and handles multiple programs

There was only one OTC personnel who was trained on PIMAM for each of the two municipalities. This was augmented by the DOH Nutritionist-Dietitian deployed in the area who however, handled several

municipalities. The OTC personnel in Municipality C wanted to conduct training for the other HCPs and the CHWs but were hindered by the lack of budget. Those whom he was able to somehow teach at the RHU had temporary job positions (Job Order) and would easily be replaced and thus, there was no continuity of knowledge.

K-HCP1-I: *“Kulang sa tao na magtataguyod ng programa”* (There is lack of personnel to carry out the program).

A barrier was created when only one health worker is trained on PIMAM to oversee OTC implementation. This problem would be compounded if this personnel also handled many other health programs. This was described as ‘competing priorities’ of the health workers in an SQUEAC evaluation in Davao Oriental, Philippines (Rogers, 2013). Moreover, a study done in Bangladesh showed that only 2.7% of physicians were trained in SAM management (Ireen et al., 2018). This shortfall is reflective of the shortage in health human resources in general in the country. Furthermore, a bigger challenge to the Philippine health system is the shortage of trained personnel to implement programs efficiently and exclusively. It is also commonplace to see government health personnel handling multiple programs.

4. Gaps in anthropometric measurements

Complete anthropometric measurement was not routine during OPD consultations at the RHU. There were also errors in the anthropometric techniques.

K-CSAM1-I: *“Tinimbang naman sya sa RHU at sinukat. Hindi tinanggal ang damit nung tinimbang. Isa lang ang nagkuha ng haba nya”* (Yes she was weighed and measured. The clothes were not removed when she was weighed. Only one person took her length).

K-CSAM3-D when she brought her child to the RHU for consultation: *“Yung timbang lang kinuha”* (Only the weight was taken).

In the community, proper standard tools used for accurate anthropometry were not available at all times. BHWs did not use height boards when going from house to house as it was heavy and not easy to carry. As an alternative, some removed the measuring steel bar and some used a tape measure. The clothes were also not removed when taking the weight. MUAC was not part of routine anthropometry. These were observed during the SAM case finding.

C-CHW4-D: *“Sa barangay namin, wala po talaga kami accurate na tools. Tape measure po ginagamit namin. Bawal talaga yun kasi mali nga yun”* (In our place we really don't have accurate tools. We only use tape measure. We are aware that this is not allowed because it is wrong).

Accurate anthropometric measurements are crucial in the diagnosis of severe acute malnutrition. Under-diagnosis of SAM happens when there are errors in the measurement techniques, when the tools used are not calibrated or not appropriate, when there are errors of interpretation in the WHO growth charts or tables, and when there is no routine measurement of height or MUAC. These were seen in both municipalities

either at the RHU or at the barangay level. This barrier can be mitigated with proper training and supervision of RHU personnel and the CHWs and ensuring availability of appropriate and accurate tools.

5. Insufficient community mobilization

Main community sensitization activities were done only once or twice a year through the “*Pabasa sa Nutrisyon*”. The audience was often limited only to parents of children with acute malnutrition, and pregnant women because of the limited budget. Other forms of counselling were done by the CHWs on the parents of SAM children only.

C-HCP1-I: “*Siguro kailangan pa ng time na mas madagdagan pa yung ganyan na nutrition na yan. Siguro mga 5 times dapat. Pero parang di ko na kaya gawin yun na lahat. Dahil nga yun na sinabi ko na limited budget*” (Maybe increasing activities for nutrition should be increased. Maybe it should be 5 times. But I think I can not accomplish all that. Because as I said, there is limited budget).

Community mobilization involves both sensitizing the community on malnutrition and the PIMAM program as well as SAM case finding. Poor quality and less conduct of these activities negatively affected program coverage. In both Municipalities C and K, case finding relied only on their *Operation Timbang* activities and sensitization were basically only those during *the Pabasa sa Nutrisyon* which dealt with nutrition problems in general. This barrier was also faced in Davao Oriental, Philippines where case finding also relied only on *Operation Timbang* (Rogers, 2013). One

of the common form of sensitization taking place in the two municipalities is simply informing the caregiver that the child is malnourished and that they have to give the child nutritious food. This was similarly seen in Kupang District Indonesia because midwives were too busy to do proper sensitization (Action Against Hunger & UNICEF, 2016).

6. Community health worker lack of knowledge and training on PIMAM

All of the CHWs encountered in Municipality C never had a single training on the PIMAM program. Some even never heard about it.

When asked about the PIMAM program, C-CHW2-I answered “*Wala po akong alam. Ngayon ko lang po nadangog*” (I don’t know anything. I was just made aware of it now).

C-HCP1-I: “*Ang BHW, kasi sila wala naman training. Walang silang training about sa PIMAM. Budget pa rin ang problema*” (The BHWs, they have no training. They have no training on the PIMAM program. Still, budget is the problem).

When asked about the PIMAM program,

K-CHW1-I replied: “*Parang narinig na pero nakalimutan na*” (I think I heard about it already but I forgot about it now).

K-CHW2,3,4-D: “*Hindi man kami masyadong aware*” (We are not that aware).

Lack of training on the PIMAM program left the CHWs missing out on SAM children in the community either due to wrong techniques in anthropometric measurements or wrong interpretation of results. Errors in the dispensing and instructions for RUTF use to the caregiver may result in poor compliance, wrong usage of the RUTF and no improvement in the child's condition. The SQUEAC done in Davao Oriental in 2013 showed that errors in RUTF dispensing, admission and discharge criteria and treatment protocols were attributed to poor technical knowledge of the CHWs on the CMAM program (Rogers, 2013). Furthermore, in the Damboa Borno State, Nigeria, they found a disconnect in the knowledge and practice from the training of CHW or an inadequacy in the training itself (Kanja, 2019). Therefore, educating and training the CHWs and supervising them will support improvement in program coverage. A study conducted in 2017 in South Sudan where CHWs were trained on the use of low-literacy adapted tools and simplified SAM treatment protocol showed that even low-literate CHW were able to follow with accuracy (Boetzelaer et al., 2019).

7. Community's lack of knowledge on malnutrition and the PIMAM program

In general, the community was not aware of the PIMAM program. *Pabasa sa Nutrisyon* activities only covered general concepts on nutrition which did not include the PIMAM program.

C-HCP1-I: *"Hindi pa masyado aware ang community. Yung mga naka enroll, aware na sila. Sana magka seminar bawat barangay"* (The

community is not so aware. For those who are enrolled in the program, yes. I hope there will be a seminar in every barangay).

When asked if malnutrition was perceived as an illness in the community, K-HCP1-I replied: *“Sa napansin po namin, hindi po nila ito nakikita as sakit. Nakikita nila ito as yun nga po, kulang. Yun po tingin nila. Pag kulang ka sa pagkain, yun po napayat ka”* (What we notice, they don't perceive it as illness. They see it as deficiency. That is how they see it. When you are deficient in food, then you will get thin).

As a result of poor community sensitization, the community in general was not aware of the PIMAM program and of malnutrition as a disease including its causes and effects. This resulted in late health-seeking behavior whereby SAM admissions would already have medical complications, which implied low coverage. The same barrier was also seen in Mudug Somalia where the respondents did not know the immediate causes and the link between malnutrition and disease (Yerrow, 2016). In Kupang District Indonesia, the lack of knowledge of the fathers on malnutrition was seen as a reason for their blocking the referrals to the health center (Action Against Hunger & UNICEF, 2016).

8. Caregivers' laziness and indifference on their child's condition

Some caregivers were lazy and not responsive towards their children's condition and perceived it as something acceptable.

C-CHW4-D: *“Pero parang accept man nila. Parang wala lang. Madakula man ngayang yan”* (But they accept the condition, as if nothing is wrong. They say: the child will grow anyway).

K-HCP1-I: *“May iba na binabalewala for the sake na ‘wala man ngayang sa aram ko na sabi sadto san mga gurang”* (Others take the condition for granted. They would say ‘I don’t know anything about this that was mentioned by the elders’).

K-CHW2-I: *“Hard-headed and ugak ang caregivers”* (The caregivers are hard-headed and lazy).

Caregivers described as always occupied and lazy may become indifferent to their child’s undernutrition condition. Their inadequate child caring practices added up to the burden of poverty, low educational attainment, and environmental constraints as determinants of acute malnutrition in children. Delayed health-seeking and resistance to counselling on malnutrition usually accompany this behavior.

9. RUTF feeding difficulties

Although many caregivers recounted that their child liked the RUTF, the study encountered responses pertaining to RUTF feeding difficulties. These included spitting it up, refusal to ingest because of the taste, allergic reactions to it, and the child eventually getting fed up with the taste.

K-CSAM4-D: *“Namumula po tas nangangati ang katawan.. yung RUTF nga po, dun sya nagre-react”* (She reddens and her body is itchy.. the RUTF was the one which caused her to react).

C-HCP2-D: *“Nung una okay lang pero nung tumagal maamoy pa lang ayaw na.. ayaw na nya kainin”* (At first it was okay. But after some time, just by its scent, the child does not want to eat it).

K-CSAM1-D: *“Palagi po pumupunta yung BHW sa health center, tinitimbang tapos binibigyan po ng peanut, yung green. Kaso po nasusuka”* (The BHW always goes to the center, weighs my child and gives the peanut, green in color. The problem is she is nauseated by it).

In an evaluation in Kupang District Indonesia, the sweet taste of the RUTF was mentioned as a barrier (Action Against Hunger & UNICEF, 2016). There were caregivers who suggested having alternatives to RUTF to treat severe wasting because they wanted their child to get well and got frustrated by the child's refusal to take the RUTF. Some studies on alternative RUTF formulations which are not peanut-based are underway which initially have shown to be non-inferior to the original RUTF preparation (Mates & Sadler, 2020). Their incorporation in the current CMAM guidelines would be a way forward in addressing RUTF feeding difficulties.

10. COVID-19 pandemic stopped community mobilization and OTC admissions

The annual community sensitization “*Pabasa sa Nutrisyon*” was stopped during the COVID pandemic. Imposition of lockdowns limited house-to-house visits and counselling by the CHWs.

C-HCP1-D: “*Di na po nakaka-focus, tulad ngayon na-busy na sa COVID*” (It is not focused on the event anymore as we are busy on COVID already).

Because of limited SAM case findings and monthly anthropometric measurements, OTC admissions were stopped during the pandemic. Casual conversation with the Nutrition Officer revealed that OTC admissions were stopped during the COVID-19 pandemic and because of RUTF stockouts.

The effect of the COVID-19 pandemic on PIMAM implementation was already felt in the past year. The mobility restrictions and the fear of contracting COVID-19 hindered community mobilization activities in 2020. The RUTF stockouts added up to the burden, ultimately stopping OTC admissions as well. Defaulter rates at the BRTTH OTC increased. In South Asia, the Maternal, Child Health and Nutrition (MNCHN) services of which CMAM is included, the COVID-19 pandemic decreased service coverage to more than 50% during the second quarter of 2020 as compared in 2019 during the same period (UNICEF, 2021).

Concept Maps

Another way of analyzing qualitative data in SQUEAC is through the use of concept maps where boosters and barriers are explored by showing relationships between them. Figures 4.15 and 4.16 below show the concept maps for the boosters for Municipality C and K, respectively.

Each booster that was identified was shown as positively leading to, associated with or encourages one or more other boosters. In the diagram, the color-coded belonged to major themes: community context, LGU support, OTC processes, community mobilization practices, CHW capacity, community knowledge of SAM and PIMAM, and caregiver's attitude and capacity.

The presence of well-trained OTC personnel lead to a cascade of boosters starting from community sensitization activities, validation of OPT results, prompt referral of patients to BRTTH ITC and increasing the knowledge of caregivers on the PIMAM program. The presence of community sensitization activities, easy access of OTC services at the BHS, provision of door-to-door follow-up and dispensing of commodities, and the presence of active CHWs directly resulted to better caregiver's knowledge of the PIMAM program. The support of the LGU and the Municipal Health Officer will positively affect OTC processes while the support of the barangay council leads to boosters pertaining to CHW capacity.

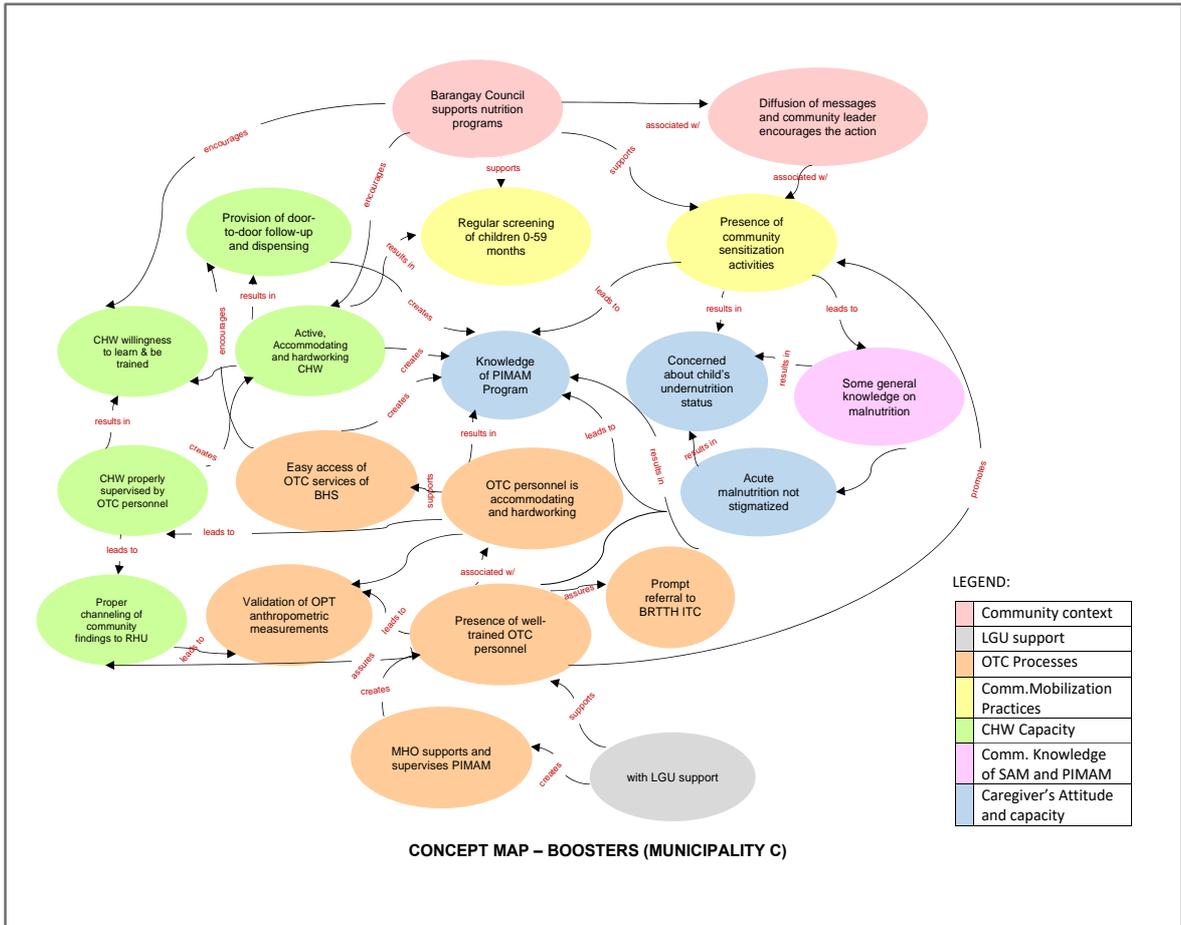


Figure 4.15. Concept map for boosters, municipality C OTC

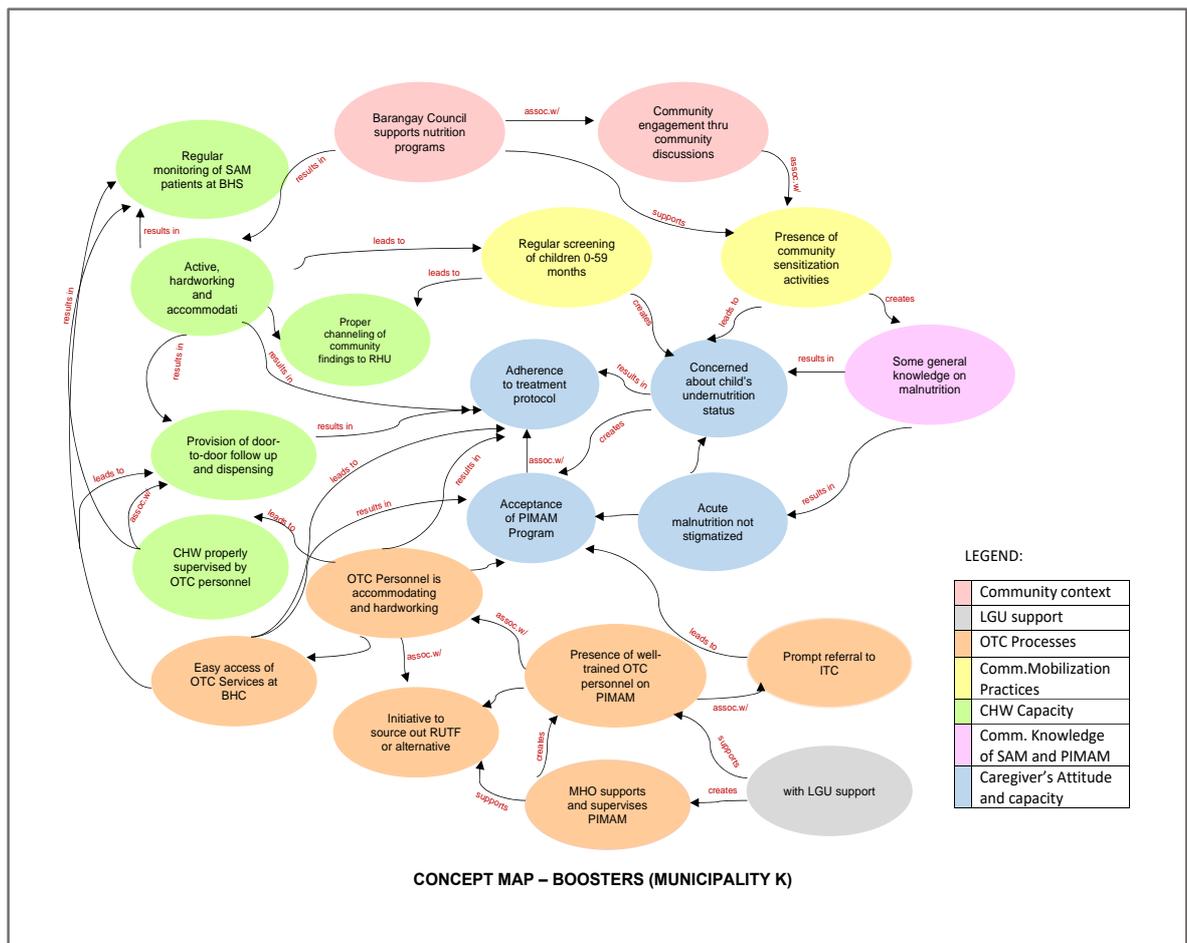


Figure 4.16. Concept map for boosters, municipality K OTC

Each barrier on the other hand negatively affects or leads to one or more other barriers. Figures 4.17 and 4.18 show concept maps for Municipality C and Municipality K OTC, respectively. For example, the inadequate number of PIMAM-trained RHU personnel leads to lack of systematic and complete anthropometric measurements at the RHU which in turn resulted to lack of counselling on the child’s condition and the PIMAM program. The lack of training and knowledge of the CHWs on malnutrition and the PIMAM program was associated with errors in anthropometric measurements and also leads to lack of counselling to caregivers about their child’s condition. The importance therefore of addressing even just one barrier will indirectly cause dealing with another.

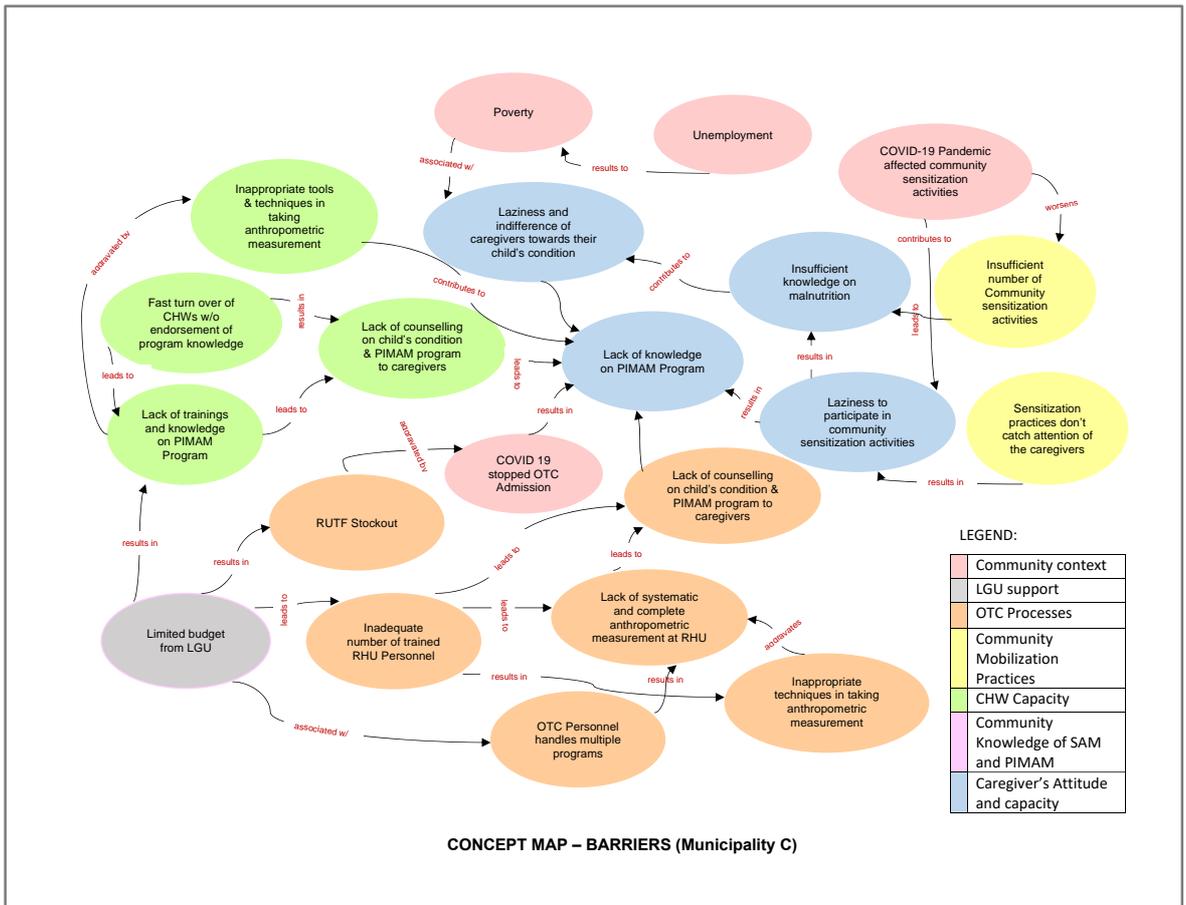


Figure 4.17. Concept map for barriers, municipality C OTC

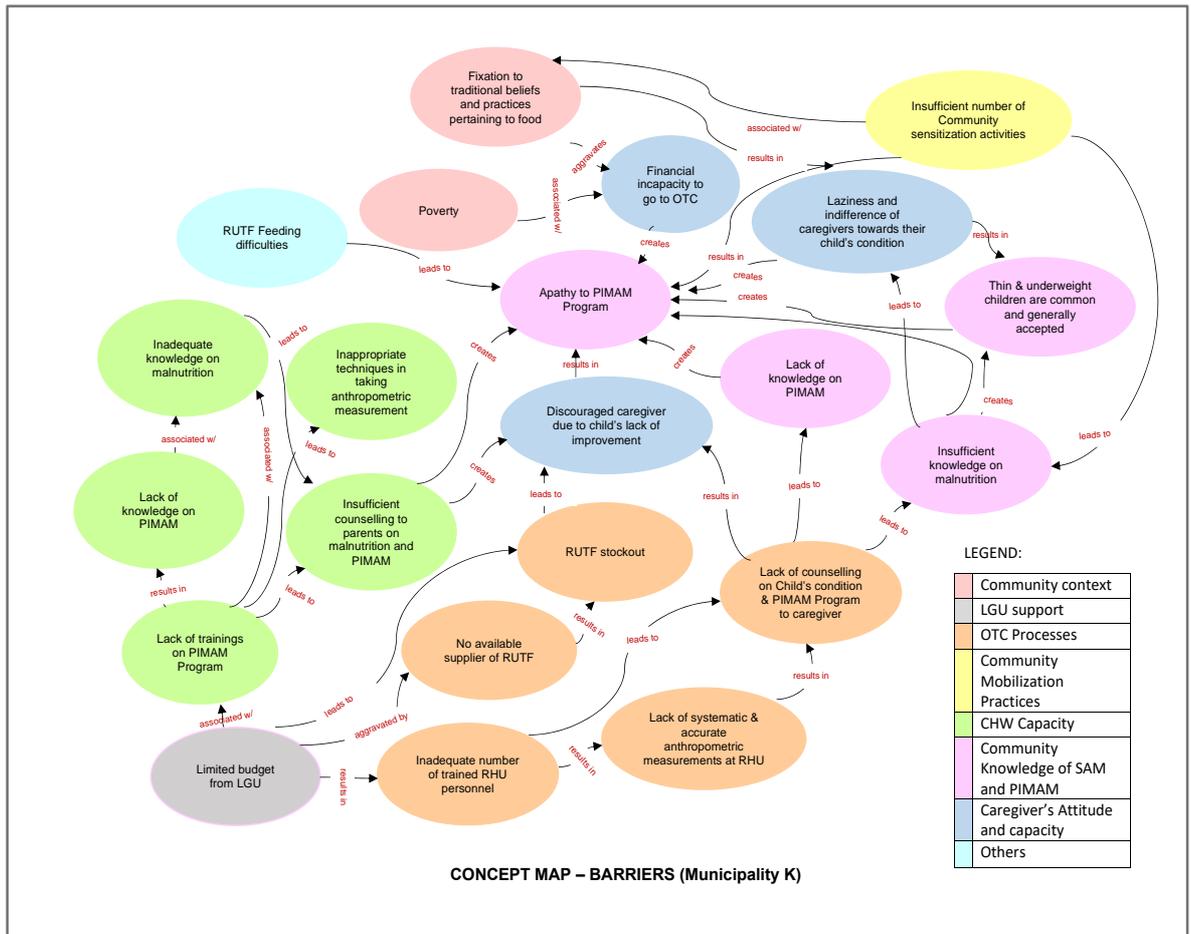


Figure 4.18. Concept map for barriers, municipality K OTC

Mind Maps

To graphically organize and analyze the data collected in SQUEAC Stage 1 and to be able to summarize at a glance the factors affecting program coverage, a mind map was created. Figure 4.19 and 4.20 below are the mind map to explore program coverage in Municipality C and Municipality K, respectively. Boosters in the diagram were represented by √ sign and teal background, while barriers were represented by an X sign, and pink background. The symbol ~ represents neutral findings.

The Mind Map for Municipality C OTC below in Figure 4.19 shows that among the secondary routine program data, the majority had a positive effect on program coverage. The patient referral source had a neutral effect because even if it can be perceived that 100% referral source from CHW may still be acceptable during the early phase of a program implementation, a better scenario for Municipality C was the presence of other referral sources which could have reflected adequate community sensitization. Among the community contexts, poverty, traditional beliefs in certain foods, and absence of volunteer networks were found to be the barriers to program access and coverage. Summing up the different effects of the seasonal variations showed neutral findings. Qualitative data from the KIIs and IGDs revealed boosters and barriers as seen on the left side of the diagram. Directly observing the OTC revealed more significant barriers than boosters. Lastly, SQUEAC Stage 2 Small Area Survey done showed low coverage in both chosen near and far barangays.

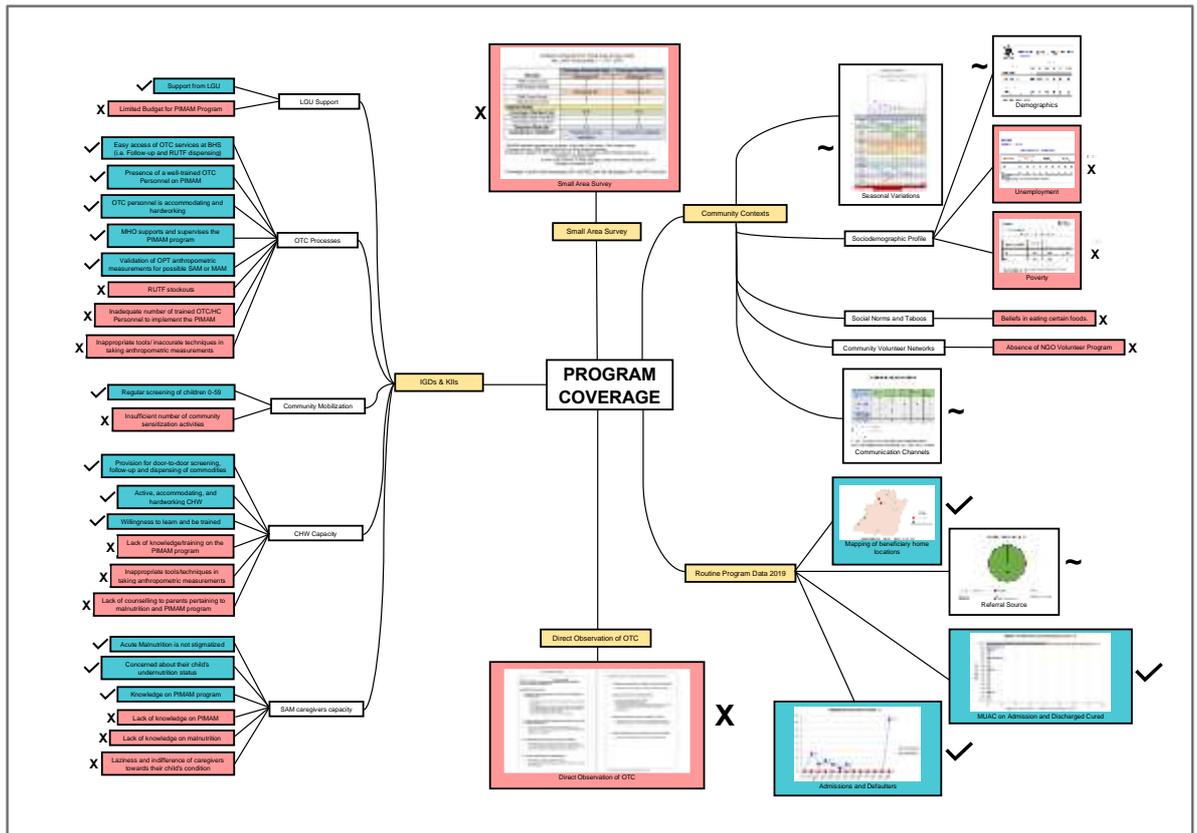


Figure 4.19. Mind map, municipality C OTC

The Mind Map for Municipality K OTC is shown on Figure 4.20 below. Secondary routine program data, admissions over time, and mapping of beneficiary home locations were barriers to access and coverage. Patient referral source and MUAC on admission had neutral effects. Poverty, traditional beliefs in eating certain foods, resort to traditional medicine and absence of volunteer networks were all identified as barriers. The seasonal calendar did not show any significant effect on admissions over time and the communication channels used had a neutral effect. Qualitative data from KIIs and IGDs revealed both barriers and boosters to program coverage. Also, directly observing the OTC had a neutral effect.

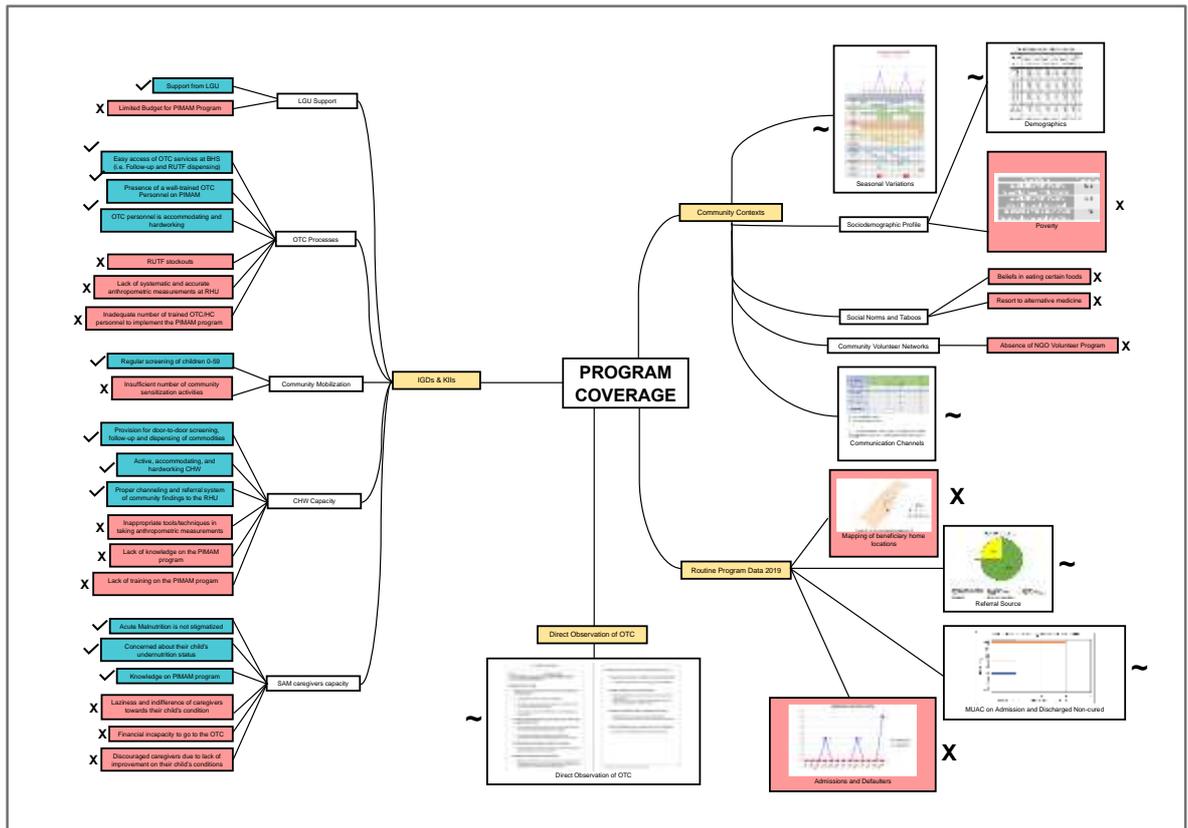


Figure 4.20. Mind map, municipality K OTC

Integration of Quantitative and Qualitative Data

Integration is a form of data analysis of the two databases wherein by combining them, the quantitative findings are connected with the qualitative findings in mixed method explanatory sequential research design (Creswell & Creswell, 2018). In this study, the quantitative part identified Municipal OTCs with no, low or high coverage through the analysis of routine program data in SQUEAC Stage 1 Quantitative. To validate, expand, and give depth to these quantitative findings, the community assessment, key-informant interviews, informal group discussions and direct observations at the OTC conducted in SQUEAC Stage 1 Qualitative provided rich qualitative data about boosters and barriers which explained why coverage was high or low. Although boosters and barriers were identified in both Municipalities C and K, it is to be

assumed that the identified boosters contributed to the high coverage of Municipality C and the identified barriers explained coverage failure for Municipality K. Figure 4.21 below is a diagrammatic representation of the integration of the quantitative and qualitative data.

Showing the connection of the quantitative findings to the qualitative findings, the following statements below were made.

Municipality C

1. The presence of the community mobilization through the monthly screening of children in every barangay which were supervised and results validated by the OTC personnel explained the timely and good trend in the number of admissions over time and the good spatial coverage of the beneficiary home locations in 2019.
2. The availability of OTC services and door-to-door follow-up and dispensing of commodities explained the good discharge outcome of 100% cure rate and no defaulters on all of the admitted cases in 2019.
3. A well trained OTC personnel supported the complete and accurate routine program data, the 100% cure rate and the good median length of stay before discharge cured in the program.
4. Caregivers' acceptance and adherence to the PIMAM program also explained the 100% cure rate and no defaulters.

5. Since acute malnutrition is not stigmatized in the community and that the caregivers accept the PIMAM program this led to the timely admissions, no defaulters, good median length of stay in the program and 100% cure rate.

Municipality K

1. The inadequate number of trained personnel at the RHU and the gaps in anthropometric measurements resulted in missing out on the identification of SAM cases consulting at the RHU which explained the low and poor trend in admissions over time.
2. RUTF stockouts and RUTF feeding difficulties explained the poor discharge outcomes which were all non-cured in 2019.
3. CHWs lack of knowledge and training on the PIMAM program and subsequent gaps in anthropometric measurements explained the low number of admissions and limited spatial coverage of beneficiary home locations in 2019.
4. The community's lack of knowledge on malnutrition and the PIMAM program and the indifference of caregivers on their child's condition also explained the low number of admissions and one late admission which needed hospitalization at BRTTH.

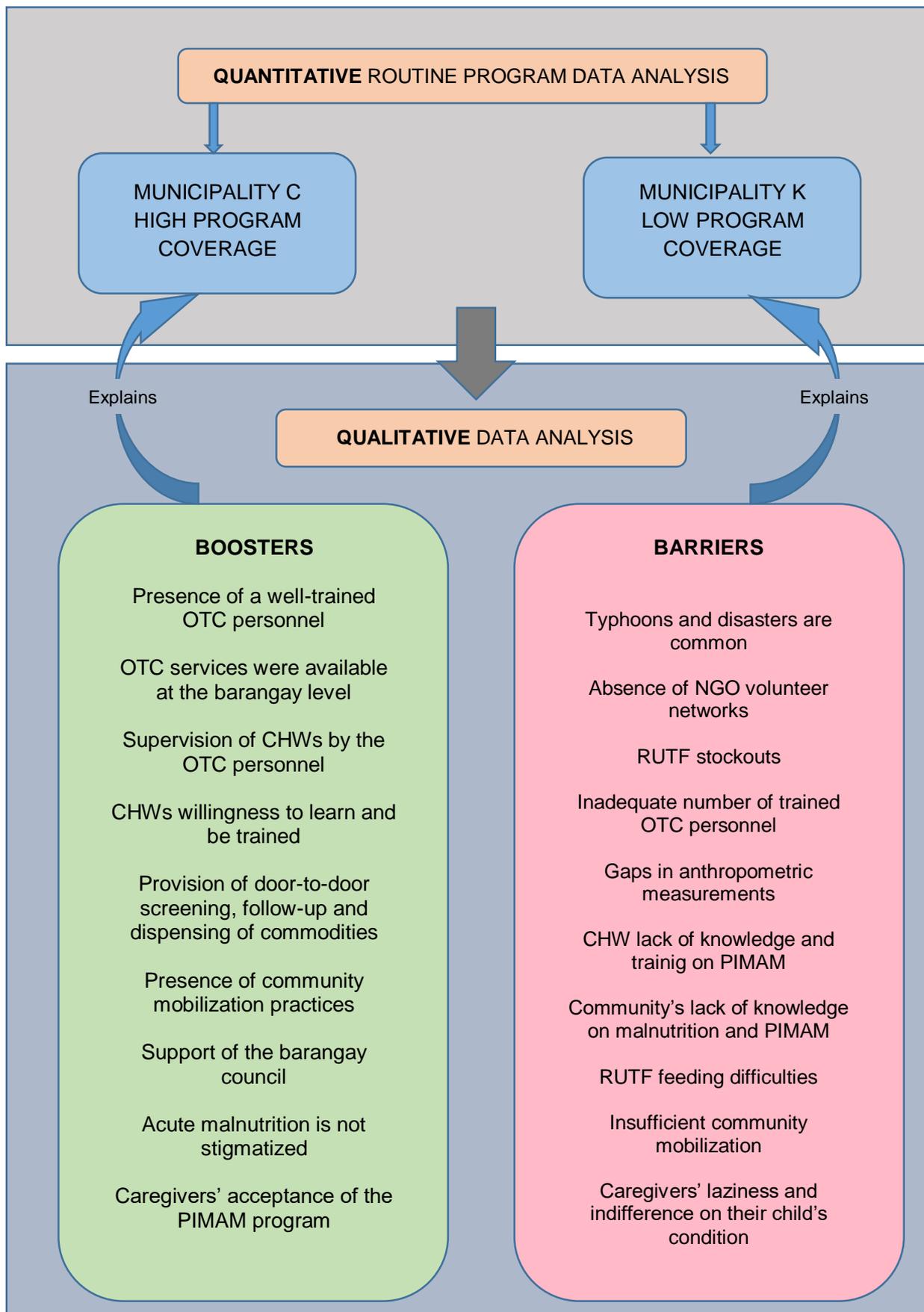


Figure 4.21. Integration of squeac stage 1 quantitative and qualitative data

SQUEAC Stage 2 Testing the Hypotheses

Specific objective no. 4: To validate the hypotheses formed as to whether some areas in the two chosen municipalities have high or low coverage.

Key finding # 5: The hypothesis that barangays which were ≥ 5 km from the OTC had low coverage was validated. The hypothesis that barangays which were < 5 km from the OTC had high coverage was disproved.

SQUEAC Stage 2 is an additional step in the evaluation of CMAM programs which was subsequently undertaken in this study. Combining the findings from the quantitative method and the findings from the qualitative method gave a rich information on the program coverage as to locations where it could be high or low. SQUEAC Stage 2 was able to validate or disprove areas with high or low coverage. Moreover, the observations during the SAM case finding activities and the subsequent findings from the interview of caregivers of the SAM children found in this stage provided more insights and further validated the boosters and barriers identified in Stage 1 Qualitative.

Analyzing the data collected from SQUEAC Stage 1 Quantitative and Qualitative, several observations were noted which were the bases for the formulation of the hypotheses. First, mapping of beneficiary home locations for Municipality C showed nearly even spatial coverage, but there was

clustering of 53% of the cases in the barangay where the OTC was and adjacent to it. Second, since all of the referral sources were from the CHWs who were not trained on PIMAM and who had incorrect techniques in anthropometric measurements, those monthly OPT results from barangays who were far from the OTC may have been less validated considering lockdown restrictions during the COVID-19 pandemic. Lastly, the proximity of the near barangays to the RHU and the OTC allowed for quick referrals and management of sick and malnourished children.

The following hypotheses were then formed at the end of Stage 1 which had to be tested:

1. Barangays which were ≥ 5 kilometers (far) from the OTC had low coverage.
2. Barangays which were < 5 kilometers (near) from the OTC had high coverage.

SAM Case Finding

To conduct SQUEAC Stage 2 Small Area Survey, four barangays – 2 far (F1 and F2) and 2 near (N1 and N2) – were chosen. In – community SAM case finding was done per barangay where a modified active-adaptive case finding technique was employed. Table 4.7 below shows the results of the case finding.

Table 4.7. SAM case finding result, municipality C

Barangay	Total Patients Screened	MAM		SAM		GAM	
		Count	%	Count	%	Count	%
N1	64	10	15.6	1	1.56	11	17.2
N2	60	6	10	2	3.33	8	13.3
F1	60	0	0	1	1.67	1	1.67
F2	33	2	6	2	6	4	12
TOTAL	217	18	8.3	6	2.7	24	11

N = Near Barangay (< 5 km from the OTC)

F = Far Barangay (≥ 5 km from the OTC)

There was a total of 6 children with SAM from the case finding in the 4 chosen barangays. Based on the results, the highest proportion of SAM among those who were screened at 6% was in F2 which is 14 km from the OTC. The proportion of wasted children (GAM) among those screened from the 4 barangays is considerably high at 11%.

Interview of Caregivers of SAM During the Case Finding

The caregivers of the 6 children diagnosed with SAM from the case finding were interviewed using a questionnaire (see Appendix N). Only 1 of the 6 children was enrolled in the PIMAM program during the time of case finding.

Figure 4.22 shows the proportion of the caregivers who thought their child was sick. Eighty percent of the caregivers whose children were not enrolled in the program thought their child was not sick which further validated poor community knowledge on malnutrition which will lead to delayed health seeking behaviors. The only caregiver whose child was enrolled in the program did not also think that her child was sick.

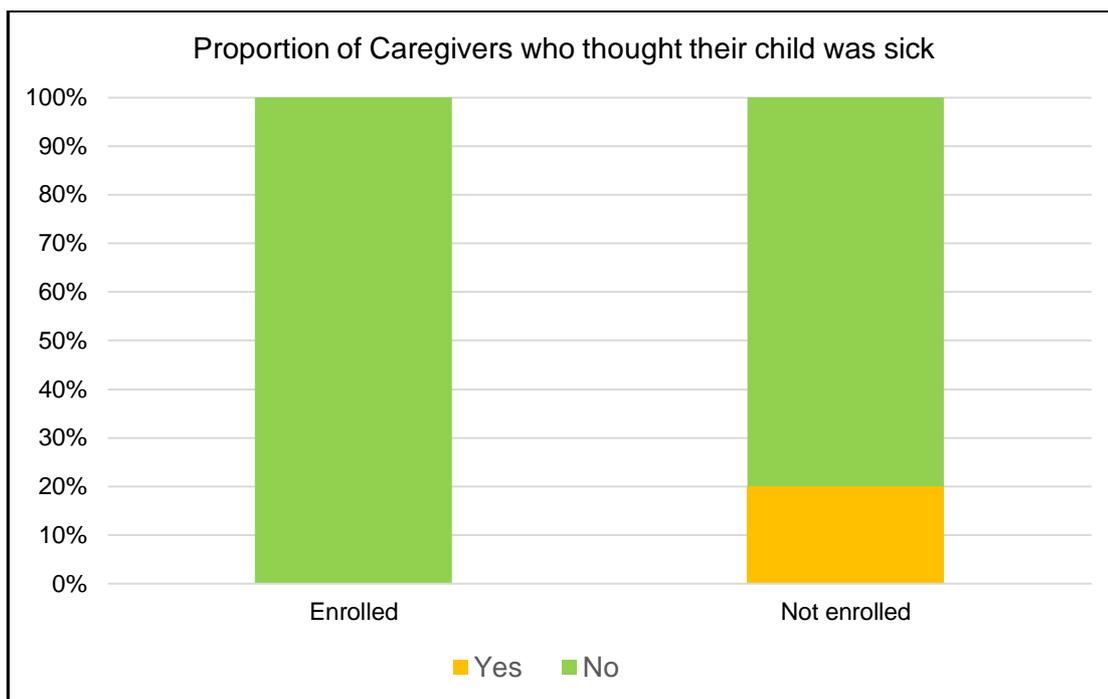


Figure 4.22. Proportion of SAM caregivers who thought their child was sick

Only 1 of the 6 (16%) caregivers thought that her child was sick. Her child was not enrolled in the program. Table 4.8. shows a summary of her answers in the questionnaire.

Table 4.8. Summary of answers of the caregiver who thought her child was sick

Question	Answer
What were the symptoms of your child?	Fever Weight loss Apathy Colds
What illness caused these symptoms?	Malnutrition
How did you try to treat this at home?	Giving enriched meals Consultation at the health center
Who made the decision about the choice of treatment?	Mother
Do you know that there is a service for the treatment of malnutrition at the health center?	No

The caregiver attributed the symptoms of her child to malnutrition which is a good sign of knowledge on malnutrition. Her attempt to treat the

illness was correct as she did not give medicinal herbs nor consulted a traditional healer. She brought her child to the health center for consultation. However, she was not aware of the PIMAM program from which we can surmise that she was not informed about the program during her consultation at the health center, more so, was not admitted.

One of the caregivers who thought that her child was not sick was enrolled in the program. This may be a reflection of the lack of counselling on the caregivers of SAM children on malnutrition. The following were the reasons why she decided to enroll her child to the PIMAM program.



Support and encouragement of CHW
Minimal or non-existing security risk
Accessibility and no seasonal barriers
Availability of transport
Financial availability for transport
Availability of company during journey
to the health center
Support and encouragement of the husband
Support and encouragement of a
community leader
Program staff is frieindly and patient
Free service

Simplified LQAS Technique

In order to validate or disprove the hypotheses formed, a simplified Lot Quality Assurance Sampling (LQAS) technique was conducted. Table 4.9 shows the analysis of results from the Small Area Survey.

Table 4.9. Analysis of results from small area survey using the LQAS, municipality C

Results	Coverage Should be High	Coverage Should be Low
	Barangay N1	Barangay F1
SAM Cases Found	1	1
SAM Cases Covered	0	0
	Barangay N2	Barangay F2
SAM Cases Found	2	2
SAM Cases Covered	1	0
DEDUCTIONS		
Coverage Standard (p)*	>50%	>50%
Total SAM Cases Found (n)	3	3
Total SAM Cases Covered	1	0
Decision Rule (d)+	1.5	1.5
Hypothesis validation#	Hypothesis is not validated	Hypothesis is validated

* SPHERE minimum standards for coverage: >50% rural; >70% urban; >90% refugee camps

+ Decision rule (d) = SAM cases found (n)/2: for 50% standard coverage

Hypothesis validation: If SAM cases covered > d, then coverage exceeds minimum standard (p) and therefore, considered HIGH; If SAM cases covered < d, then coverage is below the minimum standard (p) and therefore, considered LOW

N1 and N2 = Near barangays (< 5 km from the OTC)

F1 and F2 = Far barangays (≥ 5 km from the OTC)

There were 1 case each of SAM found in both N1 and F1 and 2 cases each in N2 and F2. Only 1 case of SAM for both near barangays was covered by the program. No case of SAM was covered by the program in both far barangays. Municipality C is a rural barangay, therefore, the SPHERE minimum standard for coverage to be used is >50%. The decision rule (d) - total SAM cases found (n)/2 - were 1.5 in both near and far barangays. Since the SAM case covered for the near barangays at 1 is < the decision rule, then coverage for the near barangays is low. Furthermore, since the SAM case covered for far barangays at 0 is < the decision rule, then coverage for the far barangays is also low. The following statements can then be deduced regarding the hypotheses formed:

1. The hypothesis that barangays which were ≥ 5 km from the OTC had low coverage was validated.
2. The hypothesis that barangays which were < 5 km from the OTC had high coverage was disproved.

The statements above indicate that Municipality C had low coverage in both far and near barangays. This is in contrast with the assumptions made from the quantitative secondary routine program data in 2019. This discrepancy may be explained by the effects of the COVID-19 pandemic on PIMAM program coverage and the unavailability of PIMAM commodities particularly RUTF in 2020. The COVID-19 pandemic halted community sensitizations and OTC admissions in Municipality C. In addition, the pandemic worsened unemployment, poverty, and food insecurity which were the predisposing factors to the rise in the prevalence of acute malnutrition. An estimate written in a UNICEF Global COVID-19 Situation Report stated that childhood wasting prevalence would increase by 15% in the next 12 months since the onset of the pandemic where 80% would be in sub-Saharan Africa and South Asia (UNICEF, 2020). Furthermore, COVID-19 affected the economy and health systems of low- and middle-income countries exacerbating all forms of malnutrition (Haedy et al., 2020). Disruptions in the health system brought about by the challenges and foremost focus on COVID-19 in the Philippines posed limitations on the PIMAM services which inevitably affect access and coverage.

CHAPTER V

CONCLUSION AND RECOMMENDATION

The study was able to conduct an assessment of the Philippine Integrated Management of Acute Malnutrition (PIMAM) program Out-patient Therapeutic Care (OTC) access and coverage in the province of Albay, Philippines adopting the Semi-Quantitative Evaluation of Access and Coverage (SQUEAC) tool. Data collection was conducted in the context of the COVID-19 pandemic which might have altered responses during the qualitative data collection and results of the Stage 2 Small Area Survey. Nonetheless, the findings generally still reflected the usual pre-pandemic conditions, knowledge and perceptions pertaining to PIMAM program access and coverage.

SQUEAC Stage 1 Quantitative had presented not only the level of PIMAM program implementation in the different cities and municipalities of the province of Albay, but was also able to evaluate program data completeness and accuracy. Only 2 municipalities were found to have a functioning OTC with complete and organized routine program data. These two municipalities were the only ones included in the study. Dissecting quantitative routine program data revealed that **Municipality C OTC** must have had high program coverage on the bases of (1) good pattern of admissions over time; (2) discharge outcomes were all cured and there were no defaulters; (3) median length of stay in the program was at 5 weeks which was shorter than the standard 8 weeks for good coverage; (4) admission MUACs reflected

timely admissions; (5) an almost even spatial coverage for beneficiary home locations; (6) number of admissions were uniform regardless of distance- and time-to-travel; and (7) CHWs outreach activities though weak, were conducted in all barangays. On the other hand, **Municipality K OTC** must have had low coverage on the grounds of (1) poor pattern of admissions over time; (2) all admitted cases were discharged non-cured which also showed discordance with program discharge outcome definitions; (3) limited spatial coverage when beneficiary home locations were mapped; and (4) one of the four admissions was a referral from the BRTTH where the patient was admitted with medical complications reflecting late program admission.

Good governance and reliable data are fundamental to the PIMAM program policy and decision making which in turn are catalysts to improve its coverage and effectiveness. Positive outcomes may be achieved if program managers encourage completeness and assess the accuracy of data from program implementers. A regular OTC visit may be necessary which while assuring data quality may also serve as an opportunity to correct errors and teach the OTC personnel on data collection and recording. Fundamentally, reliable information generated from accurate data may be used as a groundwork in decision-making across all the building blocks of a health system.

Analyzing the household and community contexts which may affect program access and coverage identified boosters and barriers. Identified **boosters** were high community literacy rate, exclusive breastfeeding practices, barangay council support on nutrition programs, utilization of some

communication channels, availability and accessibility of staple foods throughout the year, and accessible OTC services at the barangay health station. **Barriers** pertaining to community contexts included poverty, unemployment, presence of social norms, traditional practices and beliefs on food, belief in traditional healers, absence of NGO volunteer networks, typhoons disasters were common, and busy caregivers during *fiestas* and the holiday season. Adapting PIMAM protocols to take advantage of community context boosters and increasing measures to circumvent, address or correct the barriers to coverage should be part of the program re-planning and refinement.

Barriers and boosters to program access and coverage pertaining directly to OTC implementation were deconstructed in SQUEAC Stage 1 Qualitative. The most significant **boosters** identified were (1) support from the LGU and the Municipal Health Officer; (2) presence of a well-trained OTC personnel; (3) bringing the OTC services to the barangay level; (4) provision of door-to-door screening, follow-up and dispensing of commodities; (5) CHWs willingness to learn and be trained; (6) supervision of the CHWs by the OTC personnel; (7) presence of community mobilization activities; (8) support of the barangay council; (9) acute malnutrition is not stigmatized; and (10) caregivers' awareness and acceptance of the PIMAM program. Boosters should be considered as groundworks where opportunities to strengthen program access and coverage rest. Conversely, **barriers** were more consequential in affecting program access and coverage. These included the following: (1) limited budget of the LGU for the PIMAM program; (2) RUTF stockouts; (3) inadequate number of trained OTC personnel and handling of

multiple programs; (4) gaps in anthropometric measurements; (5) insufficient community mobilization; (6) CHW lack of knowledge and training on the PIMAM program; (7) community's lack of knowledge on malnutrition and the PIMAM program; (8) caregivers' laziness and indifference on their child's condition; (9) RUTF feeding difficulties; and (10) COVID-19 pandemic stopped community mobilization and OTC admissions. Barriers should be deeply delved into by program implementers and managers such that bridging gaps and augmenting inadequacies, together with adaptations to program protocols must be prioritized for an effective program implementation.

SQUEAC Stage 2 Small Area Survey was done only in Municipality C. Six children with severe acute malnutrition were identified from the four chosen barangays. Of the six children, only one was enrolled in the program. Lot Quality Assurance Sampling (LQAS) technique disproved the hypothesis that coverage in near barangays was high and it validated another hypothesis that coverage in far barangays had low coverage. This is in contrast with the assumption made in SQUEAC Stage 1 Quantitative regarding high program coverage for Municipality C. The researcher assumes that the discrepancy in the findings may have resulted from the unavailability of RUTF and the effects of the COVID-19 pandemic on the OTC implementation in the municipality.

Health program evaluation or implementation research such as this study are valuable tools to produce sound evidence regarding their performance. This also identifies both the programs' limitations and strengths. These pieces of evidence were the bases for recommendations that may

contribute to health and social innovations, and refine decision-making which may be integrated into policy and practice.

This study, therefore, recommends the following:

1. Provide measures to improve data quality such as continuous training and supervision especially on newly hired personnels. Encouraging completeness and assessing accuracy by program managers should also be reinforced.
2. LGU should strengthen ownership of the PIMAM program which may in turn boost support on the program's logistics and human resources and assurance for financial sustainability. This can be done by increasing awareness of the status of malnutrition in the municipality and educating the leaders regarding the PIMAM program. For lower class municipalities where the budget limits the full implementation of the program, augmentation of their capacities through national agencies on health and nutrition such as the DOH and NNC and national and international NGOs should be in place.
3. Increase the number of PIMAM-trained health workers who will solely manage this program. It is suggested that one may man the RHU OTC at all times to assure proper screening and immediate admissions of SAM children observed at the RHU clinic, while the other personnel may supervise CHWs activities at the barangay level.

4. Intensify OTC services at the barangay level or implement a paradigm shift from RHU-based OTC to barangay level OTC. The role of the CHWs can not be overemphasized and therefore entails training, supervising, and motivating them. A simplified admission, discharge and outcome criteria and the use of low-literacy tools in the diagnosis of SAM may also be necessary.

5. Improve the quality of the monthly OPTs by supervising the CHWs during the activity and providing them appropriate and accurate tools for anthropometric measurements. Additionally, increase the number of community sensitization activities focused on malnutrition in children and the PIMAM program and empower mothers and caregivers on the screening of their children by using the MUAC (Family or Mother MUAC). Family or mother MUAC already initiated by UNICEF should be reinforced.

6. The shortage of RUTF may be addressed by the improvement in the accuracy and timely reporting of consumption and requirements, avoiding wastage and assuring availability of a local supplier. The use of home-based indigenous foods as an alternative to RUTF in the management of SAM will not only address shortage but also provide solutions to RUTF feeding difficulties. Furthermore, the inclusion of equally effective alternative formulations being studied which are not peanut-based in the CMAM guidelines will help bridge these gaps. Adding RUTF in the WHO Essential Medicines List will assure constant supply and competitive price in the world market.

7. Consider program adaptations to PIMAM implementation during the COVID-19 pandemic such as less frequent follow-up appointments, simplified admission and discharge criteria, CHWs to treat SAM cases, use of low-literacy tools in the diagnosis of SAM, and intensifying the idea of the Family or Mother MUAC. This will ensure continuity of services despite mobility restrictions which could prevent the increase in the rates of acute malnutrition in the Philippines.

8. More research must be done on the evaluation of the PIMAM program in other regions in the Philippines, especially under normal and non-emergency conditions. This is to analyze contextual similarities and differences affecting program access and coverage.

REFERENCES

- ACF International. (2014). Semi-quantitative evaluation of access and coverage (SQUEAC) Sittwe Township- Rhakine State Myanmar. Retrieved November 16, 2019 from <https://acutemalnutrition.org/en/resource-library/4dcgDrSLriSiYWumwumqUi>
- ACF International. (2012). Semi-quantitative evaluation of access and coverage (SQUEAC), Twic County, Warrap State, Republic of South Sudan. Retrieved November 16, 2019 from https://www.actionagainsthunger.org/sites/default/files/publications/SQUEAC_Report_Twic_County_Warrap_State_South_Sudan_11.2012.pdf
- Action Against Hunger. (n.d.). CMAM coverage monitoring. *Action Against Hunger Website*. Retrieved November 15, 2019 from <https://www.coverage-monitoring.org>
- Action Against Hunger & UNICEF. (2016). Semi-quantitative evaluation of access and coverage (SQUEAC) assessment of the out-patient therapeutic programme for severe acute malnutrition, Kupang District, Nusa Tenggara Timur (NTT) Province of Indonesia. Retrieved November 16, 2019 from https://resources.acutemalnutrition.org/SQUEAC%20report%20Kupang%20district_ACF_2016.pdf
- Amin, L. (2013). SQUEAC report Mindanao island: Philippines. Retrieved November 13, 2019 from <https://acutemalnutrition.org/en/resource-library/AjYG3MQMIEy0eiU6UkwSK>

- Amin, L. (2013). Coverage assessment: semi-quantitative evaluation of access and coverage, Compostela Valley, the Philippines. Retrieved November 13, 2019 from <https://acutemalnutrition.org/en/resource-library/5YN7k9hfGMQGoaq0m80GaM>
- Apenkwa, J., Newton, S., Amponsah, S., Osei-Antwi, R., Nakua, E., Edusei, A., Otupiri, E. (2021). Coverage assessment for community-based management of acute malnutrition in rural and urban Ghana: A comparative cross-sectional study. *BMC Nutrition*. Retrieved July 28, 2021 from <https://www.researchsquare.com/article/rs-43723/v2>
- Binns, P., Guerrero, S. (2018). 2018 Korea: Evaluation of community-based management of acute malnutrition programme supported by UNICEF in DPR Korea 2015-2017. *UNICEF website*. Retrieved November 13, 2019 from https://www.unicef.org/evaldatabase/index_103314.html
- Boetzelaer, E.V., Zhou, A., Tesfai, C., Kozuki, N. (2019). Performance of low-literate community health workers treating severe acute malnutrition in South Sudan. *Maternal & Child Nutrition*. Retrieved August 8, 2021 from <https://onlinelibrary.wiley.com/doi/10.1111/mcn.12716>
- Carter, N., Bryant-Lukosius, D., DiCenso, A., Blythe, J., Neville, AJ. (2014). The use of triangulation in qualitative research. *Oncology Nursing Forum*. Retrieved March 1, 2020 from <https://pubmed.ncbi.nlm.nih.gov/25158659/>

Chitekwe, S., Biadgilign, S., Tolla, A., Myatt, M. (2018). Mid-upper-arm circumference-based case-detection, admission, and discharging of under five children in a large-scale community-based management of acute malnutrition program in Nigeria. *Archives of Public Health*. 76 (19). Retrieved July 15, 2021 from <https://archpublichealth.biomedcentral.com/track/pdf/10.1186/s13690-018-0266-4.pdf>

Community-Based Monitoring System International Network (CBMS). (2017). The many faces of poverty, volume 8. Retrieved March 15, 2021 from https://www.pep-net.org/sites/pep-net.org/files/CBMS/Publications/TheManyFacesofPoverty_Vol8.pdf

Creswell, J., Creswell, J.D. (2018). Research design. Qualitative, quantitative, and mixed methods approaches fifth edition. Retrieved August 29, 2021 from <https://us.sagepub.com/en-us/nam/research-design/book255675>

Emergency Nutrition Network. (2017). Financing the sustainable scale-up of CMAM in high-burden countries. Retrieved August 11, 2021 from <https://www.enonline.net/fex/55/financingthesustainable>

Emergency Nutrition Network & Coverage Monitoring Network. (2014). Coverage matters, a collation of content on coverage monitoring of CMAM programmes. Retrieved July 10, 2021 from <https://www.enonline.net/attachments/2502/Coverage-Matters.pdf>

FANTA & USAID. (2012). Semi-Quantitative Evaluation of Access and Coverage (SQUEAC)/Simplified Lot Quality Assurance Sampling Evaluation of Access and Coverage (SLEAC) Technical Reference. Retrieved November 14, 2019 from https://www.fantaproject.org/sites/default/files/resources/SQUEAC-SLEAC-Technical-Reference-Oct2012_0.pdf

Food and Nutrition Research Institute. (2016). The Philippine Nutrition Facts and Figures 2015. Retrieved November 18, 2019 from http://enutrition.fnri.dost.gov.ph/site/uploads/2015_ANTHROPOMETRIC_SURVEY.pdf

Guevarra, ER. (2010). Semi-Quantitative Evaluation of Access and Coverage (SQUEAC) of the community-based management of acute malnutrition (CMAM) programme in Sinazongwe district. Retrieved November 13, 2019 from <http://www.validinternational.org/wp-content/uploads/2016/04/Sinazongwe-SQUEAC-WVZ-v4-2.pdf>

Haedy, D., Heidkamp, R., Osendarp, S., Ruel, M., Scott, N., Black, R., et al. (2020). Impacts of COVID-19 on childhood malnutrition and nutrition-related mortality. *The Lancet*. (396) 10250. Retrieved August 4, 2021 from [https://www.thelancet.com/article/S0140-6736\(20\)31647-0/fulltext](https://www.thelancet.com/article/S0140-6736(20)31647-0/fulltext)

Independent Expert Group, Global Nutrition Report. (2018). 2018 Global nutrition report: shining a light to spur action on nutrition. Retrieved November 14, 2019 from <https://globalnutritionreport.org/reports/global-nutrition-report-2018/>

International Food Policy Research Institute. (2015). 2015 Global Nutrition Report. Retrieved November 14, 2019 from <https://globalnutritionreport.org/reports/2015-global-nutrition-report/>

Ireen, S., Raihan, M., Choudhury, N., Islam, M., Hossain, Md., Islam, Z., Rahman, S.M., Ahmed, T. (2018). Challenges and opportunities of integration of community based management of acute malnutrition into the government health system in Bangladesh: a qualitative study. *BMC Health Services Research*. Retrieved August 11, 2021 from <https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-018-3087-9>

Kanja, A. (2019). Semi-quantitative evaluation of access and coverage (SQUEAC) assessment report for community-based management of acute malnutrition (CMAM) programme, in Damboa local government area, Borno State, Nigeria. Retrieved November 13, 2019 from <https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/2019/03/Damboia-LGA-SQUEAC-assessment-final-report-Jan-2019.pdf>

Khattak, U., Iqbal, S., Ghazanfar, H. (2017). The role of parents' literacy in malnutrition of children under the age of five years in a semi-urban community of Pakistan: A case-control study. *Cureus*. 9 (6). Retrieved July 24, 2021 from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5498125/>

López-Ejeda, N., Charle-Cuellar, P., Alé, F., Alvarez, J.L., Vargas, A., Guerrero, S. (2020). Bringing severe acute malnutrition treatment close to households through community health workers can lead to early admissions and improved discharge outcomes. *Plos One*. Retrieved July 15, 2021 from <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0227939>

López-Ejeda, N., Cuellar, P.C., Vargas, A., Guerrero, S. (2019). Can community health workers manage uncomplicated severe acute malnutrition? A review of operational experiences in delivering severe acute malnutrition treatment through community health platforms. *Maternal and Child Nutrition*. 15 (2). Retrieved August 9, 2021 from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6587873/>

Malawi Ministry of Health. (2016). National community-based management of acute malnutrition (CMAM) operational plan 2017-2021. Retrieved July 8, 2021 from <https://extranet.who.int/nutrition/gina/sites/default/filesstore/MWI%202016%20National%20CMAM%20Operational%20Plan%202017-2021.pdf>

Mates, E., Sadler, K. (2020). Ready-to-use therapeutic food (RUTF) Scoping Study. Retrieved August 11, 2021 from https://www.enonline.net/attachments/3543/RUTF_2020.pdf

Mohammed, S., Mosmar, Z. (2018). The effectiveness of community outreach in increasing the coverage of community based management of acute malnutrition (CMAM) program, in Rural Kassala Locality. *Edelweiss Applied Science and Technology*. Retrieved July 15, 2021 from [http://edelweisspublications.com/edelweiss/article/The-Effectiveness-Community-Outreach-Increasing-Coverage-Community-Based-Management-Acute-Malnutrition-\(CMAM\)-Program-Kassala-Locality-2576-8484-EAST-18-127.pdf](http://edelweisspublications.com/edelweiss/article/The-Effectiveness-Community-Outreach-Increasing-Coverage-Community-Based-Management-Acute-Malnutrition-(CMAM)-Program-Kassala-Locality-2576-8484-EAST-18-127.pdf)

Morán, J.L., Alé, G.B., Charle, P., Sessions, N., Doumbia, S., Guerrero, S. (2018). The effectiveness of treatment for severe acute malnutrition (SAM) delivered by community health workers compared to a traditional facility based model. *BMC Health Services Research*. Retrieved August 8, 2021 from <https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-018-2987-z>

More, NS., Waingankar, A., Ramani, S., Chanani, S., D'Souza, V., Pantvaidya, S., Fernandez, A., Jayaraman, A. (2018). Community-based management of acute malnutrition to reduce wasting in urban informal settlements of Mumbai, India: a mixed-methods evaluation. *Global Health: Science and Practice*. 6 (1); 103-127. Retrieved November 13, 2019 from <http://www.ghspjournal.org/content/6/1/103>

Myatt, M. (2013). Non-responders. *Emergency Nutrition Network*. Retrieved July 15, 2021 from <https://www.en-net.org/question/1025.aspx>

Myatt, M., Guerrero, S. (2013). Why coverage is important: efficacy, effectiveness, coverage, and the impact of CMAM interventions. *Emergency Nutrition Network*. Retrieved July 15, 2021 from <https://www.enonline.net/fex/45/coverage>

National Nutrition Council. (2019). 2019 OPT results weigh/length-for-weight (wasting) among preschool children 0-59 months. Retrieved February 15, 2021 from <https://www.nnc.gov.ph/component/phocadownload/category/106>

National Nutrition Council. (2018). 2018 OPT Results Weigh/Length-for-Weight (Wasting) among Preschool Children 0-59 months. Retrieved March 10, 2020 from <https://www.nnc.gov.ph/index.php/related-statistics/2014-07-27-09-19-36/file/1991-2018-opt-results-weigh-length-for-weight-wasting-among-preschool-children-0-59-months.html>

No Wasted Lives Coalition. (n.d.). The State of Acute Malnutrition. Retrieved November 16, 2019 from <https://acutemalnutrition.org/en/countries>

No Wasted Lives Coalition. (n.d.). The State of Acute Malnutrition, Philippines. Retrieved November 16, 2019 from <https://acutemalnutrition.org/en/countries/PHL>

Nutley, T., Reynolds, H. (2013). Improving the use of health data for health system strengthening. *Global Health Action*. Retrieved July 3, 2021 from <https://www.tandfonline.com/doi/full/10.3402/gha.v6i0.20001>

Philippine Statistics Authority. (2020). Updated 2015 and 2018 full year official poverty statistics. Retrieved July 20, 2021 from <https://psa.gov.ph/poverty-press-releases/nid/162559>

Philippine Statistics Authority. (2019). Proportion of poor filipinos registered at 21.0 percent in the first semester of 2018. Retrieved July 20, 2021 from <https://psa.gov.ph/poverty-press-releases/nid/138411>

Province of Albay. (n.d.) About Albay. Retrieved April 20, 2020 from <http://albay.gov.ph/about/>

Rogers, E., Myatt, M., Woodhead, S., Guerrero, S., Alvarez, JL., (2015). Coverage of community-based management of severe acute malnutrition programmes in twenty-one countries, 2012-2013. *PLoS One*. 10 (6). Retrieved November 13, 2019 from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4456359/>

Rogers, E., (2013). Coverage assessment: semi-quantitative evaluation of access and coverage, Davao Oriental, Philippines. Retrieved November 13, 2019 from <https://acutemalnutrition.org/en/resource-library/dsKzNAUk1MEccQEWoeIYw>

Save the Children, Humanitarian Innovation Fund. (2015). Standardised indicators and categories for better CMAM reporting. Retrieved November 20, 2019 from [https://www.cmamreport.com/sites/all/themes/stc/cmam-assets/STANDARDISED%20CATEGORIES%](https://www.cmamreport.com/sites/all/themes/stc/cmam-assets/STANDARDISED%20CATEGORIES%20)

20AND%20INDICATORS%20FOR%20BETTER%20CMAM%20REPOR
TING%20%20FINAL%20Apr%202015.pdf

Schofield, L., Lalcha, SG., Getachew, T. (2010). SQUEAC in routine monitoring of CMAM programme coverage in Ethiopia. Retrieved November 13, 2019 from http://www.validinternational.org/coverage/workshop/articles_files/FieldExchange2010Schofield.pdf

Tuffrey, V., Mezger, C., Nanama, S., Bulti, A., Olisenekwu, G., Umar, C., Jones, E., Namukasa, E. (2021). Assessment of monitoring systems in the management of severe acute malnutrition in northern Nigeria. *BMC Nutrition*. 2 (2021). Retrived July 9, 2021 from <https://bmcnutr.biomedcentral.com/articles/10.1186/s40795-020-00405-z>

UNICEF. (2021). Direct and indirect effects of the COVID-19 pandemic and response in South Asia. Retrieved August 12, 2021 from <https://www.unicef.org/rosa/media/13066/file/Main%20Report.pdf>

UNICEF. (2020). UNICEF global COVID-19 situation report. Retrieved August 10, 2021 from <https://www.unicef.org/media/86171/file/GLOBAL-COVID19-SitRep-October-2020.pdf>

UNICEF. (2015). Management of Severe Acute Malnutrition in Children: Working Towards Results at Scale. Retrieved November 13, 2019 from <https://childrenandaids.org/sites/default/files/2017-05/SAM%20Guidance.pdf>

UNICEF. (2015). Prevention and treatment of severe acute malnutrition in East Asia and the Pacific, report of a regional consultation. Retrieved November 14, 2019 from <https://www.unicef.org/eap/media/1306/file>

UNICEF. (2012). Evaluation of community management of acute malnutrition (CMAM), Nepal country case study. Retrieved November 13, 2019 from https://www.unicef.org/evaldatabase/files/Nepal_CMAM_formatted_final_draft_Geneve_version_26sept2012.pdf

UNICEF & DOH. (2015). National Guidelines on the Management of Severe Acute Malnutrition for Children Under Five Years, Manual of Operations. Retrieved November 10, 2019 from <https://unicefeapronietoolkit.files.wordpress.com/2017/08/1-the-philippines-sam-guidelines-2015-final-print-ready.pdf>

UNICEF, WHO, World Bank. (2019). Levels and trends in child malnutrition, joint child malnutrition estimates. Retrieved November 18, 2019 from <https://www.who.int/nutgrowthdb/estimates2018/en/>

USAID. (2019). Community-based Management of Acute Malnutrition: Technical Guidance Brief. Retrieved March 8, 2020 from <https://www.usaid.gov/global-health/health-areas/nutrition/technical-areas/community-based-management-acute-malnutrition>

- USAID, PEPFAR. (n.d.). Lot quality assurance sampling measures performance. *Measure Evaluation*. Retrieved March 9, 2020 from <https://www.measureevaluation.org/our-work/evaluation/lot-quality-assurance-sampling-used-to-measure-program-performance>
- Vargas. M. (2018). Nutritional Status of Filipino Preschool Children. *Food and Nutrition Research Institute*. Retrieved November 14, 2019 from https://www.fnri.dost.gov.ph/images//sources/eNNS2018/Pre-school_and_School-Children.pdf
- WHO. (2019). Identification of severe acute malnutrition in children 6 – 59 months of age. *WHO Website*. Retrieved November 18, 2019 from https://www.who.int/elena/titles/sam_identification/en/
- WHO. (2017). Policy-national community-based management of acute malnutrition (CMAM) operational plan 2017-2021. Retrieved August 9, 2021 from <https://extranet.who.int/nutrition/gina/en/node/25875>
- WHO. (2010). 3. Health Information Systems. Retrieved July 3, 2021 from https://www.who.int/healthinfo/systems/WHO_MBHSS_2010_section3_web.pdf
- WHO & Alliance for Health Policy and Systems Research. (2007). What is health policy and health systems research and why does it matter? Retrieved July 15, 2020 from <https://www.who.int/alliance-hpsr/resources/Alliance%20HPSR%20-%20Briefing%20Note%201.pdf?ua=1>

WHO, World Food Programme, UN, UNICEF. (2007). Community-based management of severe acute malnutrition. Retrieved November 18, 2019 from <https://www.who.int/nutrition/publications/severemalnutrition/9789280641479/en/>

Yerrow, M. (2016). SQUEAC report CESVI IMAM (OTP) Programme Galkayo IDP Camps, Mudug Somalia, August, 2016. Retrieved November 13, 2019 from https://reliefweb.int/sites/reliefweb.int/files/resources/cesvi_galkaiyo_south_squeac_report_aug-2016_approved_002.pdf

Zuza, I., Perez, B., Ituero, C., Das, SK., Woodhead, S., Rogers, E., Alvarez, JL. (2017). Gender-related barriers to service access and uptake in nutrition programs. *World Nutrition*. 8 (2); 251-260. Retrieved November 14, 2019 from https://www.researchgate.net/publication/321689530_Gender-Related_Barriers_to_Service_Access_and_uptake_in_nutrition_programmes

APPENDIX A

OUT-PATIENT THERAPEUTIC CARE CHART

(Source: National Guidelines for the Management SAM for Children Under Five Years Manual of Operation)

ADMISSION DETAILS: OUTPATIENT THERAPEUTIC CARE (FRONT)

Instructions:

Please fill up needed details and encircle appropriate text or values based on history taking and physical examination

Name				Reg. No							
Municipality				Barangay							
Age (months)		Sex	M	F	Date of Admission						
Admission Status	Screened by BNS/BHW	Walk-in	From IC	From SFP	From other OC	Readmission (Relapse)	ITC Refusal				
Total Number in Household	# adults: —	# children: —	Twin	Yes	No	Distance to home (hrs)					
						4Ps Beneficiary?	Yes No				
Admission Anthropometry											
MUAC (cm)		wt (kg)		Ht (cm)		WHZ score					
Admission Criteria (encircle all applicable)	Edema	MUAC <11.5cm	WHZ <-3	Other (specify)							
History											
IMCI Danger Signs	Able to drink or breastfeed? Yes No		Does the Child Vomit Everything? Yes No		Has the child had convulsions? Yes No		Is child lethargic/unconscious? Yes No				
Diarrhoea	Yes	No	Stools / Day		1-3	4-5	>5				
Vomiting	Yes	No	Frequency		Passing Urine		Yes	No			
Cough	Yes	No	If edema, how long swollen?		Breastfeeding		Yes	No			
Appetite at home?	Good	Poor	None	Other Medical Problems		Tuberculosis	Malaria	Congenital anomalies			
Reported Problems							Others: _____				
Physical Examination											
Respiration Rate (# min)	<30	30 - 39	40 - 49	50+	Edema		None	+	++	+++	
Temperature (°C)					Chest Retractions		Yes	No			
Eyes	Normal	Sunken	Discharge	Dehydration		None	Moderate	Severe			
Conjunctiva	Normal	Pale	Mouth		Normal	Sores	Candida				
Ears	Normal	Discharge	Disability		Yes	No					
Skin Changes	None	Scabies	Peeling	Ulcers / Abscesses	Extremities		Normal	Cold			
Appetite Test	Pass	Fail	NOTE: If child failed appetite test, refer IMMEDIATELY to ITC								
Routine Admission Medication											
Admission:											
Drug	Date	Dosage									
Amoxycillin											
2nd visit:											
Mebendazole											
		Measles									
		Date									
Other Medication											
Drug	Date	Dosage				Drug	Date	Dosage			

FOLLOW UP: OUTPATIENT THERAPEUTIC CARE (BACK)

Name:		Registration Number:																
Week	ADH	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
Date																		
Anthropometry																		
Weight (kg)																		
Weight loss * (Y/N)		*		*														
MUAC (cm)																		
Edema (+ ++ +++)																		
* WEIGHT CHANGES: MARASMICS: If below admission weight on week 3 refer for home visit. If no weight gain by week 5 refer to ITC.																		
History																		
Diarrhea (# days)																		
Vomiting (# days)																		
Fever (# days)																		
Cough (# days)																		
Physical Examination																		
Temperature (°C)																		
Respiratory Rate (# / min)																		
Dehydrated (Y/N)																		
Anemia (Y/N)																		
Skin Infection (Y/N)																		
Appetite Test (Pass/Fail)																		
Action Needed (Y/N) <small>(note below)</small>																		
Other Medication <small>(see front of card)</small>																		
RUTF (# sachets)																		
Name of Examiner																		
OUTCOME ***																		
*** A= absent D= defaulter (3 consecutive absences) T= transfer to Inpatient X= died C= discharged cured RT= refused transfer HV= home visit NC= discharged non-cured																		
** Action Taken (include date)																		

APPENDIX B

OTC REGISTRY FORM

(Source: National Guidelines for the Management SAM for Children Under Five Years Manual of Operation)

Reg. #	SAM No.	Patient's Name (surname, first name)	Patient's Name/ Caregiver's name	Address & Phone No.	Type of Entry	Entry to Facility														
						Transfer from	Sex F/M	DOB mm/dd/yy	Age (months)	Date mm/dd/yy	Wt (kg)	Ht (cm)	WH Z	Edema 0,1,2,3	MUAC (mm)					
						Code of the OTC/ITC														
1																				
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
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19																				
20																				

	Exit to Facility						Type of Exit		Date of minimum weight mm/dd/yy	Minimum weight (kg)	Observation
	Date mm/dd/yy	Wt (kg)	Ht (cm)	WH Z	Edema 0,1,2,3	MUAC (mm)	Type	Transfer out			
								Code of the OTC/ ITC			
1											
2											
3											
4											
5											
6											
7											
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APPENDIX C

PIMAM OTC/ITC MONTHLY REPORTING FORM

MONTHLY STATISTICS REPORT- MANAGEMENT OF SEVERE ACUTE MALNUTRITION																																																																																																																																																				
CITY/MUNICIPALITY PROVINCE REGION	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">MONTHS/ANNO OF REPORTING</td> <td colspan="14"></td> </tr> <tr> <td>REPORT PREPARED BY</td> <td colspan="14"></td> </tr> <tr> <td rowspan="2">TYPE OF FACILITY (outpatient)</td> <td style="width: 10%;">OTC</td> <td colspan="13">ITC</td> </tr> <tr> <td colspan="14"></td> </tr> <tr> <td colspan="15" style="text-align: center;">NUMBER OF PERSONNEL TRAINED ON SAM</td> </tr> <tr> <td colspan="15" style="text-align: center;">TOTAL</td> </tr> <tr> <td>MS</td> <td colspan="4"></td> <td>MS/PTC</td> <td colspan="9"></td> </tr> <tr> <td>MS</td> <td colspan="4"></td> <td>MS/PTC</td> <td colspan="9"></td> </tr> <tr> <td>MS</td> <td colspan="4"></td> <td>MS/PTC</td> <td colspan="9"></td> </tr> </table>														MONTHS/ANNO OF REPORTING															REPORT PREPARED BY															TYPE OF FACILITY (outpatient)	OTC	ITC																											NUMBER OF PERSONNEL TRAINED ON SAM															TOTAL															MS					MS/PTC										MS					MS/PTC										MS					MS/PTC									
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Group age	Total beginning of the month (A)	ENTRY					EXIT					Total End (I) = A + F	Total end of the month (B = A + D - G)																																																																																																																																							
		New admissions (B)			Transfer In (C)			Total Admissions (B + C + E)	Discharges (D)				Transfer out (F)																																																																																																																																							
		WFR or MUAC (B1)	Discharge Policy (B2)	Admission (B3)	Transfer from another OTC (C1)	Transfer from ITC (C2)	Returned Discharge (C3)		DECEASED (D1)	DEATH (D2)	DEFAULTER (D3)	DISCHARGED (D4)	Transfer to OTC (F1)	Transfer to ITC (F2)																																																																																																																																						
<6 months (P)																																																																																																																																																				
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									DEFAULTER																																																																																																																																											
									DISCHARGED																																																																																																																																											

Total Beginning of the Month = Indicate here the total patients admitted into the program from the previous month ("W" from the last month's report).

New admission (B) = Patients directly admitted to your programme to start the treatment process. If identified SAM by WFR = 3, 4, 5, or MUAC < 11 then only, indicate in B1.

If identified with bilateral pitting oedema, indicate in **B3 Discharge (B3)** when no patient previously admitted and already treated but has become SAM again.

Transfer In (C) = Patient that has started the nutritional therapeutic intervention in a different site and is referred to your programme to continue the treatment. This can be equal to: another OTC (C1), another ITC (C2), or a returned discharger (C3).

Total Admissions (B) = Add all new admissions and transfer in: (B + C)

Discharges (D) = There are four types of discharges as described below (D1 to D4)

- **Death (D1)** = Patient that has reached the discharge criteria.

- **Default (D2)** = Patient that is absent for 3 consecutive weighings (1 week in OTC or 3 days in ITC) confirmed above by a home visit.

- **Death (D3)** = Patient that has died while in the program. For OTC, the death has to be confirmed by a home visit.

- **Non-Careful (D4)** = Patient that has not reached the discharge criteria after 4 months in the ITC or 3 months in ITC.

Transfer Out (F) = Patient that has started the nutritional therapeutic intervention in your programme and is referred to another site to continue the treatment. If transfer to another OTC, indicate in F1. If transfer to another ITC, indicate in F2.

Total End (D) = Add all Discharges (D1 to D4) and all transfer out (F)

Total end of the month (B) = Total beginning of the month (A) + Total admissions (B) - Total discharges (D)

APPENDIX D

SUMMARY OF ROUTINE PROGRAM DATA FINDINGS, MUNICIPALITIES A TO R, JAN TO DEC 2019

Municipality	OTC Present	OTC Chart Present	OTC Registry Form Present	Monthly Reporting Form Present	Admissions Over Time	Discharge Outcomes	Number of defaulters	MUAC on Admission and Discharge	Patient Length of Stay	Patient Home Barangays	Referral Source	Percent Routine Program Data Available
A	YES	NO	NO	NO	50%*	20%#	20%	0	40%	100%	100%	47%
B	YES	NO	YES*	YES*®	100%\$	80%#	0	5%	0	100%	0	29%
C	YES	YES	YES	YES	100%	100%	100%	100%	100%	100%	100%	100%
D	YES	NO	NO	NO	0	0	0	0	0	0	0	0%
E	NO	NO	NO	NO	0	0	0	0	0	0	0	0%
F	NO	NO	NO	NO	0	0	0	0	0	0	0	0%
G	NO	NO	YES*	YES*®	100%\$	80%#	0	0	0	100%	0	40%
H	YES	NO	NO	NO	0	0	0	0	0	0	0	0%
I	YES	NO	NO	NO	0	0	0	0	0	0	0	0%
J	YES	NO	YES*	YES*®	50%\$	40%#	0	0	50%#	100%	0	34%
K	YES	YES	YES	YES	100%	100%	100%	100%	100%	100%	100%	100%
L	YES	NO	YES*	NO	20%#	20%	100%	10%	0	20%	20%	27%
M	NO	NO	NO	NO	0	0	0	0	0	0	0	0%
N	YES	NO	YES*	YES*®	100%	50%#	0	5%	40%#	100%	0	42%
O	YES	NO	NO	NO	50%	0	0	0	0	0	0	7%
P	YES	NO	NO	NO	0	0	0	0	0	0	0	0%
Q	YES	NO	YES*®	YES*&	50%	50%#	0	50%	50%#	100%	0	43%
R	NO	NO	NO*	NO*&	25%&	20%#	0	0	10%#	100%	0	22%

*Data provided only by the Nutritionist-Dietitian deployed in the Municipality

@ Data started June 2019

& Data started August/September 2019

Data with discrepancies and inaccuracies

\$ Admissions recorded from OPT results

APPENDIX E.1

MUNICIPALITY C

C - BARANGAYS	C-SAM	CHW	HCP	T	TH/BA
N1 (0.14 km)	IGD 4	KII / IGD	KII / IGD	KII	
N2 (4.1 km)	KII				
N3 (1.4 km)					
N4 (1.2 km)					
N5 (1.2 km)		IGD 2			
F1 (5.7 km)		IGD			
F2 (14 km)					KII
F3 (9 km)					KII
F4 (15 km)		IGD 2			
F5 (6.5 km)				KII	
F6 (11 km)	KII				
F7 (9.7 km)		IGD			
F8 (5.7 km)					
F9 (8.1 km)		KII			
F10 (5.7 km)					
Total	2 KII 4 IGD	2 KII 7 IGD	2 KII 4 IGD		

(Patterned from: Action Against Hunger; CMAM Coverage Monitoring: How to Conduct Community Assessment)

C-SAM: Caregiver of SAM children

CHW: Community Health Worker

HCP: Health Center/OTC Personnel

T: Teacher

TH/BA: Traditional Healer/Birth Attendant

KII: Key Informant Interview

IGD: Informal Group Discussion

DO: Direct Observation at the OTC

km: Distance from the OTC in km

N – Near barangay (< 5 km from the OTC)

F – Far barangay (≥ 5 km from the OTC)

APPENDIX E.2

MUNICIPALITY K

K - BARANGAYS	C-SAM	CHW	HCP	T	TH/BA
N1 (0.4 km)	KII	IGD	KII / IGD		
N2 (0.45 km)					
N3 (0.45 km)					
N4 (0.55 km)					
N5 (1.1 km)	IGD				
N6 (1.1 km)		KII			
N7 (1.6 km)					
N8 (1.6 km)				KII	
N9 (2 km)		IGD			
N10 (2 km)	IGD	IGD			
N11 (2.2 km)					
N12 (2.3 km)					
N13 (2.5 km)					KII
N14 (2.7 km)					
N15 (2.8 km)					
N16 (3.3 km)	IGD				
N17 (4.1 km)					
N18 (4.3 km)					
N19 (4.5 km)					
N20 (4.6 km)					
N21 (4.6 km)					
F1 (5.1 km)					
F2 (5.1 km)					
F3 (5.6 km)					
F4 (6.3 km)	IGD 2	IGD			
F5 (6.4 km)					
F6 (6.6 km)					
F7 (7.1 km)	IGD	IGD			
F8 (7.8 km)					
F9 (9.3 km)		IGD		KII	
F10 (9.6 km)		KII			

F11 (9.6 km)					
F12 (11 km)					
F13 (11 km)	KII / IGD	IGD			KII
F14 (13 km)					
F15 (13 km)					
F16 (16 km)					
F17 (17 km)					
F18 (18 km)	IGD				
F19(21 km)		IGD			
F20 (21 km)					
F21 (22 km)					
F22 (22 km)					
F23 (22 km)					
Total	2 KII 8 IGD	2 KII 8 IGD	2 KII 8 IGD		

(Patterned from: Action Against Hunger; CMAM Coverage Monitoring: How to Conduct Community Assessment)

C-SAM: Caregiver of SAM children

CHW: Community Health Worker

HCP: Health Center/OTC Personnel

T: Teacher

TH/BA: Traditional Healer/Birth Attendant

KII: Key Informant Interview

IGD: Informal Group Discussion

km: Distance from the OTC in km

N – Near barangay (< 5 km from the OTC)

F – Far barangay (≥ 5 km from the OTC)

APPENDIX F

SUMMARY OF PARTICIPANTS IN THE KIIS, MUNICIPALITY C & K

	MUNICIPALITY C		MUNICIPALITY K	
	PARTICIPANT	CODE	PARTICIPANT	CODE
1	Municipal Nutrition Officer	C-HCP1-I	Municipal Nutrition Officer	K-HCP1-I
2	Public Health Nurse 2	C-HCP2-I	DOH Deployed Nutritionist Dietitian	K-HCP2-I
3	Carer of SAM Child	C-CSAM1-I	Carer of SAM Child	K-CSAM1-I
4	Carer of SAM Child	C-CSAM2-I	Carer of SAM Child	K-CSAM2-I
5	Barangay Health Worker	C-CHW1-I	Barangay Health Worker	K-CHW1-I
6	Barangay Nutrition Scholar	C-CHW2-I	Barangay Nutrition Scholar	K-CHW2-I
7	Day Care Child Development Worker	C-T1-I	Day Care Child Development Worker	K-T1-I
8	Day Care Child Development Worker	C-T2-I	Day Care Child Development Worker	K-T2-I
9	Traditional Birth Attendant	C-TBA-I	Traditional Birth Attendant	K-TBA-I
10	Traditional Healer	C-TH-I	Traditional Healer	K-TH-I

1 – Coming from a near barangay (< 5 km from the OTC)

2 – Coming from a far barangay (≥ 5 km from the OT)

I – Interview (KII)

HCP – Health Care Personnel at the OTC

CHW – Community Health Worker

T – Teacher

APPENDIX G

SUMMARY OF PARTICIPANTS IN THE IGDS, MUNICIPALITY C & K

	Municipality C		Municipality K	
	Number of Participants	Codes	Number of Participants	Codes
Municipal Health Care Personnel	4	C-HCP1..4-D	8	K-HCP1..8-D
Carers of SAM Children	4	C-CSAM1..4-D	8	K-CSAM1.8-D
Community Health Workers (BHW/BNS)	7	C-CHW1..7-D	8	K-CHW1..8-D
TOTAL	15		24	

APPENDIX H.1

INTERVIEW GUIDE FOR CAREGIVERS OF SAM CHILDREN

(Source: Action Against Hunger, Coverage Monitoring Network)

Interviewee Code: _____	Date: _____
Interviewer: _____	
Municipality: _____	
Barangay: _____	
AWARENESS OF PIMAM PROGRAM	
<p>1. How did you hear about the PIMAM Program? <i>(Paano mo nalaman ang PIMAM program?)</i> <i>(Pano mo naaraman ang PIMAM program?)</i></p> <p>2. What did you hear? <i>(Ano ang narinig mo?)</i> <i>(Ano su nadangog mo?)</i></p> <p>3. How often do you hear about the PIMAM program? <i>(Gaano mo kadalas marinig ang PIMAM program?)</i> <i>(Puropirmi mo nadadangog an PIMAM program?)</i></p> <p>4. Why did you decide to come to the health center? <i>(Bakit kayo nagdesistyon pumunta sa health center?)</i> <i>(Nata nag desidir kamo magduman sa health center?)</i></p> <p>IF CHILD'S ILLNESS IS MENTIONED:</p> <p>5. When did you notice that your child is ill? <i>(Kailan mo napansin na may sakit ang anak mo?)</i> <i>(Kasuarin mo nareparo na may helang su aki mo?)</i></p> <p>6. What symptoms or problems did you notice? <i>(Ano ang mga sintomas or problema na napansin mo?)</i> <i>(Ano su mga sintomas o problema na nareparo mo?)</i></p> <p>7. Was your child measured at home? <i>(Tinimbang ba o sinukat ang anak mo sa bahay?)</i> <i>(Pigtimbang o pigsukol su aki mo sa harong?)</i></p>	

<p>IF YES:</p> <p>8. Who measured him? How? What was said? <i>(Sino ang nagsukat o nagtimbang sa kanya? Papano ito ginawa? Ano ang sabi sayo? (Sisay su nagsukol o nagtimbang sa iya? Pano ito ginibo? Ano su taramon sa imo?)</i></p> <p>9. After what time have you decided to come to the health center? <i>(Gaano katagal bago mo naidala ang anak mo sa health center?) (Gaano kahaloy bago ka nag-desidir na darahon su aki mo sa health center?)</i></p> <p>ON DECISION MAKING</p> <p>10. Did someone encourage you to go to the health center? <i>(May naghikayat ba sa iyo na dalhin ang anak mo sa health center?) (May nakataram saimo na darahon su aki mo sa health center?)</i></p> <p>11. Who encouraged you? <i>(Sino ang naghikayat sa iyo?) (Sisay su nakataram saimo?)</i></p> <p>12. Does this person encourage you to continue the treatment? <i>(Hinihikayat ka ba nya na magpatuloy sa gamutan o programa?) (Nakakatabang man ang tawo na ini na ipadagos ang pagpaparahay?)</i></p> <p>13. Does this person accompany you to the health center? <i>(Sinamahan ka ba nya sa health center?) (Tig-iibahan ka man kan tawo na ini na magduman sa health center?)</i></p> <p>14. If not, would you like to be accompanied? <i>(Kung hindi, gusto mo bang samahan ka niya?) (Kun dae, muya mo na ibahan ka niya?)</i></p>	
<p>AWARENESS OF MALNUTRITION</p>	
<p>1. Do you know the causes of your child's condition? If yes, what are they? <i>(Alam mo ba ang mga sanhi ng kalagayan ng anak mo? Kung oo, ano-ano ang mga ito?) (May aram ba kamo sa kawsa kan kondisyon kan saindong aki? Kun iyo, ano ang mga ini?)</i></p> <p>2. Do you know the effects of these condition? If yes, what are they? <i>(Alam mo ba ang mga epekto ng kanyang kalagayan? Kung oo, ano-ano ang mga ito?) (Aram mo ba su mga epekto kan kondisyon</i></p>	

<p><i>na ini? Kun iyo, ano ang mga ini?)</i></p> <p>3. Do you think that it's a disease like any other? Why? Why not? <i>(Sa iyong palagay, ito ba ay karamdaman katulad ng ibang sakit? Bakit? Bakit hindi? (Sa imong pag-una pareho daw ini kan ibang mga helang? Nata? O nata dae?)</i></p> <p>4. How did you try to treat this condition before going to the health center? <i>(Papano mo ito ginamot o binigyang lunas bago mo siya dalhin sa health center?) (Pano mo tigbulong su aki mo, bago mo siya tigdara sa health center?)</i></p> <p>5. Which words do people use to describe it? <i>(Ano ang tawag ng mga tao sa kalagayan niya?) (Ano su apod kan mga tawo sa kondisyon niya?)</i></p> <p>6. Does the health center staff use the same words? If not, what words do they use? <i>(Ito din ba ang tawag ng nars sa health center? Kung hindi, ano ang tawag nila?) (Ini man daw ang apod kan mga nars sa health center? Kun bako, ano ang apod ninda digdi?)</i></p> <p>7. Did the health center staff explain your child's condition? If yes, what did they tell you? <i>(Pinaliwanag ba sa iyo ng nars sa health center and kalagayan ng anak mo? Kung oo, ano ang sabi niya?) (Tig-paliwanag man saimo kan nars sa health center ang kondisyon kan aki mo? Kun iyo, ano su mga tinaram saimo?)</i></p>	
QUALITY OF PIMAM PROGRAM	
<p>1. How long do you have to wait before being served? Why? <i>(Gaano katagal kang naghintay bago natignan ang anak mo? Bakit? (Gurano kahaloy kamo naghalat? Nata?)</i></p> <p>2. How much time do you spend with the nurse during the consultation? <i>(Gaano katagal umaabot ang konsultasyon?) (Pirang oras man ang inabot kan konsultasyon nindo?)</i></p> <p>3. Is he/she kind? Why? Why not? <i>(Mabait ba yung nars? Bakit? Bakit hindi? (Maboot man su tawo na nag-asikaso saindo? Nata man? Nata ta bako?)</i></p> <p>4. What does the health center staff give you to treat the disease? <i>(Ano ang binigay sa iyo sa health center para magamot and sakit o kalagayan ng anak mo?)</i></p>	

<p><i>(Ano man su mga tinao saimo sa health center para mabulong ang helang na ini?)</i></p> <p>5. Did they explain the reason for this treatment? <i>(Pinaliwanag ba nila ang rason kung bakit ito ang binigay na gamot?)</i> <i>(Tig-paliwanag man saimo kung nata iyo ang tinao nindang bulong para sa helang na ini?)</i></p> <p>6. Have you always received a complete ration? If not, why not? How many times? <i>(Lagi ka bang nakakatanggap ng kumpletong rasyon? Kung hindi, bakit hindi? Gaano kadalas ito mangyari?)</i> <i>(Pirmi man kompleto ang nakukuha nindo na rasyon? Kun dae, nata ito? Puro pirmi man?)</i></p> <p>7. Did the health center staff explain how to use it? If yes, do you observe their instructions? <i>(Pinaliwanag ba sa iyo sa health center kung papano ito gamitin at ibigay sa anak mo? Kung oo, naipakita ba sa iyo kung papano?)</i> <i>(Tig-papaliwanag man saimo kan mga tawo sa health center kung papano ini gamiton? Kun iyo, pigpailing man saimo kun pano?)</i></p> <p>8. Does your child like to eat it? <i>(Gusto ba itong kainin ng anak mo?)</i> <i>(Namuyahan man su aki mo na pagkaunon ito?)</i></p> <p>9. Does/did he/she display symptoms after eating it? If yes, what symptoms? <i>(May napapansin ka bang mga sintomas matapos nya itong kainin? Kung oo, ano-ano ang mga ito?)</i> <i>(Nakailing ka ki mga sintomas pagkatapos niya magkaon kan mga tinao saiya? Kung iyo, ano su mga nagkahiriling mong sintomas?)</i></p> <p>10. Do you continue the treatment? <i>(Kapag may sintomas, tinutuloy ma ba ito?)</i> <i>(Tig-duruderetso pa nindo dawa kan may nahiling na kamong sintomas?)</i></p> <p>11. Do you share it with other family members? Why? <i>(Ibinabahagi mo ba ito sa ibang myembro ng pamilya?)</i> <i>(Tigatatawan mo man kani su ibang myembro kan pamilya nindo?)</i></p> <p>12. Will you continue the treatment until your child fully recovers? Why? Why not? <i>(Ipagpapatuloy mo ba itong gamutan hanggang ang iyong anak ay gumaling?)</i> <i>(Iduduroderetso mo ini hanggang sa marahay ang aki mo? Nata? Nata ta dae na?)</i></p>	
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APPRECIATION OF PIMAM PROGRAM	
<p>1. What do you think of the PIMAM program? Why? <i>(Ano ang masasabi tungkol sa programang PIMAM? Bakit? (Ano sa iling mo ang programang PIMAM? Nata?)</i></p> <p>2. Will you refer other children in your community? Why? Why not? <i>(Ipapadala or irerefer mo din ba ang ibang bata kagaya ng kalagayan ng anak mo? Bakit? Bakit hindi?) (Ire-refer mo man ang ibang aki sa lugar nindo? Nata? Nata ta dae?)</i></p> <p>IF ANSWER IS POSITIVE:</p> <p>3. Have you already referred other children in your community? When? Why? <i>(May mga na-refer ka na ba na ibang bata sa barangay ninyo? Kailan ito? Bakit?) (May mga tig-refer kana man na ibang aki sa lugar nindo? Kasuarin? Nata?)</i></p> <p>4. What would you change to improve the quality of the program? <i>(Ano ang iyong papalitan para mapabuti ang kalidad ng PIMAM program?) (Ano su mga babaguhon mo para maparahay ang kalidad kan programang PIMAM?)</i></p> <p>5. Is it easy to get to the health center? If not, what makes it difficult? <i>(Madali bang mapuntahan ang health center? Kung hindi, bakit ito mahirap? (Madali man makaduman sa health center? Kung bako, nata ta mapagal ang pagduman?)</i></p> <p>6. What means of transport do you use? <i>(Ano ang transportasyon na ginagamit mo? (Ano ang tigelunadan nindo paduman?)</i></p> <p>7. What is the price of the journey there and back? <i>(Magkano ang nagagastos mo sa pamasaha papunta sa health center at pabalik?) (Gurano ang tig-aabot kan pamasaha nindo paduman buda pauli?)</i></p> <p>8. How long does it take you? <i>(Gaano katagal ang byahe papunta at pabalik?) (Pirang oras man ang tig-aabot kan byahe nindo?)</i></p>	
COVERAGE/REJECTIONS/DEFAULTING	
<p>1. Do you know other children in the community who need the treatment? If yes, why aren't they in the program? <i>(May alam ka ba na ibang bata na kailangan</i></p>	

<p><i>din ng ganitong gamutan? Kung oo, bakit kaya wala sila sa programa?)</i> <i>(May midbid kang ibang mga aki duman sa lugar nindo na kaipuhan man bulungon? Kung igwa, nata ta wara sinda sa programa?)</i></p> <p>2. Are these children or the parents stigmatized by any community members? Why? <i>(Ito bang mga batang ito o ang kanilang mga magulang ay pinagtatawanan o pinagiisipang kakaiba sa lipunan?)</i> <i>(Su mga aki daw nani o di kaya su mga magurang ninda tig-uurulukan o tig-papangisturya kan mga kataraid ninda?)</i></p> <p>3. Do you know about any children being rejected? Why? <i>(May kilala ka ba na ibang bata na tinanggihan sa programa? Bakit?)</i> <i>(May midbid kang mga aki na dae tig-ako kan programa? Nata daa?)</i></p> <p>4. Do you know about any children abandoning the treatment? Why <i>(May alam ka ba na ibang bata na hindi na nagtuloy sa gamutan? Bakit?)</i> <i>(May midbid kang aki na dae na tigderetso su pagbulong saiya? Nata ito?)</i></p> <p>5. How could we motivate them to return? <i>(Ano ang maaari nating gawin para mahikayat silang bumalik sa gamutan?)</i> <i>(Ano sa iling mo ang pwede tang gibuhon para magbalik sinda?)</i></p>	
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APPENDIX H.2

INTERVIEW GUIDE FOR COMMUNITY HEALTH WORKERS

(Source: Action Against Hunger, Coverage Monitoring Network)

Interviewee Code: _____ Date: _____ Interviewer: _____ Municipality: _____ Barangay: _____	
PERSONAL PROFILE	
<ol style="list-style-type: none"> 1. What is your role in the community? <i>(Ano ang ginagampanan mong papel sa komunidad?)</i> <i>(Ano ang posisyon mo sa lugar nindo?)</i> 2. Since when have you been working in your role? <i>(Kailan mo pa ito ginagampanan?)</i> <i>(Kasuarin ka nagpuon sa posisyon na iyan?)</i> 3. Have you been trained? If yes, when and how many times? <i>(Ikaw ba ay sinanay sa papel na ginagampanan mo? Kung oo, kailan at ilang beses?)</i> <i>(Naturuan ka man kung ano ang mga gibo kan health worker buda kung pano ini gibuhon? Kung iyo, kasuarin ka naturuan buda pirang beses man?)</i> 4. Are you satisfied with the level of training? Why? Why not? <i>(Kuntento ka ba sa ginawang pagsasanay o training? Bakit o bakit hindi?)</i> <i>(Kuntento kana man sa mga naturo saimo? Sa iling mo nata? Nata ta dae?)</i> 5. Are you supervised? If yes, by whom? How? How often? <i>(May nangangasiwa ba sa iyo? Kung oo, sino? Papano? Gaano kadalas?)</i> <i>(May nagtagareparo man saimo? Kung igwa, sisay? Buda pano? Puro pirmi man?)</i> 6. Do you collaborate with other community health workers? If yes, how? Why? How often? <i>(Ikaw ba ay nakikipagtulungan at sumasangguni sa iba pang community health wokers? Kung oo, papano? Bakit? Gaano kadalas?)</i> <i>(Nagtatarabangan man kamo kan ibang mga health workers? Kung iyo, pano man? Nata? Puro pirmi man?)</i> 	

<p>7. Do you collaborate with the health center personnel? If yes, how? Why? How often? <i>(Ikaw ba ay nakikipagtulungan at sumasanggui sa tauhan sa health center/OTC? Kung oo, papano? Bakit? Gaano kadalas?)</i> <i>(Nagtatarabangan man kamo kan mga empleyado sa health center? Kung iyo, pano man? Nata? Puro pirmi man?)</i></p> <p>SENSITIZATION</p> <p>8. Do you organize sensitization sessions in your community? If yes, how? How often? <i>(Ikaw ba ay nagsasagawa ng mga pagpapa-sensitibong aktibidad sa komunidad? Kung oo, papano? Gaano kadalas?)</i> <i>(Nag organisar kamo ki mga pagpapa-sensitibong aktibidades sa komunidad? Kung iyo, pano? Puro pirmi?)</i></p> <p>9. What tools do you have at your disposal? <i>(Ano-anong mga gamit ang meron ka para gawin ito?)</i> <i>(Ano man ang mga tig-gamit mo para gibuhon ini?)</i></p> <p>10. Who do you target in your sensitization sessions? Why? <i>(Sino ang mga target mo sa aktibidad na ito? Bakit?)</i> <i>(Sirisay man ang target mo sa aktibidad na ini? Nata sinda?)</i></p> <p>11. What other people should be targeted by the sensitization sessions? Why? Why don't you target them? <i>(Sino pa sa tingin mo ang dapat pang i-target sa aktibidad na ito? Bakit? Bakit hindi mo sila sinali?)</i> <i>(Sisay pa sa iling mo ang dapat i-target kan aktibidad na ini? Nata? Nata dae mo sinda sinabay?)</i></p> <p>12. How should be sensitization be reinforced? Why? <i>(Paano ba dapat papatibayin ang pagpapa-sensitibong aktibidad? Bakit?)</i> <i>(Sa iling mo pano pa mapapakusog ang aktibidad na ini? Nata?)</i></p> <p>SCREENING</p> <p>13. Do you screen malnourished children? If yes, how? How often? <i>(Nagsasagawa ka ba ng screening ng mga batang malnourished? Papano? Gaano kadalas?)</i> <i>(Naga screening kamo ki malnourished na mga aki? Kung iyo, pano? Puro pirmi?)</i></p>	
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<p>14. What tools do you have at your disposal? <i>(Ano ang mga kagamitan na meron ka para isagawa and screening?)</i> <i>(Ano ang tigagamit nindo pag naga screening kamo?)</i></p> <p>15. How do you refer these children to the health center? <i>(Papano mo nire-refer ang mga batang malnourished sa health center o OTC?)</i> <i>(Pano mo tigre-refer ang mga malnourished na aki sa health center o OTC?)</i></p> <p>16. Do health centers accept your referrals? If not, Why not? <i>(Tinatanggap ba sa health center/OTC ang iyong mga nire-refer? Kung hindi, Bakit hindi?)</i> <i>(Tig-ako man kan mga health center/OTC su mga tig-refer mo? Kun dae, nata daa?)</i></p> <p>17. Who follows up on referred children? How often? If no follow up is done, explain. <i>(Sino nag-follow up sa mga batang nire-refer sa health center? Gaano kadalas? Kung walang follow-up, bakit wala?)</i> <i>(Sirisay man sa tig-refer na aki ang nagduruman sa health center? Pirmi man? Kun warang nagduruman, nata daw?)</i></p> <p>18. Are there many children in your community who benefit from the PIMAM program? <i>(Madami bang bata sa komunidad na nakikinabang sa programa?)</i> <i>(Dakol man ang aki na natatabangan kan programa?)</i></p> <p>19. Do you know other children in the community who need the treatment? If yes, why aren't they in the program? <i>(May alam ka ba na ibang bata sa komunidad na kailangan ng ganitong gamutan? Kung meron, bakit wala sila sa programa?)</i> <i>(May midbid kang ibang mga aki duman sa lugar nindo na kaipuhan man bulungon? Kung igwa, nata ta wara sinda sa programa?)</i></p> <p>20. Do you know children who abandoned the treatment? If yes, why? How could we motivate them to return? <i>(May alam ka ba na ibang bata na hindi na nagtuloy sa gamutan? Kung oo, bakit? Ano ang maaari nating gawin para mahikayat silang bumalik sa gamutan?)</i> <i>(May midbid kang aki na dae na tigderetso su pagbulong saiya? Nata ito? Ano sa iling mo ang pwede tang gibuhon para magbalik sinda?)</i></p>	
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<p>21. Who follows-up on defaulting children? How often? If no follow-up is done, explain. <i>(Sino ang nag follow up sa mga batang ito? Gaano kadalas? Kung wala, bakit kaya?)</i> <i>(Sisay ang mga nag follow up sa mga aki na ini? Pirmi? Nata ta wara?)</i></p> <p>DECISION MAKING AND REFUSAL OF TREATMENT</p> <p>22. Which family member do you talk to if a child needs to be referred to a health center? <i>(Sinong myembro ng pamilya ang kinakausap mo kapag kailangan dalhin ang bata sa health center?)</i> <i>(Sisay sa pamilya ang tigakahuron mo pag igwang aki na kaipuhan i-refer sa health center?)</i></p> <p>23. Who makes the decision following your recommendation? <i>(Sino ang may desisyon para sumunod sa iyong rekomendasyon?)</i> <i>(Sisay ang nagdedesidir sa rekomendasyon mo?)</i></p> <p>24. Do both parents accept? If not, why do they refuse? How could we avoid these situations? <i>(Tinatanggap ba ang rekomendasyon mo ng parehong magulang? Kung hindi, bakit? Papano natin maiiwasan ang kanilang pagtangga?)</i> <i>(Tig-ako man kan parehong magurang an saimong rekomendasyon? Kun dae, nata ta abo ninda? Pano ta daw malilikayan ang arog kaining sitwasyon?)</i></p> <p>25. Do you sensitize parents on their child's condition? If yes, what kind of information do you share? <i>(Tinuturuan mo ba ang mga magulang patungkol sa kalagayan ng kanilang anak? Kung oo, anong impormasyon and iyong ibinabahagi?)</i> <i>(Tig-papaliwanag mo man sa mga magurang ang kondisyon kan aki ninda? Kun iyo, ano man ang mga impormasyon ang tigtuturo mo?)</i></p>	
<p>CHILDHOOD DISEASES AND MALNUTRITION</p>	
<p>1. What are main challenges in your community? <i>(Ano ang mga pangunahing hamon o balakid sa inyong komunidad?)</i> <i>(Ano su mga kinakaampang na problema saindong lugar?)</i></p> <p>2. Do they have impact on the health of the community? If yes, explain. <i>(May epekto ba ito sa kalusugan ng</i></p>	

<p><i>komunidad? Kung oo, papano?) (May epekto daw ini sa kalusugan kan komunidad? Kun iyo, pano?)</i></p> <p>3. Which childhood diseases are most frequent in your community? <i>(Ano anong mga karamdaman ng mga bata ang karaniwang nakikita sa inyong komunidad?) (Ano ang mga kadalasang helang kan mga aki an nailing sa lugar nindo?)</i></p> <p>4. In which months are they prevalent? <i>(Ang mga ito ay madalas tuwing anong mga buwan?) (Anong bulan ini nagdadakol?)</i></p> <p>5. What therapeutic itineraries are available to treat them? Which are more frequent? Why? <i>(Ano ano ang mga paraan na mayroon sa komunidad para mapagamot ang kanilang karamdaman? Alin dito ang mas madalas gawin? Bakit?) (Ano su igwa sa lugar nindo an makakatabang sa pagbulong kan ilang na ini? Arin ang pirmi nindong tigigibo o tigagamit? Nata ta iyo ini?)</i></p> <p>MALNUTRITION:</p> <p>6. What local terms depicting malnutrition in your community? <i>(Ano ang mga tawag sa komunidad patungkol sa malnutrisyon?) (Ano ang apod sa lugar nindo pag sinabing malnutrisyon?)</i></p> <p>7. How is it perceived? Why? <i>(Ano ang palagay ng mga tao tungkol dito?) (Pano ini ilingon kan tawo?)</i></p> <p>8. Is it a new disease? If yes, since when? Why do you think it appeared in your community? <i>(Ito ba ay bagong klase ng karamdaman? Kung oo, kalian pa? Bakit sa tingin mo nagkaroon nito sa komunidad?) (Bagong helang ba ini? Kun iyo, kasuarin ini nagpuon? Sa iling mo nata ta igwa kaini sa lugar nindo?)</i></p> <p>9. How do community members describe its symptoms? <i>(Papano nilalarawan ng mga tao sa komunidad ang mga sintomas?) (Ano ang apod kan mga tawo sa sintomas kaini?)</i></p> <p>10. Do community members understand its cause and effects? If yes, how do they describe them? <i>(Naiintindihan ba ng mga tao sa komunidad</i></p>	
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<p><i>ang sanhi at epekto nito? Kung oo, papano nila ito nilalarawan?)</i> <i>(Nasasabutan daw kan mga tawo kung ano ang kawsa buda epekto kaini? Kun iyo, anong apod ninda digdi?)</i></p> <p>11. Which therapeutic itineraries are available in your community to treat the malnutrition? Which are most frequent? Why? <i>(Ano ano ang mga paraan na mayroon sa komunidad para mapagamot ang malnutrisyon? Alin dito ang madalas gamitin? Bakit?)</i> <i>(Ano su igwa sa lugar nindo ang pwedeng gamiton para mapabulong na ang malnutrisyon na ini? Arin ang pirmi nindong tiggagamit? Nata iyo ini?)</i></p> <p>12. Do you think that this condition is stigmatized? Why? <i>(Sa iyo bang palagay, ang kondisyon na ito ay pinagtatawanan o tinitignan na kakaiba sa lipunan? Bakit?)</i> <i>(Sa iling mo tig-uurulukan ang kondisyon na ini kan ibang tawo? Nata?)</i></p> <p>13. How does this stigmatization mark people's behavior or community relationships? <i>(Papano ito nakakaapekto sa pag-uugali pakikipag-relasyon sa bawat isa ng mga tao sa komunidad?)</i> <i>(Pano kaini naapektaran su ugali o pakikiiba kan mga tawo sa lugar ninda?)</i></p>	
PERCEPTION OF PIMAM PROGRAM	
<p>1. What do you think of the PIMAM program? <i>(Ano ang tingin mo sa PIMAM program?)</i> <i>(Ano sa iling mo ang programang PIMAM? Nata?)</i></p> <p>2. What are its strengths and weaknesses? <i>(Ano ang mga lakas at kahinaan nito?)</i> <i>(Ano ang mga kagusugan buda kaluyahan kaini?)</i></p> <p>3. What would you change to improve its quality? <i>(Para sa iyo, ano ang mga babaguhin mo para mapabuti ito?)</i> <i>(Ano ang gusto mong baguhon para mapagayon ang kalidad kaini?)</i></p> <p>4. How is it perceived in the community? Why? <i>(Ano ang palagay ng komunidad ukol dito? Bakit?)</i> <i>(Ano ang iling digdi kan mga tawo saindo? Nata?)</i></p> <p>5. Are there any obstacles, barriers for the use of this service? If yes, explain.</p>	

<p><i>(Meron bang mga balakid para magamit ang serbisyo nito? Kung oo, ipaliwanag.)</i></p> <p><i>(Ano ang mga kikahampang na problema para magamit ang serbisyo na ini? Kun igwa, ano ano ini?)</i></p>	
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APPENDIX H.3

INTERVIEW GUIDE FOR HEALTH CENTER / OTC PERSONNEL

(Source: Action Against Hunger, Coverage Monitoring Network)

Interviewee Code: _____ Date: _____ Interviewer: _____ Municipality: _____	
PERSONAL PROFILE	
<ol style="list-style-type: none"> 1. What is your role in the health center? <i>(Ano ang ginagampanan mong papel sa health center?)</i> <i>(Ano ang posisyon mo sa health center?)</i> 2. Since when have you been working in this role? <i>(Kailan mo pa ito ginagampanan?)</i> <i>(Kasuarin ka nagpuon magtrabaho sa posisyon na ini?)</i> 3. Have you been trained? If yes, when and how many times? <i>(Ikaw ba ay sinanay sa papel na ginagampanan mo? Kung oo, Kailan at ilang beses?)</i> <i>(Naturuan ka man kung ano ang mga gibo kan health worker buda kung pano ini gibuhon? Kung iyo, kasuarin ka naturuan buda pirang beses man?)</i> 4. Are you satisfied with the level of training? Why? Why not? <i>(Kuntento ka ba sa ginawang pagsasanay o training? Bakit o bakit hindi?)</i> <i>(Kuntento kana man sa mga naturo saimo? Sa iling mo nata? Nata ta dae?)</i> 5. Are you supervised? Does anyone follow up on your activities? If yes, who? How? How often? <i>(May nangangasiwa ba sa iyo or nag check ng gawa mo? Kung oo, sino? Papano? Gaano kadalas?)</i> <i>(May nagtagareparo man saimo? Kung igwa, sisay? Buda pano? Puro pirmi man?)</i> 6. Do you collaborate with other people/ health centers? If yes, with whom? How? When? How often? <i>(Ikaw ba ay nakikipagtulungan at sumasangguni sa iba pang tao/ health centers kaugnay sa programa? Kung oo, kanino? Papano? Kailan? Gaano kadalas?)</i> <i>(Nagtatarabangan man kamo kan ibang mga health workers? Kung iyo, pano man? Nata</i> 	

<i>buda kasuarin? Puro pirmi man?</i>	
COMMUNITY PROFILE	
<p>1. What are the main challenges of the community where you work? <i>(Ano ano ang mga hamon sa komunidad kung saan ka nagsisilbi?)</i> <i>(Ano man ang mga kinakahampang na problema kan lugar kun sain ka nagtatrabaho?)</i></p> <p>2. Do they have impact on the health of the community? <i>(May mga epekto ba ito sa kalusugan ng komunidad?)</i> <i>(May epekto man ini sa kalusugan duman sa lugar nindo?)</i></p> <p>CHILDHOOD DISEASES:</p> <p>3. Which childhood diseases are most frequent in your community? <i>(Ano anong mga karamdaman ng mga bata ang karaniwang nakikita sa inyong komunidad?)</i> <i>(Ano ang mga kadalasang helang kan mga aki an nailing sa lugar nindo?)</i></p> <p>4. In which months are they prevalent? <i>(Ang mga ito ay madalas tuwing anong mga buwan?)</i> <i>(Anong bulan ini nagdadakol?)</i></p> <p>5. What therapeutic itineraries are available to treat them? Which are more frequent? Why? <i>(Ano ano ang mga paraan na mayroon sa komunidad para mapagamot ang kanilang karamdaman? Alin dito ang mas madalas gawin? Bakit?)</i> <i>(Ano su igwa sa lugar nindo ang pwedeng gamiton para mapunduhan na ang malnutrisyon na ini? Arin ang pirmi nindong tiggagamit? Nata iyo ini?)</i></p> <p>MALNUTRITION:</p> <p>6. What local terms depicting malnutrition in your community? <i>(Ano ang mga tawag sa komunidad patungkol sa malnutrisyon?)</i> <i>(Ano ang apod sa lugar nindo pag sinabing malnutrisyon?)</i></p> <p>7. How is it perceived? Why? <i>(Ano ang palagay ng mga tao tungkol dito?)</i> <i>(Ano ang iling digdi kan mga tawo saindo? Nata?)</i></p> <p>8. Is it a new disease? <i>(Ito ba ay bagong klase ng karamdaman?)</i></p>	

<p><i>(Bagong helang daw ini?)</i></p> <p>9. What are the main causes of this disease in the community where you work? <i>(Ano ano ang mga sanhi nito sa komunidad ninyo?)</i> <i>(Ano ang pinakakawsa kan helang na ini sa lugar nindo kung sain ka nagtatrabaho?)</i></p> <p>10. Do community members understand its symptoms, causes and effects? If yes, how do they describe them? <i>(Naiintindihan ba ng mga tao sa komunidad ang mga sintomas, sanhi at epekto nito? Kung oo, papano nila ito nilalarawan?)</i> <i>(Nasasabutan daw kan mga tawo saindo ang mga sintomas, kawsa buda epekto kaini? Kun iyo, pano ninda ini tig-aapod?)</i></p> <p>11. Which therapeutic itineraries for malnutrition are available in the community where you work? Which are most frequent? Why? <i>(Ano ano ang mga paraan na mayroon sa komunidad para mapagamot ang malnutrisyon? Alin dito ang madalas gamitin? Bakit?)</i> <i>(Ano su igwa sa lugar kun sain ka nagtatrabaho ang pwede gamiton para mapunduhan na ang malnutrisyon na ini? Arin ang pirmi nindong tiggagamit? Nata iyo ini?)</i></p> <p>12. Do you think that this condition is stigmatized? Why? <i>(Sa iyo bang palagay, ang kondisyon na ito ay pinagtatawanan o tinitignan na kakaiba sa lipunan? Bakit?)</i> <i>(Sa iling mo tig-uurulukan ang kondisyon na ini kan ibang tawo? Nata?)</i></p> <p>13. How does this stigmatization mark people's behavior or community relationships? <i>(Paano ito nakakaapekto sa pag-uugali at pakikipag-relasyon sa bawat isa ng mga tao sa komunidad?)</i> <i>(Pano kaini naaapektaran su ugali kan pakikiiba kan mga tawo sa lugar ninda?)</i></p> <p>SENSITIZATION:</p> <p>14. Who is responsible for the sensitization of the community where you work? <i>(Sino ang responsable sa mga pagpapasensitibong aktibidad sa inyong komunidad?)</i> <i>(Sisay ang mga responsable sa panpapasensitibong aktibidad na ini sa lugar kun sain ka nagtatrabaho?)</i></p> <p>15. Do these people sensitize the community on malnutrition? If yes, how often? <i>(Sila ba ay nagsasagawa ng mga</i></p>	
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<p><i>pagpapa-sensitibong aktibidad paukol sa malnutrisyon sa inyong komunidad? Kung oo, gaano kadalas?)</i> <i>(Naggigibo daw sinda ki pagpapa-sensitibong aktibidad para sa malnutrisyon sa lugar ninda? Kun iyo, puro pirmi daw?)</i></p> <p>16. Who is targeted by the sensitization on malnutrition? <i>(Sino ang mga target na maturuan patungkol sa malnutrition?)</i> <i>(Sisay man ang mga tigaturuan ninda kan ukol sa malnutrisyon?)</i></p> <p>17. What other people should be targeted by these sensitization activities? Why? <i>(Sino pa ang ibang tao na kailangan ma-target patungkol dito?)</i> <i>(Sirisay ang dapat na tigaturuan ninda kan paukol digdi?)</i></p> <p>18. Are you involved in the sensitization sessions? If yes, why? How? How often? If no, why not? <i>(Ikaw ba ay kasali sa mga pagpapa-sensitibong aktibidad? Kung oo, bakit? Papano? Gaano kadalas?)</i> <i>(Kaintra ka man sa pagpapa-sensitibong aktibidad na ini? Kun iyo, nata? Puro pirmi? Kun bako, nata ta dae?)</i></p> <p>19. Who should actively participate in the sensitization on malnutrition? Why? <i>(Sino ang mga dapat na aktibong kasali sa aktibidad na ito? Bakit?)</i> <i>(Sisay su mga pirmi dapat na kaintra sa aktibidad na ini? Nata?)</i></p> <p>20. Is the sensitization sufficient? Why? Why not? <i>(Sapat na baa ng ginagawa ninyong pagpapasensitibong aktibidad? Bakit? Bakit hindi?)</i> <i>(Tama na daw ang aktibidad na ini? Nata? Nata ta bako?)</i></p> <p>21. What would you change to improve the quality of sensitization? <i>(Ano ang iyong babaguhin para mapabuti ang aktibidad na ito?)</i> <i>(Ano ang babaguhon mo para mapagayon ang kalidad kaini?)</i></p> <p>SCREENING:</p> <p>22. Are there people in the community where you work who identify malnourished children? If yes who? How? How often? <i>(May mga tao bas a komunidad kung saan ka nagtatrabaho na naghahanap ng mga batang may malnutrisyon? Kung oo, sino? Papano?)</i></p>	
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<p><i>Gaano kadalas?) (May mga tawo sa lugar nindo kun sain ka nagtatrabaho an mga nag-aanap ki malnourished na mga aki? Kun iyo, sisay? Pano? Pirmi?)</i></p> <p>23. Who should be included in this activity? Why? <i>(Sino pa dapat ang kasama sa akitibidad na ito? Bakit?) (Sisay ang dapat na kaiba sa aktibidades na ini? Nata?)</i></p>	
QUALITY OF PIMAM PROGRAM	
<p>1. Do you perform systematic screening for all children who come for consultation? If not, why not? <i>(Kayo ba ay nagsasagawa ng sistematikong screening para sa mga batang may malnutrisyon sa lahat ng nagpapa konsulta sa health center? Kung hindi, bakit hindi?) (Naggigibo man kamo ki sistematikong screening para sa mga aki na igwang malnutrisyon sa gabos na nagpapa konsulta sa health center? Kun dae, Nata ta dae?)</i></p> <p>2. What kind of referral (CHW, auto-referral, peer referral) is most frequent? Why? <i>(Ano ang pinakamadalas na uri ng referral? Galling ba sa CHW, mismong magulang ang nagdala o ni-refer ng ibang kaibigan? Bakit?) (Sain ali an pinakadakol na referral (CHW, sa mga magurang o ali sa mga kabarkada? Nata?)</i></p> <p>3. How is screening and referral by CHW organized? <i>(Papano ang pag-organisa ng paghahanap o referral ng mga CHW?) (Pano tig-oorganisa ang pag-aanap o referral kan CHW?)</i></p> <p>4. Who follows-up on referrals by CHWs? If no follow up is done, why? <i>(Sino ang nag-follow up ng mga referrals ng mga CHW? Kung walang follow up, bakit?) (Sisay an mga nag-follow up sa referral kan CHWs? Kun warang nag-follow up, nata?)</i></p> <p>5. How do you refer children to the BRTTH ITC? <i>(Papano kayo nagre-refer ng mga bata sa BRTTH ITC?) (Pano kamo nagre-refer ki aki sa BRTTH ITC?)</i></p> <p>6. Who follows up on children referred to the ITC? If none, why? <i>(Sino ang nag-follow up sa mga batang nirefer sa BRTTH ITC? Kung wala, bakit?) (Sisay an mga nag-follow up sa mga aki na tig-refer sa BRTTH ITC? Kun wara, nata?)</i></p>	

<p>7. Who makes the decision to admit a child to the PIMAM OTC program? According to what criteria? <i>(Sino ang nagde-decision para i-admit ang isang bata sa OTC? Sa anong pamantayan?)</i> <i>(Sisay an nagdedesidir kun sisay na aki ang ilalaog sa PIMAM OTC? Ano an mga pamantayan?)</i></p> <p>8. Do you experience any difficulties related to admissions? If yes, what kind of difficulties? <i>(Nakaranas ka ba ng hirap sa proseso ng pag-admit? Kung oo, ano ang mga kahirapang ito?)</i> <i>(May mga nakahampang ka nang kapagalan sa pag-admit? Kun iyo na, ano ang mga kapagalan na ini?)</i></p> <p>9. Do you reject children referred by CHW or other community actors? If yes, why? How many? <i>(May mga pagkakataon ba na tinatangihan ninyo ang mga referrals ng CHW or sino man galling sa komunidad? Kung oo, bakit? Ilang porsyento ito?)</i> <i>(May mga panahon man na dae nindo tig-ako an mga tig-refer kan CHW o ali sa ibang lugar? Kun iyo, nata? Pirang porsyento man?)</i></p> <p>10. Who fills in the registers/monitoring forms? <i>(Sino ang nagfi-fill up o nagsusulat sa mga monitoring at registration forms?)</i> <i>(Sisay an nagfi-fill up o nagsusurat sa monitoring buda registration forms?)</i></p> <p>11. Do you experience difficulties in this respect? If yes, explain. <i>(Nakaranas ba kayo ng hirap sa pag-gawa nito? Kung oo, ipaliwanag.)</i> <i>(May mga nagkahampang na man kamong kapagalan sa paggibo kaini? Kung iyo, ano ano ini?)</i></p> <p>12. How many times per month do you update the registers? <i>(Ilang beses sa isang buwan ninyo ina-update ang mga ito?)</i> <i>(Pirang beses sa sarong bulan kamo naga-update kan mga rehistro?)</i></p> <p>13. Do children in this community abandon the treatment? If yes, why? How many? What ethnic group? <i>(May mga bata ba sa komunidad na tumitigil sa gamutan? Kung oo, bakit? Ilang sila? Anong ethnic group sila?)</i> <i>(May mga aki man sa lugar nindo ang nagpupundo sa pagpapabulong? Kung igwa, nata? Pira man? Anong ethnic na grupo ini?)</i></p> <p>14. Who follows-up on defaulting children? How?</p>	
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<p>If no follow-up is done, explain. <i>(Sino ang nag follow up sa mga batang ito? Papano? Kung wala, bakit kaya?)</i> <i>(Sisay man an nag follow up sa mga aki na ini? Pano? Kun warang nag follow up, nata?)</i></p> <p>15. How could we motivate them to return? <i>(Papano natin sila mahihikayat na bumalik sa programa?)</i> <i>(Pano ta kaya sinda mapapabalik?)</i></p> <p>16. Do you experience stock breakouts? If yes, what products are concerned? Why? What does it imply? <i>(Nauubusan ba kayo ng mga stocks na kailangan sa gamutan? Kung oo, anong mga produkto ito? Bakit? Ano ang ipinahihwatig nito?)</i> <i>(Naubusan na man kamo ki stocks na kaipuhanon sa pagbulong? Kun iyo na, ano ano man na produkto ini? Nata ta naubusan? Ano daw ang tigpapakahiling kaini?)</i></p> <p>17. Do you organize sensitization sessions for caregivers of malnourished children in the program? If yes, how often? With which tools? If no, why not? <i>(Kayo ba ay nagkakaroon ng mga sesyon ng pagtuturo sa mga tagapangalaga ng mga batang may malnutrisyon dito sa programa? Kung oo, gaano ito kadalas? Ano ang ginagamit na pamamaraan? Kung hindi, bakit?)</i> <i>(Nagkakaigwa man kamo ki oras para maturuan an mga nagtatabang sa mga malnourished na aki sa programa? Kun iyo, pirmi man? Ano man ang mga tiggagamit nindo? Kun wara, nata?)</i></p>	
PERCEPTION OF PIMAM PROGRAM	
<p>1. What do you think of the PIMAM program? <i>(Ano ang tingin mo sa PIMAM program?)</i> <i>(Ano sa iling mo ang programang PIMAM?)</i></p> <p>2. What are its strengths and weaknesses? <i>(Ano ang mga lakas at kahinaan nito?)</i> <i>(Ano ang mga kagusugan buda kaluyahan kaini?)</i></p> <p>3. What would you change to improve its quality? <i>(Para sa iyo, ano ang mga babaguhin mo para mapabuti ito?)</i> <i>(Ano ang gusto mong baguhon para mapagayon ang kalidad kaini?)</i></p> <p>4. How is it perceived in the community? Why? <i>(Ano ang palagay ng komunidad ukol dito? Bakit?)</i> <i>(Ano ang iling digdi kan mga tawo saindo? Nata?)</i></p>	

<p>5. Are there any obstacles, barriers for the use of this service? If yes, explain. <i>(Meron bang mga balakid para magamit ang serbisyo nito? Kung oo, ipaliwanag.)</i> <i>(Ano ang mga kakahampang na problema para magamit ang serbisyo na ini? Kun igwa, ano ano ini?)</i></p>	
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APPENDIX H.4

INTERVIEW GUIDE FOR TEACHERS

(Source: Action Against Hunger, Coverage Monitoring Network)

Interviewee Code: _____ Date: _____	
Interviewer: _____	
Municipality: _____	
Barangay: _____	
ORGANIZATIONAL/COMMUNITY PROFILE	
<p>1. What is your role in the community? <i>(Ano ang ginagampanan mong papel sa komunidad?)</i> <i>(Ano ang posisyon mo sa lugar nindo?)</i></p> <p>2. How do you communicate with the population? Why? <i>(Paano kayo makipag-ugnayan sa populasyon na inyong sinasakupan? Bakit?)</i> <i>(Pano kamo nakikiururon sa mga tawo sa lugar nindo? Nata?)</i></p> <p>3. How would you describe the community? <i>(Paano mo ilalarawan ang komunidad?)</i> <i>(Sa paanong paagi mo ilalarawan an komunidad?)</i></p> <p>4. What are its main challenges? Why? <i>(Ano ang mga pangunahing hamon nito? Bakit?)</i> <i>(Ano an mga kinakahampang na problema kaini? Nata?)</i></p> <p>5. How does the community address these challenges? Why? <i>(Paano sinusolusyonan ng komunidad ang mga hamon na ito?)</i> <i>(Pano tigasolusyonan kan komunidad an mga kinakahampang nindang problema?)</i></p> <p>6. How are decisions made in your community? <i>(Paano ginagawa ang mga desisyon sa lyong komunidad?)</i> <i>(Panong pagdesidir ang tigigibo sa saindong lugar?)</i></p> <p>7. Do you participate in the decision-making? Why? Why not? <i>(Nakikilahok k aba sa paggawa ng desisyon? Bakit? Bakit Hindi?)</i> <i>(Nagsasabay ka man sa pagdesidir? Nata? Nata ta dae?)</i></p>	

8. How are decisions communicated to community members?
(Paano naipaparating ang mga desisyon sa komunidad?)
(Pano tigpapaabot sa mga tawo an mga nagkaderesidiran?)
9. What other communication channels (formal and informal) are available in your community?
(Ano pa ang ibang paraan ng komunikasyon na mayroon sa komunidad?)
(Ano an igwa sa lugar nindo an pweding gamiton para maipaabot an bareta?)
10. Which are most efficient?
(Alin dito ang pinakamahasay?)
(Arin ang pinaka maray?)

MALNUTRITION

(show images of acute malnutrition)

11. Are there children in your community who look like these? If yes, which type is more frequent?
(Mayroon bang mga ganitong bata sa inyong komunidad? Kung oo, alin ang pinak madalas makita?)
(Igwa daw na mga aki ang arog kaini sa lugar nindo? Kung igwa, arin ang dakol kamong nailling?)
12. Is it a disease like others? Why? Why not?
(Ito ba ay karamdaman kagaya ng iba? Bakit? Bakit hindi?)
(Parehong helang daw ini kan iba? Nata? Nata ta bako?)
13. Which local terms are used to describe it?
(Ano ang tawag dito sa komunidad?)
(Ano an apod digdi?)
14. How is it perceived in the community? Why?
(Paano ito tinuturing sa komunidad? Bakit?)
(Pano ini tigahiling kan mga tawo? Nata?)
15. Is it a “new” disease? If yes, since when? Why do you think that this disease appeared in your community?
(Ito ba ay bagong karamdaman? Kung oo, kalian pa? Bakit kaya ito lumitaw sa komunidad?)
(Bagong helang daw ini? Kun iyo, puon kasuarin? Nata daw ta nagkaigwa kan helang na ini sa lugar nindo?)
16. Do you think that this condition is stigmatized? Why?
(Sa tingin mo ba na ang kondisyon na ito ay pinagtatawanan o tinitignan na kakaiba sa lipunan? Bakit?)

<p><i>(Sa iling mo tig-uurulukan ang kondisyon na ini kan ibang tawo? Nata?)</i></p> <p>17. How does this stigmatization mark people's behavior or community relationships? <i>(Paano ito nakakaapekto sa pag-uugali at pakikipag-relasyon sa bawat isa ng mga tao sa komunidad?)</i> <i>(Pano kaini naapektaran su ugali kan pakikiiba kan mga tawo sa lugar ninda?)</i></p> <p>18. How are its causes, symptoms and effects described? <i>(Paano nilalarawan ang mga sanhi, sintomas at epekto nito?)</i> <i>(Pano inaapod kan tawo ang kawsa, sintomas buda epekto kaini?)</i></p> <p>19. Do you agree? Why? Why not? <i>(Ikaw ba ay sumasangayon dito? Bakit? Bakit hindi?)</i> <i>(Uyon ka? Nata? Nata dae?)</i></p> <p>20. Which therapeutic itineraries are available in your community to treat the malnutrition? <i>(Ano ano ang mga paraan na mayroon sa komunidad para mapagamot ang malnutrisyon?)</i> <i>(Ano su igwa sa lugar nindo an pwedeng gamiton para mapunduhan na an malnutrisyon na ini?)</i></p> <p>21. Do you agree? Why? Why not? <i>(Ikaw ba ay sumasangayon dito? Bakit? Bakit hindi?)</i> <i>(Uyon ka? Nata? Nata dae?)</i></p> <p>FAMILY ORGANIZATION</p> <p>22. Who makes the decision for the family? Why? <i>(Sino ang gumagawa ng desisyon para sa pamilya? Bakit?)</i> <i>(Sisay an nagdedesidir para sa pamilya? Nata?)</i></p> <p>23. Are there situations in which another person can decide? Explain. <i>(May mga pagkakataon ba na ibang tao ang pwedeng mag desisyon? Ipaliwanag.)</i> <i>(May mga panahon man na pwedeng iba an magdesidir? Nata?)</i></p> <p>24. Where do young women learn to take care of their babies? Why? <i>(Saan natututo ang mga batang kababaihan ng pagalaga sa kanilang mga sanggol? Bakit?)</i> <i>(Sain nakaukod an mga babayi na magbantay ki aki? Nata?)</i></p>	
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<p>25. Do men learn how to take care of their babies? Why? Why not? <i>(Ang mga kalalakihan ba ay natututong mag-alaga ng kanilang sanggol? Bakit? Bakit hindi?)</i> <i>(Nag-aadal man an mga lalaki kun pano magbantay kan mga aki ninda? Nata? Nata ta dae?)</i></p>	
<p>AWARENESS OF PIMAM PROGRAM</p>	
<p>1. Have you heard about the PIMAM program? If yes, from whom? What did you hear? <i>(Narinig mo na ba ang tungkol sa PIMAM program? Kung oo, kanino mo ito narinig? Ano ang narinig mo?)</i> <i>(Nadangog mo na an programang PIMAM? Kun iyo na, kay isay mo nadangog? Ano an mga nadangog mo?)</i></p> <p>2. Do you know which children are targeted by the program? <i>(Alam mo ba kung sinong mga bata ang target ng programa?)</i> <i>(Aram mo kun aring mga aki an target kan programa?)</i></p> <p>3. Do you know which treatment they receive? <i>(Alam mo ba kung anong gamot ang binibigay sa kanila?)</i> <i>(Aram mo kun anong bulong an tinao sainda?)</i></p> <p>4. What do you think about this treatment? <i>(Ano ang iyong palagay ang paggamot na ito?)</i> <i>(Ano sa iling mo ang pagbulong kaini?)</i></p> <p>5. How is it perceived in the community? Why? <i>(Paano ito kinikilala sa komunidad? Bakit?)</i> <i>(Pano ini tighihiling sa lugar nindo? Nata?)</i></p> <p>6. What do you think about the PIMAM program? <i>(Ano sa palagay mo ang PIMAM program?)</i> <i>(Ano sa hiling mo ang programang PIMAM?)</i></p> <p>7. What would you change to improve its quality? <i>(Ano ang iyong gagawin upang mapabuti ang kalidad nito?)</i> <i>(Ano ang gusto mong baguhon para mapagayon ang kalidad kaini?)</i></p> <p>8. Are there any obstacles/barriers to the use of this program? If yes, explain. <i>(Mayroon bang mga balakid sa paggamit ng programang ito? Kung meron, ipaliwanag)</i> <i>(Ano ang mga kakahampang na problema para magamit ang serbisyo na ini? Kun igwa, ano ano ini?)</i></p>	

COVERAGE/ REJECTION/ DEFAULTING	
<p>1. Are there many children in your community who benefit from the PIMAM program? <i>(Madami bang mga bata sa inyong komunidad na nakikinabang sa PIMAM program?)</i> <i>(Dakol man na aki sa lugar nindo an natatabangan kan programang PIMAM?)</i></p> <p>2. Do you know other children in the community who need this service? If yes, why aren't they in the program? <i>(May mga alam ka ban a ibang bata sa komunidad na kailangan ns serbisyo ng programa? Kung oo, bakit wala sila sa programa?)</i> <i>(May midbid kang ibang mga aki duman sa lugar nindo na kaipuhan kan serbisyo na ini? Kung igwa, nata ta wara sinda sa programa?)</i></p> <p>3. Do you know any children who were rejected? Why? <i>(May alam ka ba na mga batang tinanggihan? Bakit kaya?)</i> <i>(May mga midbid kang aki na dae inako? Nata daw?)</i></p> <p>4. Do you know any children who abandoned the treatment? Why? How could we motivate them to return? <i>(May alam ka ba na mga bata na hindi tinapos ang gamutan? Bakit kaya? Paano mo sila mahihikayat na bumalik?)</i> <i>(May midbid kang aki na dae na tigderetso su pagbulong saiya? Nata ito? Ano sa iling mo ang pwede tang gibuhon para magbalik sinda?)</i></p>	
SENSITIZATION AND SCREENING	
<p>1. Who is responsible for sensitization in your community? <i>(Sino ang responsible sa pagpapasensitibong aktibidad sa komunidad?)</i> <i>(Sisay an responsable sa pagpapasensitibong aktibidad sa lugar nindo?)</i></p> <p>2. Do these people sensitize the community on malnutrition? If yes, how often? Do you know which subjects are addressed? <i>(Sila ba ay nagsasagawa ng mga pagpapa-sensitibong aktibidad paukol sa malutrisyon sa inyong komunidad? Kung oo, gaano kadalas? Alam mo ba kung aling paksa ukol dito ang kanilang tinuturo?)</i> <i>(Naggigibo daw sinda ki pagpapa-sensitibong aktibidad para sa malnutrisyon sa lugar ninda? Kun iyo, puro pirmi daw? Aram mo kun para sain an mga tigtuturo ninda?)</i></p> <p>3. Are you involved in the sensitization sessions? If yes, why? How? How often?</p>	

<p>If no, why not? <i>(Ikaw ba ay kasali sa mga pagpapa-sensitibong aktibidad? Kung oo, bakit? Papano? Gaano kadalas? Kung hindi, bakit hindi?)</i> <i>(Kaintra ka man sa mga pagpapasensitibong aktibidades? Kun iyo, nata? Pano? Pirmi? Kun dae, nata ito?)</i></p> <p>4. Who is targeted by sensitization sessions on malnutrition? <i>(Sino ang mga target na maturuan patungkol sa malnutrition?)</i> <i>(Sirisay an dapat na maintra para maturuan kan tungkol sa malnutrisyon?)</i></p> <p>5. Who else should be targeted, why? <i>(Sino pa ang ibang tao na kailangan ma-target patungkol dito? Bakit?)</i> <i>(Sisay pa an mga dapat na kaintra digdi? Nata?)</i></p> <p>6. What do you think of the information shared? Is it useful? Not useful? Why? <i>(Ano sa tingin mo sa impormasyong ibinabaghi? Ito ba ay kapaki-pakinabang o hindi? Bakit?)</i> <i>(Sa iling mo nakatabang daw an mga naturo na impormasyon o dae? Nata?)</i></p> <p>7. Do you think the sensitization is sufficient? Why? Why not? <i>(Sa iyong palagay, sapat ba itong pagpapa-sensitibong aktibidad? Bakit? Bakit hindi?)</i> <i>(Sa iling mo tama na an pagpapasensitibong aktibidades? Nata? Nata dae?)</i></p> <p>8. How should it be reinforced? <i>(Paano ito patitibayin?)</i> <i>(Pano ini mapapakusog?)</i></p> <p>9. Are there people in your community who identify malnourished children? If yes, who? How? How often? <i>(May mga tao ba sa komunidad na tumutukoy sa mga batang malnourished? King oo, sino? Paano? Gaano kadalas?)</i> <i>(May mga tawo sa lugar nindo kun sain ka nagtatrabaho an mga nag-aanap ki malnourished na mga aki? Kun iyo, sisay? Pano? Pirmi?)</i></p> <p>10. Who should be included in this activity? Why? <i>(Sino pa ang dapat isali sa ganitong akitibidad? Bakit?)</i> <i>(Sisay an mga dapat na kaintra sa aktibidades na ini? Nata?)</i></p>	
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APPENDIX H.5

INTERVIEW GUIDE FOR TRADITIONAL HEALERS AND BIRTH ATTENDANTS

(Source: Action Against Hunger, Coverage Monitoring Network)

Interviewee Code: _____	Date: _____
Interviewer: _____	
Municipality: _____	
Barangay: _____	
PERSONAL PROFILE	
<ol style="list-style-type: none"> 1. What is your role in the community? <i>(Ano ang ginagampanan mong papel sa komunidad?)</i> <i>(Ano ang posisyon mo sa lugar nindo?)</i> 2. How long have you been practicing this activity? <i>(Gaano katagal mo na ginagawa ito?)</i> <i>(Gurano kahaloy mo na pig-gigibo ini?)</i> 3. Do you collaborate with other TH/BAs? Why? Why not? <i>(Nakikipagtulungan ka ba sa ibang mga albularyo o nagpapanaka? Bakit? Bakit hindi?)</i> <i>(Nakikipagtarabangan ka man sa ibang mga parasantigwar o nagpapaaki? Nata? Nata ta dae?)</i> 4. Do you collaborate with health centers? Why? Why not? <i>(Ikaw ba ay nakikipagtulungan sa health center? Bakit? Bakit hindi?)</i> <i>(Nakikipagtarabangan ka man sa health center? Nata? Nata dae?)</i> 	
COMMUNITY PROFILE	
FEEDING PRACTICES	
<ol style="list-style-type: none"> 1. What staples are available in your community? <i>(Ano ang mga pangkaraniwang pagkain sa inyong komunidad?)</i> <i>(Ano man ang mga kaunon ang pirming mahihiling sa lugar nindo?)</i> 2. Is there any food which community members cannot eat? If yes, what? Why? <i>(Mayroon bang pagkain na hindi maaaring kainin ng mga tao sa komunidad? Kung oo, ano ito? Bakit?)</i> <i>(May mga pagkaon man sa lugar nindo ang dae pwedeng kaunon kan mga tawo? Kun igwa, ano ini? Nata?)</i> 	

<p>3. Is there any food which children cannot eat? If yes, what? Why? At what age? <i>(Mayroon bang pagkain na hindi maaaring kainin ng mga bata? Kung oo, ano? Bakit? Sa anong edad hindi maaari?)</i> <i>(May mga pagkaon man na dae pwede kaunon kan mga aki? Kun igwa, ano ini? Nata? Buda su mga nasa anong edad?)</i></p> <p>BREASTFEEDING/ WEANING</p> <p>4. Do women breastfeed their children? If yes, until what age? How often? <i>(Pinapasuso ba ng mga ina ang kanilang mga anak? Hanggang anong edad ng bata? Gaano kadalas?)</i> <i>(Nagpapadodo man an mga babayi sa mga aki ninda? Kun iyo, hanggang anong edad? Pirmi man?)</i></p> <p>5. Do they give their babies other types of food or drink? If yes, what? At what age? Why? <i>(Binibigyan ba ang mga sanggol ng ibang pagkain o maiinom? Kung oo, ano ito? Sa anong edad? Bakit?)</i> <i>(Tigtatawan man ninda an mga aki ninda ki ibang pagkaon o inumon? Kun iyo, ano man an tigtatao ninda? Pag anong edad na? Nata?)</i></p> <p>6. Do they come to you to be treated? <i>(Pumupunta ba sila sa iyo para magpagamot?)</i> <i>(Nagdudulok man sinda saimo para magpabulong?)</i></p> <p>7. Do they breastfeed children when pregnant? Why? Why not? <i>(Nagpapasuso ba sila habang buntis?)</i> <i>(Nagpapadodo pa sinda sa aki dawa na badus sinda? Nata? Nata dae na?)</i></p> <p>8. Do you advise women on breastfeeding practices? <i>(Pinapayuhan mo ba ang mga kababaihan patungkol sa pagpapasuso?)</i> <i>(Tigapagirumduman mo man an mga babayi sa pagpapadodo sa mga aki ninda?)</i></p>	
CHILDHOOD DISEASES AND MALNUTRITION	
<p>CHILDHOOD DISEASES</p> <p>1. Which childhood diseases are more frequent in your community? <i>(Aling mga karamdaman ng mga bata ang madalas sa inyong komunidad?)</i> <i>(Anong helang kan mga aki an pirming nahihiling sa lugar nindo?)</i></p> <p>2. In which months are they prevalent? <i>(Sa mga anong buwan madalas ito makita?)</i></p>	

<p><i>(Sa anong bulan ini dakol?)</i></p> <p>3. How do you treat them? <i>(Paano mo ito ginagamot?)</i> <i>(Pano ini tigbubulong?)</i></p> <p>MALNUTRITION</p> <p><i>(Show images of marasmus and kwashiorkor)</i></p> <p>4. Are there children in your community who look like these? If yes, which type is more frequent? <i>(Mayroon bang mga ganitong bata sa inyong komunidad? Kung oo, alin ang pinaka madalas makita?)</i> <i>(May mga aki sa lugar nindo an arog kaini? Kun iyo, arin digdi an dakol?)</i></p> <p>5. Is it a disease like others? Why? Why not? <i>(Ito ba ay karamdaman kagaya ng iba? Bakit? Bakit hindi?)</i> <i>(Ining helang daw na ini arog kan iba? Nata? Nata bako?)</i></p> <p>6. Which local terms are used to describe it? <i>(Ano ang tawag dito sa komunidad?)</i> <i>(Anong apod kaini sa lugar nindo?)</i></p> <p>7. How is it perceived in the community? Why? <i>(Paano ito tinuturing sa komunidad? Bakit?)</i> <i>(Pano ini hilingon sa lugar nindo? Nata?)</i></p> <p>8. Is it a “new” disease? If yes, since when? Why do you think that this disease appeared In your community? <i>(Ito ba ay bagong karamdaman? Kung oo, kalian pa? Bakit kaya ito lumitaw sa komunidad?)</i> <i>(Bagong helang daw ini? Kun iyo, puon kasuarin pa?) Sa iling mo nata daw nagkaigwa kaini sa lugar nindo?)</i></p> <p>9. Do you think that this condition is stigmatized? Why? <i>(Sa tingin mo ba na ang kondisyon na ito ay pinagtatawanan o tinitignan na kakaiba sa lipunan? Bakit?)</i> <i>(Sa iling mo tig-uurulokan daw an arog kaini saindo o tighihiling na lain? Nata?)</i></p> <p>10. How does this stigmatization mark people's behavior or community relationships? <i>(Paano ito nakakaapekto sa pag-uugali at pakikipag-relasyon sa bawat isa ng mga tao sa komunidad?)</i> <i>(Pano ini nakakaapektar sa kustomri kan pakikiulay kan mga tawo saindo?)</i></p> <p>11. What are the symptoms of this disease? <i>(Ano ang mga sintomas ng karamdamang ito?)</i></p>	
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<p><i>(Ano an mga sintomas kan helang na ini?)</i></p> <p>12. What are its causes and effects? <i>(Ano ang mga sanhi at epekto nito?)</i> <i>(Ano an mga kawsa at epekto kaini?)</i></p> <p>13. Do you treat this disease? If yes, How? <i>(Ginagamot mo ba ang karamdamang ito?</i> <i>Kung oo, paano?)</i> <i>(Tigbubulong nindo an helang na ini? Kun iyo,</i> <i>pano?)</i></p> <p>14. Do you know any other treatments of this disease? If yes, which? <i>(May alam ka bang ibang gamot sa karamdamang ito? Kung oo, alin?)</i> <i>(Aram mo kun ano an ibang pwedeng bulong digdi? Kun iyo, ano ito?)</i></p> <p>15. In which time of the year do children develop this disease most frequently? <i>(Sa anong bahagi ng taon pinaka madalas magkaroon ng ganitong karamdaman ang mga bata?)</i> <i>(Anong parte kan taon dakol na nagkakaigwa kaini an mga kaakian?)</i></p>	
AWARENESS OF PIMAM PROGRAM	
<p>1. Have you heard about the PIMAM program? If yes, from whom? What did you hear? <i>(Narinig mo na ba ang tungkol sa PIMAM program? Kung oo, kanino mo ito narinig? Ano ang narinig mo?)</i> <i>(Nadangog mo na programang PIMAM? Kun iyo na, kaisay? Ano an nadangog mo?)</i></p> <p>2. Do you hear about the PIMAM program often? If yes, how often? <i>(Madalas mo ba margining ang tungkol sa PIMAM program? Kung oo, gaano kadalas?)</i> <i>(Pirmi mong nadadangog an programang PIMAM? Kun iyo, pirang beses?)</i></p> <p>3. Do you know which children are targeted by the program? <i>(Alam mo ba kung sinong mga bata ang target ng programa?)</i> <i>(Aram mo kun aring mga aki an target kan programa?)</i></p> <p>4. Do you know which treatment they receive? <i>(Alam mo ba kung anong gamot ang binibigay sa kanila?)</i> <i>(Aram mo kun aring bulong an tinao sainda?)</i></p> <p>5. What do you think about this treatment? <i>(Ano ang iyong palagay ang paggamot na ito?)</i> <i>(Ano sa iling mo an pagbulong na ini?)</i></p>	

<p>6. How is it perceived in the community? Why? <i>(Paano ito kinikilala sa komunidad? Bakit?)</i> <i>(Pano ini hilingon kan mga tawo? Nata?)</i></p> <p>7. What do you think about the PIMAM program? <i>(Ano sa palagay mo ang PIMAM program?)</i> <i>(Ano sa iling mo an programang PIMAM?)</i></p> <p>8. How is it perceived in the community? Why? <i>(Paano ito kinikilala sa komunidad? Bakit?)</i> <i>(Pano ini hilingon kan mga tawo? Nata?)</i></p> <p>9. Are there any obstacles/barriers to the use of this program? If yes, explain. <i>(Mayroon bang mga balakid sa paggamit ng programang ito? Kung meron, ipaliwanag)</i> <i>(May mga kinakahampang man na problema sa paggamit kan programa na ini? Kun igwa, ano?)</i></p>	
COVERAGE/ REJECTION/ DEFAULTING	
<p>1. Are there many children in your community who benefit from the PIMAM program? <i>(Madami bang mga bata sa inyong komunidad na nakikinabang sa PIMAM program?)</i> <i>(Dakol man na kaakian sa lugar nindo an natatabangan kan programang PIMAM?)</i></p> <p>2. Do you know other children in the community who need this service? If yes, why aren't they in the program? <i>(May mga alam ka ba na ibang bata sa komunidad na kailangan ns serbisyo ng programa? Kung oo, bakit wala sila sa programa?)</i> <i>(May mga midbid kang kaakian sa lugar nindo na kaipuhan matabangan kan programa? Kun igwa, nata dae sinda kaintra sa programa?)</i></p> <p>3. Do you know any children who were rejected? Why? <i>(May alam ka ba na mga batang tinanggihan? Bakit kaya?)</i> <i>(May midbid kang mga kaakian na dae inako kan programa? Nata?)</i></p> <p>4. Do you know any children who abandoned the treatment? Why? How could we motivate them to return? <i>(May alam ka ba na mga bata na hindi tinapos ang gamutan? Bakit kaya? Paano mo sila mahihikayat na bumalik?)</i> <i>(May mga midbid kang kaakian na dae na nagderetso kan pagpapabulong?Nata daw? Pano mo sinda maaagdang magbalik?)</i></p>	
SENSITIZATION AND SCREENING	
<p>1. Who sensitizes the community? How often? On what subjects?</p>	

<p><i>(Sino ang responsible sa pagpapasensitibong aktibidad sa komunidad? Gaano kadalas? Ano ang mga paksa?)</i> <i>(Sisay an responsable sa pagpapasensitibong aktibidades sa lugar? Pirang beses man? Ano an mga tighuhuronan?)</i></p> <p>2. Do you assist in the sensitization sessions? Why? Why not? <i>(Ikaw ba ay tumutulong sa mga pagpapa-sensitibong aktibidad? Bakit? Bakit hindi?)</i> <i>(Nagtatabang ka man sa aktibidades na ini? Nata? Nata ta dae?)</i></p> <p>3. What do you think of those sessions? Are they interesting? Boring? Why? <i>(Ano ang palagay mo sa mga sesyon na ito? Ito ba ay kawili-wili? Boring? Bakit?)</i> <i>(Ano man sa hiling mo ining sesyon na ini? Sa hiling mo interesante man ini o bako? Nata?)</i></p> <p>4. What do you think of the information shared? Is it useful? Not useful? Why? <i>(Ano sa tingin mo sa impormasyong ibinabagahi? Ito ba ay kapaki-pakinabang o hindi? Bakit?)</i> <i>(Ano man sa hiling mo an mga tigtuturo ninda? Nakakatabang man daw ini o dae sana? Nata?)</i></p> <p>5. Do you think the sensitization is sufficient? Why? Why not? <i>(Sa iyong palagay, sapat ba itong pagpapasensitibong aktibidad? Bakit? Bakit hindi?)</i> <i>(Sa hiling mo, tama na ining aktibidades na ini? Nata? Nata dae?)</i></p> <p>6. How should it be reinforced? <i>(Paano ito patitibayin?)</i> <i>(Pano ini mapapakusog?)</i></p> <p>7. Are there people in your community who identify malnourished children? If yes, who? How? How often? <i>(May mga tao ba sa komunidad na tumutukoy sa mga batang malnourished? King oo, sino? Paano? Gaano kadalas?)</i> <i>(May mga tawo man sa lugar nindo an nag-aanap ki mga malnourished na kaakian? Kun igwa, sirisay man? Pano? Pirmi man?)</i></p>	
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APPENDIX I.

DIRECT OBSERVATION OF THE OTC, MUNICIPALITY C & K

	MUNICIPALITY C OTC	MUNICIPALITY K OTC
OBSERVATION OF CARE		
OTC Reception & Atmosphere, Personnel Behavior and Attitude	<ul style="list-style-type: none"> No distinct space for the OTC as the new RHU is still under construction The OTC staff who is the Nutrition officer was kind and accommodating The Detecto weighing scale and the height board had thick dust which may mean they were not used frequently. One of the weighing scales was not calibrated 	<ul style="list-style-type: none"> The OTC is located in the Nutrition Office with tables, filing cabinets, bulletin boards and lots of papers with little space to do accurate length measurements. All SAM patients seen at the RHU clinic were referred to this office for evaluation. It was a comfortable room with air conditioning. The OTC personnel who is the Municipal Nutrition Officer and who was trained in PIMAM is kind, accommodating and hard working.
Communication with SAM caregivers/Information shared with program beneficiaries	<ul style="list-style-type: none"> The patient was found to have MAM only. There was counselling but no in-depth explanation to the caregiver of the child's condition such as causes and effects of malnutrition and no mention of the PIMAM program to the caregiver 	<ul style="list-style-type: none"> The OTC personnel had good rapport and communicated well with the caregiver about the child's general condition. However, an in-depth explanation of the causes and effects of malnutrition and about the PIMAM program was not shared.
Waiting time/ time dedicated to medical consultation	<ul style="list-style-type: none"> There was no other patient at the clinic at the time of observation. However, the patient and the caregiver still had to wait for a while for the OTC staff to be available to attend to them as there was no other staff who was trained on PIMAM was available at the time of visit. 	<ul style="list-style-type: none"> During the day of observation, the OTC personnel was present at the Nutrition Office, thus the patient was seen immediately.
Quality of anthropometric measurements	<ul style="list-style-type: none"> The OTC personnel took the weight and length of the patient accurately. 	<ul style="list-style-type: none"> The OTC personnel took the weight and the MUAC of the patient

	<p>However, there was no confidence in taking the MUAC and had a slight error in using the MUAC tape.</p>	<p>accurately. Measurement of the height was done by only one person using a stainless ruler only which was detached from the height board.</p>
OBSERVATION OF REGISTERS AND MONITORING SHEETS		
Storage and maintenance of registers and monitoring sheets	<ul style="list-style-type: none"> The registers and monitoring sheets were organized, clean and kept in envelopes and filing cabinets. 	<ul style="list-style-type: none"> The registers and monitoring sheets were organized, clean and kept in envelopes and filing cabinets.
Filling of registers and monitoring sheets	<ul style="list-style-type: none"> The registers and monitoring sheets were filled out completely and accurately. All necessary data were entered. However, the weekly anthropometric measurements at the OTC chart were taken from the measurements of the CHWs at the barangay level. 	<ul style="list-style-type: none"> The registers and monitoring sheets were filled out completely and accurately. All necessary data were entered. There are reporting forms developed/innovated by the OTC personnel for their own consumption which was useful at the OTC.
Respect of admission criteria, calculation of Z scores	<ul style="list-style-type: none"> Calculation of Z-scores based on available anthropometric measurements were correct. Criteria for SAM were respected. 	<ul style="list-style-type: none"> Calculation of Z-scores based on the anthropometric measurements were correct. Criteria for SAM were respected.
Note of defaulting and its causes/home visits for defaulters	<ul style="list-style-type: none"> There were no defaulting cases in all of the admissions. 	<ul style="list-style-type: none"> There were no defaulting cases in all of the admissions.

APPENDIX J

FIELD NOTES

MUNICIPALITY C						
OBSERVER	DATE	TIME	PLACE	ACTORS	ACTIVITIES	BOOSTER/BARRIER
Arlene Calleja	March 24, 2021	9:00 AM	C-Barangay N1 Senior Citizen Center	Barangay Captain, BHWs, BNS,	SAM Case Finding	The barangay captain was supportive of the activity and pledged to support a feeding program for MAM patients
Arlene Calleja	March 26, 2021	9:00 AM to 3 PM	C- Barangay N2 Covered Court	BHWs, BNS, Children 0-59 months	SAM Case Finding	It was observed that the community health workers did not know how to perform proper anthropometric measurements. Willingness to learn was noted thus the researcher trained them on proper anthropometric measurements.
Arlene Calleja	March 30, 2021	9:00 AM to 3 PM	C- Barangay F1 Chapel	BHWs, BNS, Children 0-59 months	SAM Case Finding	It was observed that the community health workers did not know how to perform proper anthropometric measurements. Willingness to learn was noted thus the researcher trained them on proper anthropometric measurements.
Arlene Calleja	March 31, 2021	1:00 PM	C-Barangay F2 Covered Court	Barangay Captain, BHWs, BNS,	SAM Case Finding	The barangay council was supportive by being present during the activity
Arlene Calleja	March 24, 26, 30, 31, 2021	9:00 AM to 3:00 PM	C- Barangays N1, N2, F1, F2	BHWs, BNS,	SAM Case Finding	The community health workers were hard-working and knew their constituents well. Coordination and collaboration amongst each other was observed.
Arlene Calleja	March 24, 26, 30, 31, 2021	9:00 AM to 3:00 PM	C- Barangays N1, N2, F1, F2	Caregivers of children 0-59 months	SAM Case Finding	Caregivers of children 0-59 months showed concern about their child's nutritional status. Those with SAM children showed willingness to enrol their child to the program
Arlene Calleja	March 24, 26, 30, 31, 2021	9:00 AM to 3:00 PM	C- Barangays N1, N2, F1, F2	Caregivers of children 0-59 months	SAM Case Finding	The Nutrition Officer and the community health workers went door-to-door to communicate the need to bring their child for the SAM case finding
Samantha Red Urag	March 24, 26, 30, 31	9:00AM to 3:00 PM	C - Barangays N1, N2, F1, F2	BHWs and BNS	SAM Case finding	BHWs and BNS do not know how to properly take anthropometric measurements
Stephanie Sesbreño	March 15, 24, 26, 20, 31	9:00AM - 3:30PM	C-Barangay N1, N	-	Travel to different barangays	Public transportation not readily available There were few PUJs on the main road.
Stephanie	March 15,	9:00AM	C-OTC	NO	Conversation	In our casual conversation with

Sesbreño	2021				with HCP	NO, he mentioned that Caregivers don't attend sensitization activities because "it's a waste of time". They would rather use their time for household chores.
Christine Joy Azuelo	March 15, 2021	3:00pm	C-RHU	Caregiver of SAM; NO; Researcher	Direct Observation	Inadequate number of OTC personnels trained
Christine Joy Azuelo	February 15, 2021 March 15, 2021	11:00A M 3:00 PM	C-RHU	NO; Researcher	Routine Program Data Collection	The Nutrition Officer knows the PIMAM program well and efficient in keeping data
Christine Joy Azuelo	March 23, 2021	1:00 PM	C-RHU	CSAM; Researcher; NO	IGD of SAM Caregivers	In our casual conversation with NO, he mentioned that OTC admissions were stopped during the COVID-19 pandemic and because of RUTF stockouts
Christine Joy Azuelo	March 31, 2021	10: 00 AM	C-F2	Caregiver of SAM; Researcher	SAM Case Finding	Discontinuation of treatment of child from BRTTH OTC to Municipal OTC because of current hiatus of OTC admissions
Arlene Calleja	March 15-23, 2021		C- RHU; Barangays	KII and IGD participants	KIIs IGDs	In all of our dialogues, interviews and discussions, there was no noted form of communication where a role model is utilized and no dialogue about barriers and solutions

MUNICIPALITY K						
OBSERVER	DATE	TIME	PLACE	ACTOR/S	ACTIVITIES	ISSUE/S
Arlene Calleja	February 10, 2021	2:30 PM	K-RHU Nutrition Office	Nutrition Officer, Researcher	Collection of routine program data	The Nutrition Officer narrated that he was trying to look for other sources of RUTF where the municipality can buy from. He also expressed his willingness to learn alternative recipe for F100
Arlene Calleja	March 4, 2021	1:30 PM	K-RHU Nutrition Office	Nutrition Officer, MHO	Planning of qualitative data collection	The MHO was supportive and approved and supervised the planning of activities for the qualitative data collection
Arlene Calleja	March 5, 2021; March 6, 2021 March 9, 2021	2:00 PM 1:30 PM 2:00 PM	K-N15 K-F7 K-F6	Nutrition Officer, CHWs	Qualitative data collection thru KIIs	The Nutrition Officer has a good working relationship with the community health workers and showed frequent coordination and good supervision.
Arlene Calleja	March 11 2021	3:00 PM	K-RHU Nutrition Office	Nutrition Officer	Direct Observation	During our visit at the RHU, there was only one personnel manning the OTC
Stephanie Sesbreño	March 5,6,9	10:AM - 3:00 PM	C- Barangays	-	Travel to different barangays	Easy access to public transportation
Christine Joy Azuelo	March 6, 2021	3:00 PM	K-F	Researcher, Children in Community	Visit to the barangay for KII	Malnourished and underweight children are commonly seen and generally accepted in the community
Sheree Longaza	March 5 2021	10 AM	K- Nutrition Office	DOH-ND (deployed)	Direct Observation	The ND mentioned that the Municipal Nutrition Council (composed of different govt and non-govt org) is utilized as venue for community sensitization to solicit assistance
Sheree Longaza	March 4 2021	3:00 PM	K-Nutrition Office	Nutrition Officer	Direct Observation	The NO innovates report forms for PIMAM, easier to fill- out, made simple, and easy to understand for use in the OTC

APPENDIX K

BARRIERS, BOOSTERS AND QUESTIONS TOOL WITH TRIANGULATION BY SOURCE AND METHOD AND WEIGHTING

BARRIERS, BOOSTERS, AND QUESTIONS (BBQ) TOOL - C																		
I. COMMUNITY CONTEXT	BOOSTERS	TRIANGULATION		WEIGHTING SCORES						BARRIERS	TRIANGULATION		WEIGHTING					
		SOURCE	METHOD	AC	SL	SU	SS	CA	TOTAL		SOURCE	METHOD	AC	SL	SU	SS	CA	TOTAL
SEASONAL VARIATIONS	Staple foods are available and accessible throughout the year	C-TH1-I, C-TH2-I, C-HCP1-I	KII	2	3	5	2	4	16	Prone to disasters like typhoon and landslides	SD	CP	1	4	4	4	2	15
										Respiratory infections are prevalent on most parts of the year	C-HCP2-I, C-CHW2-I, C-TH2-I, C-HCP1-I	KII	2	3	3	2	3	13
VOLUNTEER NETWORKS AND OTHER COMMUNITY ACTORS	Barangay captain and the council support nutrition programs	C-CHW2-I, C-HCP2-I, FN, C-CSAM2-Q	KII, O, Q	4	3	5	4	4	20	Absence of volunteer NGO networks	C-HCP1-I	KII, CP	2	5	2	1	2	12
	Food security through provision of backyard gardening from Department of Agriculture	C-HCP2-I, C-CHW2-I, C-HCP1-I, C-CHW1-I, SD	KII, CP	2	3	3	2	3	13									0
SOCIODEMOGRAPHIC PROFILE	High literacy rate	SD	CP	1	2	2	2	1	8	Poverty	C-T1-I, C-T2-I, C-HCP2-I, C-HCP1-I, C-CHW1-I, C-CHW5-D, C-HCP4-D, SD	KII, IGD, FN, CP	5	5	5	5	4	24
	Both parents are involved in decision-making and care of the children	C-CHW1-I, C-CHW2-I, C-CSAM2-Q	KII, Q	2	2	3	3	2	12	Unemployment	C-T1-I, C-CHW1-I, C-CHW2-D, SD	KII, IGD, CP	3	5	5	5	5	23
									0	Large family size	C-HCP1-I, C-CHW1-I, C-CHW6-D, C-CHW5-D	KII, IGD	4	4	4	4	4	20
TRADITIONAL BELIEFS, SOCIAL NORMS AND TABOOS	Exclusive breastfeeding practices	C-TH1-I, C-TH2-I, C-CSAM2-D	KII, IGD	2	5	3	3	4	17	Presence of traditional beliefs regarding feeding practices	C-HCP2-I, C-TH2-I	KII	3	3	2	3	3	14
										Community belief in traditional healers and herbal medicines	C-TH1-I, C-TH2-I, C-CSAM2-D, C-HCP1-I, C-CHW1-I	KII, IGD	4	3	3	5	3	18
COMMUNICATION CHANNELS	Community engagement thru community discussions utilized	C-HCP1-I, C-CHW2-I, C-HCP2-D, C-HCP4-D, C-HCP2-I	KII, IGD	4	3	4	4	4	19	Dialogue about barriers and solutions and role model not utilized	FN	O	2	6	3	4	3	18
	Diffusion of Messages and Community Leader Encouraging the Action utilized thru all communication channels	C-T1-I, C-HCP2-I, C-CHW2-I, C-HCP1-I, C-CHW1-I, C-CHW2-D, C-CHW4-D, C-CHW6-D, C-CHW5-D, C-T2-I, FN	KII, IGD, O	5	4	6	6	5	26									0
OTC ACCESSIBILITY									0	Scarce public transportation	FN	O	3	5	2	3	4	17
OTHERS									0	COVID-19 Pandemic affected community sensitization activities	C-HCP1-I, C-HCP1-D, C-CHW6-D, C-CHW4-D	KII, IGD	5	6	4	4	4	23
										COVID-19 Pandemic stopped OTC admissions	FN	O	4	6	3	4	4	21
									0	More focus on addressing COVID-19 pandemic	C-HCP1-D	IGD	3	5	3	4	4	19

II. PIMAM IMPLEMENTATION FACTORS														0				
LGU SUPPORT	Support from LGU	C-T1-I, C-HCP1-I	KII	4	3	3	4	4	18	Very limited budget for PIMAM Program	C-HCP2-I, C-HCP1-I, C-HCP1-D, C-HCP2-D, C-HCP3-D, C-HCP4-D	KII, IGD	6	6	5	5	5	27
OTC PROCESSES	Easy access of OTC services at BHS (i.e. Follow-up and RUTF dispensing)	C-CSAM1-I, C-CSAM2-I, C-CHW1-I, C-CHW1-D, C-CHW2-D, C-CHW3-D, C-CHW4-D, C-CHW5-D, C-CHW6-D, C-CHW7-D, C-HCP1-I, C-HCP2-D, C-CSAM2-Q	KII, IGD, Q	6	5	6	6	6	29	RUTF stockouts	C-CSAM1-I, C-CSAM2-I, C-CSAM1-D, C-CSAM2-D, C-HCP1-I, C-CHW1-I, C-CHW1-D, C-CHW5-D, C-CHW6-D, FN	KII, IGD, O	6	6	6	6	6	30
	Organized, accurate, and properly filled-out registers and monitoring sheets		DO	4	5	2	4	3	18	Lack of or insufficient counselling on child's condition and PIMAM program to SAM caregivers	C-CSAM1-I, C-CSAM2-I, C-HCP2-D	KII, IGD, DO	4	4	5	5	5	23
	OTC personnel is accommodating and hardworking	FN, C-HCP2-I	O, DO, KII	4	5	4	5	3	21	Inadequate number of trained OTC/HC Personnel to implement the PIMAM program	C-HCP-2, C-HCP1-I, C-HCP1-D, C-HCP2-D, C-HCP3-D, C-HCP4-D, FN	KII, IGD, O	6	5	6	6	6	29
	Prompt referral of patients with complications to BRTTH ITC	C-HCP2-I, C-HCP1-I	KII	4	5	3	4	4	20	Weighing scales at the RHU were not calibrated	C-HCP2-I	KII, DO	4	3	4	4	4	19
	Presence of a well-trained OTC Personnel on PIMAM	C-HCP2-I, C-HCP1-I, FN	KII, O	5	5	4	5	5	24	Inappropriate tools/ inaccurate techniques in taking anthropometric measurements	C-CHW2-I, C-HCP4-D, C-HCP1-D	KII, IGD, DO	6	5	6	6	6	29
	MHO supports and supervises the PIMAM program	C-HCP2-I, C-HCP1-I, FN	KII, O	4	5	4	4	4	21	Nutrition Officer/ Healthcare personnels handles multiple programs	C-HCP1-I, C-HCP1-D, C-HCP2-D	KII, IGD	5	6	6	6	5	28
	Proper monitoring of DOH and NNC	C-HCP1-I	KII	3	5	2	3	4	17	Insufficient budget to carry out community sensitization programs	C-HCP1-I	KII	2	4	2	4	3	15
	Coordination with Nutrition Officers from other Municipalities	C-HCP1-I	KII	2	3	3	3	3	14	Lack of systematic and complete taking of height and MUAC at the RHU	C-HCP1-I	KII, DO	4	5	4	5	5	23
	Validation of OPT anthropometric measurements for possible SAM or MAM	C-HCP1-I, C-CHW1-I, C-HCP2-D, C-HCP3-D	KII, IGD	4	5	4	4	4	21	RUTF supplied are near expiry	C-CHW1-I	KII	1	6	3	2	3	15
	Free of service	C-CSAM2-Q	Q	3	5	3	5	4	20	Inappropriate OTC commodities (F75 for SAM, RUSF for SAM)	C-CHW6-D, C-HCP4-D	IGD	3	4	4	4	3	18
										Lack of healthcare personnel knowledge on malnutrition	C-HCP1-D, C-HCP3-D	IGD	3	5	4	3	4	19
COMMUNITY MOBILIZATION PRACTICES	Presence of community sensitization activities	C-HCP2-I, C-CHW2-I, C-HCP1-I, C-CHW1-I, C-CHW5-D, C-CHW6-D, C-CHW7-D	KII, IGD	5	5	5	5	4	24	Sensitization practices don't catch attention of the caregivers	C-HCP2-I	KII	3	6	3	4	3	19
	Regular screening of children 0-59 months	C-HCP2-I, C-CHW2-I, C-CSAM4-D, C-CHW1-I, C-CHW4-D, C-CHW7-D	KII, IGD	5	5	5	6	4	25	Screening for malnutrition not regular/frequent	C-CSAM3-D, C-CSAM2-D	IGD	3	3	2	3	4	15

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COMMUNITY KNOWLEDGE OF SAM AND PIMAM	Community with general knowledge on malnutrition	C-T1-I, C-TH1-I, C-T2-I, C-TH2-I	KII	3	4	3	2	4	16	Insufficient knowledge on malnutrition	C-CSAM2-I, C-T1-I, C-T2-I, C-CHW2-I, C-TH1-I, C-TH2-I, C-HCP1-I, C-CHW1-I	KII	5	6	5	5	4	25
										Lack of knowledge on the PIMAM program	C-CSAM1-I, C-CSAM2-I, C-T1-I, C-T2-I, C-HCP2-I, C-CHW2-I, C-TH1-I, C-HCP1-I, C-CHW1-I,	KII	5	5	6	5	5	26
										Lack of knowledge of the traditional healer on PIMAM Program	C-TH1-I, C-TH2-I	KII	3	4	3	4	4	18
CAREGIVERS ATTITUDE AND CAPACITY	Knowledge on PIMAM program	C-CSAM1-I	KII	5	6	2	3	3	19	Insufficient of knowledge on malnutrition	C-CSAM1-I, C-CSAM2-I, C-HCP2-I, C-CHW2-I, C-CSAM1-D, C-CSAM2-D, C-CSAM3-D, C-CSAM4-D, C-HCP1-I, C-CHW5-D, C-HCP3-D, C-CSAM1-Q, C-CSAM4-Q, C-CSAM5-Q, C-CSAM6-Q	KII, IGD, Q	6	5	6	6	4	27
	General knowledge on malnutrition	C-CSAM3-Q	Q	2	4	2	2	3	13	Lack of knowledge on PIMAM program	C-CSAM2-I, C-CHW2-I, C-CSAM2-D, C-CSAM1-Q, C-CSAM3-Q, C-CSAM4-Q, C-CSAM6-Q	KII, IGD, Q	6	6	6	6	5	29
	Concerned about their child's undernutrition status	C-CHW5-D, C-HCP2-I, FN	KII, IGD, O	3	5	3	4	4	19	Laziness of caregivers to participate in sensitization practices	C-HCP1-I, C-CHW5-D, C-CHW1-D, FN	KII, IGD, O	4	4	4	5	5	22
	Acute Malnutrition is not stigmatized	C-CSAM1-I, C-CSAM2-I, C-T2-I, C-HCP2-I, C-CHW2-I, C-TH1-I, C-TH2-I, C-CHW1-I	KII	5	4	4	4	4	21	Laziness and indifference of caregivers towards their child's condition	C-CSAM1-I, C-CSAM2-I, C-T2-I, C-HCP2-I, C-CHW4-D, C-CHW5-D, C-HCP1-D	KII, IGD	5	3	4	6	5	23
										Caregiver ashamed of their child's condition	C-T2-I, C-CHW4-D	KII, IGD	3	3	3	3	3	15
										Poor comprehension to instructions/counselling	C-CHW5-D	IGD	2	3	2	2	2	11
										Dependence on dole outs	C-CHW1-I, C-CHW5-D	KII, IGD	2	3	2	2	2	11
OTHERS																		0
	RUTF well accepted by the child	C-CHW2-D, C-CHW3-D, C-CHW4-D, C-HCP1-D	IGD	5	3	4	5	3	20	RUTF Feeding difficulties (i.e. child is fed up to taste, child vomits RUTF)	C-CSAM1-I, C-CSAM2, C-CHW5-D, C-HCP2-D	KII, IGD	5	4	4	5	5	23

LEGEND
SOURCE
I - Key Informant Interviews (KII)
C-CSAM1-I - Caregivers of SAM child from near Barangay
C-CSAM2-I - Caregivers of SAM child from far Barangay
C-HCP1-I - Healthcare Personnel from Near Barangay
C-HCP2-I - Healthcare Personnel from far Barangay
C-CHW1-I- Community HealthWorker from near Barangay
C-CHW2-I - Community Health Worker from far Barangay
C-T1-I - Teacher from near Barangay
C-T2-I - Teacher from far Barangay
C-TH-I - Traditional Healer
C-TH2-I - Traditional Birth Attendant
D- Informal Group Discussion (IGD)
C-CSAM-1...4-D - Caregivers of SAM children in the IGD
C-HCP1...4-D - Healthcare personnels in the IGD
C-CHW1...7-D - Community Health Workers in the IGD
Case Finding
SD - Secondary Data
FN - Field Notes
METHOD
KII - Key Informant Interview
IGD - Informal Group Discussion
CP - Community Profiling
O - Observation
DO - Direct Observation at the OTC
Q - Questionnaire
AC - Arlene Calleja
SL - Sheree Longaza
SU - Samantha Urag
SS - Stephanie Sesbreño
CA - Christine Azuelo

BARRIERS, BOOSTERS, AND QUESTIONS (BBQ) TOOL - K																		
I. COMMUNITY CONTEXT	BOOSTERS	TRIANGULATION							TOTAL	BARRIERS	TRIANGULATION							TOTAL
		SOURCE	METHOD	AC	SL	SU	SS	CA			SOURCE	METHOD	AC	SL	SU	SS	CA	
SEASONAL VARIATIONS	Staple foods are available and accessible	K-T2-I, K-CHW1-I	KII	2	2	3	2	3	12	Respiratory infections are prevalent on most parts of the year	SD, K-HCP1-I	CP, KII	1	3	1	2	3	10
	Presence of livelihood trainings/gardening	K-T1-I, K-T2-I, K-HCP5-D, K-HCP1-D	KII, IGD	3	3	3	2	3	14	Prone to typhoons, floods, and lahar	K-T1-I, K-CHW1-D, K-CHW3-D, K-HCP5-D	KII, IGD	3	3	3	3	2	14
VOLUNTEER NETWORKS AND OTHER COMMUNITY ACTORS	Barangay captain and the council support nutrition programs	K-T1-I, K-T2-I, K-CHW2-I, K-HCP1-I, K-HCP2-I, K-CHW3-I, K-HCP7-D, K-HCP2-D	KII, IGD	5	3	6	5	5	24	No volunteer NGO networks available	K-HCP1-I	CP, KII	2	3	1	2	2	10
	Day Care teachers support nutrition programs	K-T2-I	KII	2	2	1	2	3	10	Lack of barangay council support	K-CHW2-I, K-HCP1-I, K-HCP2-I	KII	3	3	3	3	4	16
SOCIODEMOGRAPHIC PROFILE	High Literacy Rate	SD	CP	2	5	2	1	3	13	Poverty	K-CHW1-I, K-HCP1-I, K-T1-I, K-T2-I, K-HCP5-D	KII, IGD	3	5	4	5	5	22
	Both parents are involved in decision-making and care of the children	K-CHW1-I; K-CHW2-I; K-T1-I	KII	3	3	3	3	3	15	Unemployment	K-HCP1-I, K-T1-I, K-TBA-I; K-CHW1-I	KII	3	4	4	4	4	19
TRADITIONAL BELIEFS, SOCIAL NORMS AND TABOOS	Exclusive breastfeeding practices	K-TBA-I	KII	2	3	1	2	3	11	Resort to alternative medicine (i.e. herbal, hilot) to treat illness	K-HCP1-I, K-T1-I	KII	3	3	1	3	2	12
										Fixation to traditional beliefs and practices pertaining to food	K-HCP1-I, K-T2-I, K-CHW3-D, K-CHW4-D	KII, IGD	4	3	3	3	3	16
										Delay in health seeking behaviour	K-HCP1-I	KII	3	3	2	3	4	15
COMMUNICATION CHANNELS	Community engagement thru community discussions utilized	K-CHW1-I; K-CHW2-I; K-HCP1-I	KII	4	4	4	4	4	20	Dialogue about barriers and solutions and role model not utilized	FN	O	2	4	2	3	3	14
	Diffusion of Messages and Community Leader Encouraging the Action utilized thru all communication channels	K-T1-I, K-T2-I	KII	4	4	2	4	4	18								0	
OTC ACCESSIBILITY	Readily available public transportations	K-CSAM1-I; K-HCP1-I; FN	KII, O	4	3	3	4	4	18	Lack of means of transportation in remote areas	K-CSAM2-I, K-HCP1-I	KII	4	5	2	4	4	19
II. PIMAM IMPLEMENTATION FACTORS																		0
LGU SUPPORT	Support from the LGU	K-HCP1-I, K-HCP2-I, K-HCP7-D	KII, IGD	5	4	4	4	5	22	Limited budget given by the LGU to the PIMAM Program	K-HCP1-I	KII	5	5	3	3	5	21
										Other LGUs are not aware or do not prioritize the PIMAM program	K-HCP1-I; K-HCP2-I	KII	5	5	3	5	5	23
OTC PROCESSES	Easy access of OTC services at BHS (i.e. Follow-up and RUTF dispensing)	K-CHW1-I, K-CSAM2-I, K-HCP1-I, K-HCP2-I, K-CSAM6-D, K-CHW4-D	KII, IGD	6	5	6	6	5	28	RUTF stockouts	K-CHW1-I, K-CSAM1-I, K-CSAM2-I, K-HCP1-I, K-HCP2-I, K-CSAM8-D, K-CSAM5-D, K-CHW3-D, K-HCP7-D, K-HCP5-D	KII, IGD	6	6	6	6	6	30
	Prompt referral to ITC (BRTTH) in cases of medical complications or feeding difficulties	K-CSAM4-D; K-HCP1-I	KII, IGD	5	5	4	4	5	23	No available supplier of RUTF	K-HCP1-I, K-HCP2-I	KII	5	6	4	5	5	25
	Initiative to source out RUTF or alternatives	K-HCP2-I, K-HCP1-I; FN	KII, O	5	4	5	5	4	23	RUTF supplied are near expiry	K-HCP1-I	KII	3	4	2	2	4	15
	Presence of a well-trained OTC Personnel on PIMAM	K-HCP1-I, K-HCP2-I	KII, DO	6	6	5	5	6	28	Lack of alternative to RUTF in cases of feeding difficulties (i.e allergies to RUTF)	K-CSAM2-I, K-CSAM4-D, K-CHW3-D	KII, IGD	4	4	4	5	4	21
	MHO supports and supervises the PIMAM program	K-HCP1-I, FN	KII, O	5	5	4	5	5	24									
Validation of OPT anthropometric measurements for possible SAM or MAM	K-HCP1-I; K-HCP2-I; K-CHW1-I; FN	KII, O	5	5	4	5	4	23	Inappropriate commodities in the OTC (F75, RUSF for SAM)	K-CSAM1-I, K-CSAM3-D, K-CSAM4-D	KII, IGD	4	4	5	5	5	23	
OTC personnel is accommodating and hardworking	K-CHW2-I; K-CSAM1-I	KII, DO	5	6	4	5	5	25	Lack of systematic and accurate anthropometric measurements at RHU	K-CSAM1-I, K-HCP1-I, K-T1-I, K-CSAM3-D	KII, IGD	6	5	5	5	5	26	
Organized, accurate, and properly filled-out registers and monitoring sheets		DO	4	6	1	4	4	19	Lack of counselling on child's condition and PIMAM program to SAM caregivers	K-CSAM1-I, K-CSAM2-I, K-CSAM3-D	KII, IGD, DO	5	5	5	5	5	25	
									Inconsistent follow-up schedules	K-CSAM1-I	KII	1	1	1	1	1	5	

COMMUNITY KNOWLEDGE OF SAM AND PIMAM	Some general knowledge on malnutrition	K-CHW1-I; K-CHW2-I; K-HCP1-I	KII	2	4	4	3	5	18	Insufficient knowledge on malnutrition	K-CHW1-I, K-CHW2-I, K-CSAM1-I, K-CSAM2-I, K-HCP1-I, K-HCP2-I, K-T1-I, K-T2-I, K-TBA-I, K-CSAM2-D, K-CSAM5-D, K-CHW7-D, K-HCP5-D	KII, IGD	6	6	6	6	5	29
										Lack of knowledge on PIMAM program	K-HCP1-I; K-CHW1-I, K-CSAM1-I, K-CSAM2-I, K-T2-I, K-TBA-I, K-TH-I, K-CSAM6-D, K-HCP2-D, K-HCP5-D, K-HCP7-D	KII, IGD	5	6	6	6	5	28
										Lack of knowledge of the traditional healer on the PIMAM program	K-TH-I; K-TBA-I	KII	3	3	2	3	3	14
										Apathy to the PIMAM program	K-HCP1-I; K-HCP2-I	KII	3	3	4	4	4	18
										Thin and underweight children are common and generally accepted in the community	K-CHW2-I; K-CSAM1-I, K-HCP1-I, K-T2-I; FN	KII, O	4	4	5	4	5	22
CAREGIVERS ATTITUDE AND CAPACITY	Adherence to the treatment protocol	K-CSAM2-I	KII, IGD	5	5	4	5	4	23	Laziness and indifference of caregivers towards their child's condition	K-CHW1-I, K-CHW2-I, K-CSAM1-I, K-HCP1-I; K-HCP2-I, K-T1-I, K-T2-I, K-CHW2-D, K-HCP7-D, K-HCP5-D, K-HCP1-D	KII, IGD	6	4	6	6	4	26
	Mother's encouraged to continue treatment due to apparent improvement seen on her child	K-CSAM2-I	KII	4	4	3	3	5	19	Financial incapacity to go to the OTC	K-CSAM1-I, K-HCP1-I, K-CSAM6-D, K-HCP1-D	KII, IGD	4	4	5	5	5	23
	Acute Malnutrition is not stigmatized	K-CSAM1-I, K-CSAM2-I, K-CHW1-I, K-CHW2-I, K-HCP1-I, K-HCP2-I, K-T1-I, K-TBA-I, K-TH-I	KII	5	4	5	5	4	23	Discouraged caregivers due to lack of improvement on their child's condition	K-HCP1-I; K-CSAM1-I; K-HCP7-D	KII, IGD	4	4	4	5	4	21
	Acceptance of the PIMAM program	K-TBA-I; K-CSAM2-I	KII, IGD	4	4	3	4	5	20	Caregivers of SAM children have low educational attainment	K-HCP2-I	KII	3	3	3	4	4	17
	Early health seeking behaviour	K-CSAM3-D	IGD	4	3	3	4	5	19	Lack of knowledge on the PIMAM program	K-CSAM1-I; K-CSAM2-I	KII	4	5	4	5	3	21
	Concerned about their child's undernutrition status	K-CHW1-I; K-CSAM2-I; K-CSAM3-D, K-CSAM4-D, K-CSAM6-D	KII, IGD	5	3	5	5	4	22									
OTHERS																		
	RUTF well accepted by the child	K-CSAM2-I	KII	5	5	4	5	5	24	RUTF Feeding difficulties (i.e. child is fed up with taste, allergic reactions to RUTF, child vomits RUTF)	K-HCP2-I, K-CSAM2-D, K-HCP7-D, K-CSAM1-D, K-CSAM4-D	KII, IGD	4	4	5	5	5	23

LEGEND
SOURCE
I - Key Informant Interviews (KII)
K-CSAM1-I - Carer of SAM child from near Barangay
K-CSAM2-I - Carer of SAM child from far Barangay
K-HCP1-I - Healthcare Personnel from Near Barangay
k-HCP2-I - Healthcare Personnel from far Barangay
K-CHW1-I- Community HealthWorker from near Barangay
K-CHW2-I - Community Health Worker from far Barangay
K-T1-I - Teacher from near Barangay
K-T2-I - Teacher from far Barangay
K-TH-I - Traditional Healer
K-TBA-I - Traditional Birth Attendant
D- Informal Group Discussion (IGD)
K-CSAM-1...8-D - Carers of SAM children in the IGD
K-HCP1...8-D - Healthcare personnels in the IGD
K-CHW1...7-D - Community Health Workers in the IGD
SD - Secondary Data
FN - Field Notes
METHOD
KII - Key Informant Interview
IGD - Informal Group Discussion
O - Observation
CP - Community Profiling
DO - Direct Observation
AC - Arlene Calleja
SL - Sheree Longaza
SU - Samantha Urag
SS - Stephanie Sesbreño
CA - Christine Azuelo

APPENDIX L

TOP BOOSTERS, EXPLANATION AND TRIANGULATION

BOOSTERS – C	EXPLANATION	SOURCE	METHOD
COMMUNITY CONTEXTS			
Diffusion of messages and community leader encouraging the action utilized thru all communication channels	Though these were basic actions utilized by key players in communicating messages regarding nutrition to the beneficiaries, they were still essential in getting through important messages if done through all communication settings such as door-to-door visits and, community discussions, special events such as fiesta and mass media.	C-T1-I, C-HCP2-I, C-CHW2-I, C-HCP1-I, C-CHW1-I, C-CHW2-D, C-CHW4-D, C-CHW6-D, C-CHW5-D, C-T2-I, FN	KII, IGD, O
Barangay captain and the council support nutrition programs	Majority of the barangay councils supported programs on nutrition initiated by the municipal health office. Feeding programs were made available depending on the budget of the barangay. C-CHW2-I mentioned that the Barangay Kagawad on Health assisted in the lectures on nutrition. During our SAM case finding in the 4 barangays, the Barangay Captains supported and were present during the activity. They formed plans to start feeding programs for those children who were found to be moderately wasted.	C-CHW2-I, C-HCP2-I, C-CSAM2-Q FN	KII, O, Q
LGU SUPPORT			
Support from LGU	There was support for the PIMAM program from the LGU whereby part of the budget on nutrition went to OTC implementation.	C-T1-I, C-HCP1-I	KII
OTC PROCESSES			
Easy access of OTC services at the barangay health station (follow-up and RUTF dispensing)	Once the SAM cases were validated and admitted at the Municipal Health Office OTC, the CHWs – BNS and BHW- were instructed to monitor the children in their respective jurisdiction and entrusted the supply of RUTF. Weekly follow-up was then done at the Barangay Health Station where replenishing of RUTF ration was also done.	C-CSAM1-I, C-CSAM2-I, C-HCP1-I C-CHW1-I, C-CHW1-D, C-CHW2-D, C-CHW3-D, C-CHW4-D, C-CHW5-D, C-CHW6-D, C-CHW7-D, C-HCP2-D, C-	KII, IGD, Q

		CSAM2-Q	
Presence of a well-trained OTC personnel on PIMAM	The OTC personnel is the Municipal Nutrition Officer who attended a DOH-sponsored 3-day training workshop on PIMAM. He said he was satisfied with the level of training.	C-HCP2-I, C-HCP1-I, FN	KII, O
OTC personnel is accommodating and hardworking	The OTC personnel had good relationships with the CHWs and conversed kindly to them as well as to the caregivers. He showed diligence in the tasks assigned to him.	C-HCP2-I FN	DO, KII, O
MHO supports and supervises the PIMAM program	The Nutrition Officer accounts that the MHO supports the PIMAM program and supervises him: "Si Doc ang nag-supervise sa akin.. pag minsan may nakaligtaan ako gawin, si Doc ang nag-susuggest" (<i>The Doctor supervises me.. sometimes when I forget something, Doc is the one who will suggest I do things</i>).	C-HCP2-I, C-HCP1-I, FN	KII, O
Validation of OPT anthropometric measurements for possible SAM or MAM	Once the monthly/quarterly anthropometric measurements done by the CHWs on children less than 5 years come in from all the barangays, children with abnormal nutritional status are measured again by the Nutrition Officer for validation. C-CHW1-I: "Pag merong problema sa timbang, minsan pag naipapasa na namin kay Nutrition Officer, tumatawag sa amin kung meron ire-reevaluate ganun" (<i>When there is a problem with the weight once submitted to the Nutrition Officer, he calls us when there is a need to re-evaluate</i>).	C-HCP1-I, C-CHW1-I C-HCP2-D, C-HCP3-D	KII, IGD
Prompt referral of patients with complications to BRTTH ITC	The OTC personnel directly communicated with BRTTH ITC and referred SAM with complications immediately	C-HCP2-I, C-HCP1-I	KII
COMMUNITY MOBILIZATION PRACTICES			
Regular screening of children 0-59 months	All CHWs in all barangays conduct monthly anthropometric measurements for children 0 to less than 2 years of age and quarterly to children 2 to less than 5 years. Results are submitted to the Municipal Nutrition Officer/OTC personnel	C-HCP2-I, C-CHW2-I, C-CSAM4-D, C-CHW1-I, C-CHW4-D, C-CHW7-D	KII, IGD
Presence of community sensitization activities	A yearly "Pabasa sa Nutrisyon" (<i>Reading on Nutrition</i>) is being done in all barangays where caregivers of undernourished children and pregnant women are invited. Other sensitization activities mostly included individual efforts of the CHWs to give informal counselling on nutrition to the families	C-HCP2-I, C-CHW2-I, C-HCP1-I, C-CHW1-I, C-CHW5-D, C-CHW6-D, C-CHW7-D	KII, IGD

	in their jurisdiction and to the caregivers of SAM children.		
COMMUNITY HEALTH WORKER CAPACITY			
Provision of door-to-door screening, follow-up and dispensing of commodities	The CHWs usually do home visits to follow-up patients who do not show up at the BHS on the day of the scheduled follow-up. They even brought the RUTF ration to the patient's home.	C-T1-I, C-HCP2-I, C-CHW2-I, C-HCP1-I, C-CHW1-I, C-CHW2-D, C-CHW4-D, C-CHW6-D, C-CHW5-D	KII, IGD
CHW is active, accommodating, and hardworking	The community health workers were hard-working and knew their constituents well. Coordination and collaboration amongst each other was observed.	C-CSAM2-I, C-CHW5-D, C-CHW6-D, FN, C-CSAM2-Q	KII, IGD, O, Q
Proper channelling and referrals of community findings to the RHU	Findings in the community by the BHWs are referred to the BNSs or the midwives. They in turn report these findings to the Rural Health Unit (RHU)/Municipal Health Office and Nutrition Officer.	C-HCP2-I, C-CHW2-I, C-HCP1-I, C-CHW1-I, C-CHW2-D, C-CHW1-D, C-CHW3-D, C-CHW4-D, C-CHW5-D, C-CHW6-D, C-CHW7-D	KII, IGD
CHW willingness to learn and be trained	All of the CHWs encountered during the KIIs and most in the IGDs wanted to learn more on malnutrition and showed willingness to be trained regarding the PIMAM program. C-CHW1-I: "Gusto ko pang malaman ang lahat ng manungod sa malnutrisyon. Sana mabigyan kami ng training tungkol sa PIMAM" (<i>I want to learn more about malnutrition. I hope we will be given training regarding PIMAM</i>). C-CHW2-I: When asked about the PIMAM program: "Maga training po siguro para malaman po namin" (<i>We need to be trained so that we will know about it</i>).	C-CHW1-I, C-CHW2-I, C-HCP2-I, C-CHW1-D, C-CHW6-D, C-CHW5-D, FN	KII, IGD, O
CHW properly supervised by an OTC personnel	The OTC personnel supervised the activities of the CHWs pertaining to nutrition such as the monthly anthropometric measurements. C-CHW2-I: "Si NO, yung NDP mi, mga nurse, pati si Kapitan pig supervise din man kami" (<i>The Nutrition Officer, the deployed nurse, and also the barangay captain supervise us</i>).	C-CHW2-I, C-CHW1-I, C-CHW1-D, C-CHW2-D, C-CHW3-D, C-CHW4-D, C-CHW5-D, C-CHW6-D, C-CHW7-D	KII, IGD
COMMUNITY KNOWLEDGE ON SAM AND PIMAM			
Community with	The community's general knowledge	C-T1-I,	KII

general knowledge on malnutrition	<p>was that malnutrition is caused by lack of food and can arise after the child gets sick.</p> <p>CT1-I: “Minsan sasabihin ng magulang, hindi talaga masyadong kumakain ang bata kaya sya malnourished” (<i>Sometimes the parent would say that the child is not eating well and that is why he is malnourished</i>).</p> <p>Poverty and unemployment are the usual bottom line causes they mention.</p>	C-TH1-I, C-T2-I, C-TH2-I	
CAREGIVERS ATTITUDE AND CAPACITY			
Acute Malnutrition is not stigmatized	<p>They know that malnutrition is just caused by the lack of food and therefore is not stigmatized</p> <p>C-TH2-I: “Dae man tiguurolokan, aram na nila yan na malnourished ang aki ta kulang sa pagbigay nutrisyon, mga masasarap na pagkain” (<i>It is not stigmatized, since they know that malnutrition occurs because of lack of nutrition, those delicious food</i>).</p>	C-CSAM1-I, C-CSAM2-I, C-T2-I, C-HCP2-I, C-CHW2-I, C-TH1-I, C-TH2-I, C-CHW1-I	KII
Some knowledge of PIMAM program	Caregivers of SAM children admitted in the program were aware about the program and that receiving RUTF was part of the program.	C-CSAM1-I	KII
Concerned about their child's undernutrition status	Caregivers of SAM encountered during the KIIs, IGDs and SAM case finding were very concerned about their child's condition and were very willing to learn and enrol their child in the program.	C-CHW5-D, C-HCP2-I, FN	KII, IGD, O

BOOSTERS - K	EXPLANATION	SOURCE	METHOD
COMMUNITY CONTEXTS			
Barangay captain and the council support nutrition programs	The barangay councils were sensitive and responsive to the nutrition needs of the families. They coordinated with the LGU and supported programs on nutrition. K-HCP2-D: "May participation yung barangay officials then nakiki-coordinate sa Municipal Nutrition Council then they go hand in hand to address the problem" <i>(The barangay officials have participation then they coordinate with the Municipal Nutrition Council then they coordinate with the Municipal Nutrition Council.)</i> .	K-T1-I, K-T2-I, K-CHW2-I, K-HCP1-I, K-HCP2-I, K-CHW3-I, K-HCP7-D, K-HCP2-D	KII, IGD
Community engagement thru community discussions utilized	Community discussions on nutrition such as the "Pabasa sa Nutrisyon" were utilized to convey messages and teach the community on malnutrition.	K-CHW1-I; K-CHW2-I; K-HCP1-I	KII
LGU SUPPORT			
Support from LGU	The LGU supports the nutrition program on the RHU. The MHO, being also the Municipal Nutrition Action Officer, is active in lobbying projects for nutrition. K-HCP1-I: "Sa support ng LGU, Sanggunihan, nag susupport talaga sila" <i>(The LGU and the members of the consultation body are really supporting)</i> .	K-HCP1-I, K-HCP2-I, K-HCP2-D, K-HCP7-D	KII, IGD
OTC PROCESSES			
Easy access of OTC services at the barangay health station (follow-up and RUTF dispensing)	The PIMAM commodities such as the RUTF were brought at the BHS and the BHWs are tasked to do the weekly monitoring and dispensing of RUTF. K-CSAM2-I: "Pigdadara ko an akus ko sa BHS. Su BNS ngan su midwife po an nagatimbang" <i>(I bring my child to the BHS. The BNS and the midwife are the ones weighing my child)</i> . K-CSAM8-D: "Surusemana indadara ko sa center tas may pigtatao sa kanya" <i>(I bring my child to the center (BHS) every week and they give something to her)</i> . K-HCP2-I: "Dun na po sa barangay sila (CHWs) na po nagbibigay (RUTF) or pinapapunta nila sa BHS" <i>(At the barangay, the CHWs give the RUTF or have the parents go to the BHS)</i> .	K-CHW1-I, K-CSAM2-I, K-HCP1-I, K-HCP2-I, K-CSAM8-D, K-CHW4-D	KII, IGD
Presence of a well-trained OTC personnel on PIMAM	The Nutrition Officer underwent a 3-day PIMAM training and workshop in 2017. When asked if he was satisfied with the training, K-HCP1-I replied: "Ah yes po kasi very comprehensive naman po ang training namin nung 2017 and dun ko	K-HCP1-I, K-HCP2-I	KII, DO

	<p>natutunan yung tamang process, procedures, tapos paano gawin, sino target, and some definitions” (<i>Oh yes, because the training in 2017 was very comprehensive and it was there where I learned the right processes, procedures, how to do, who are the target and some definitions</i>).</p>		
OTC personnel is accommodating and hardworking	The OTC personnel is the Nutrition Officer. He is active and focused on his work. He has good rapport with the beneficiaries.	K-CHW2-I; K-CSAM1-I	KII, DO
MHO supports and supervises the PIMAM program	The MHO who is also the Municipal Nutrition Action Officer strongly supports the PIMAM program.	K-HCP1-I, FN	KII, O
Initiative to source out RUTF or alternatives	<p>Because of the RUTF stockouts, the Nutrition Officer sourced out RUTF for the OTC to purchase.</p> <p>K-HCP1-I: “Nag-inquire po ako sa supplier ng DOH yung nakalagay sa pakete. So nung kinontak ko po sila, ang tanong lang po nila sa akin ay ‘Anong LGU po kayo’? Tas nung sinagot, di na sila nag-response” (<i>I inquired from the supplier of DOH, the one in the package. When I contacted them, their question was just ‘From what LGU are you?’ Then when I answered, they did not respond anymore</i>).</p> <p>During our data collection, he also asked the researcher for recipes of F100 which they plan to give in lieu of RUTF.</p>	K-HCP2-I, K-HCP1-I; FN	KII, O
Prompt referral to ITC (BRTTH) in cases of medical complications or feeding difficulties	<p>The OTC personnel has direct contact with the BRTTH PIMAM team and refers SAM with complications immediately to the ITC.</p> <p>K-HCP1-I: “Gumagamit po kami ng referral form tapos hinahatid po namin with the ambulance” (<i>We use a referral form then we bring the patient to BRTTH using an ambulance</i>).</p>	K-CSAM4-D; K-HCP1-I	KII, IGD
COMMUNITY MOBILIZATION PRACTICES			
Regular screening of children 0-59 months	<p>Children in every barangay are screened regularly – monthly for 0 to 23 months and quarterly for 24 to 59 months.</p> <p>K-HCP1-I: “May monthly monitoring po ng age group 0-23 months na bata. Tapos may quarterly naman for 24 to 59 months” (<i>There is a monthly monitoring of children 0-23 months and quarterly for children 24 to 59 months</i>).</p> <p>K-CSAM2-D: “Tinitimbang din po kasi lahat kaya namomonitor man po sa center. Kun sino po an payat tapos i-</p>	K-CHW1-I, K-CHW2-I; K-HCP1-I, K-TBA-I, K-CSAM2-D, K-HCP1-D, K-HCP7-D	KII, IGD

	fofollow up ki sir NO” (<i>Every child is weighed that is why they are monitored at the center. Whoever is thin is being referred to the NO</i>).		
Presence of community sensitization activities	<p>Community sensitizations are basically the “Pabasa sa Nutrisyon”.</p> <p>K-CHW2-I: “Meron po kaming buntis class tapos Pabasa sa Nutrisyon. Every year, yung mga bagong buntis, bagong lactating mother, mother of underweight children” (<i>We have a class for pregnant women and Reading on Nutrition. Every year, those who are newly pregnant, lactating women and mothers of underweight children are included</i>).</p> <p>Individual efforts of the CHWs to do counselling during their home visits is also commonplace.</p> <p>K-CHW1-I: “Yung may mga anak na may malnutrisyon, pinapatawag po dito tas ni-lecturan po” (<i>Those with malnourished children are being called to go here and are lectured on nutrition</i>).</p>	K-HCP1-I, K-HCP2-I, K-T1-I, KT2-I, K-TBA-I; K-CHW1-I; K-CHW2-I	KII
COMMUNITY HEALTH WORKER CAPACITY			
Provision of door-to-door screening, follow-up (including defaulting cases) and dispensing of commodities	<p>Part of the CHWs work was to visit beneficiaries in their homes to follow them up and dispense commodities. This was especially true for those who do not follow-up or those living in locations far from the BHS.</p> <p>On dispensing of RUTF: K-CSAM3-D: “Opo pig-aano po ninda kaya direct. Minsan ngani sinda pa naghahatod” (<i>Yes they give it directly, at times they are the ones who deliver it to us</i>).</p>	K-CHW2-I, K-CSAM2-I; K-HCP1-I, K-HCP2-I; K-CSAM1-D, K-CSAM3-D, K-CHW4-D, K-CHW3-D	KII, IGD
Regular monitoring of SAM patients at the Barangay Health Station	<p>The CHWs conduct regular weekly monitoring of SAM patients at the Barangay Health Station as instructed by the OTC personnel.</p> <p>k-CSAM4-D: “Pinagmomonitor po kami every week sa health center namin. Kinukuha ang MUAC, timbang, height” (<i>We are being monitored every week in our health center. They get the MUAC, weight and height</i>).</p> <p>K-CSAM2-I: “Pigdadara ko an akus ko sa BHS. Su BNS ngan su midwife po an nagatimbang” (<i>I bring my child to the BHS. The BNS and the midwife are the ones weighing my child</i>).</p>	K-HCP2-I; K-CHW1-I; K-CSAM2-I; K-CSAM4-D, K-CSAM8-D, K-CSAM6-D, K-CSAM5-D, K-CHW3-D, K-HCP1-D	KII, IGD
CHW is active, accommodating, and	The CHWs are inherently active and hardworking. They go beyond their duty	K-CHW2-I; K-TBA-I,	KII, IGD

hardworking	of going from house to house to follow-up patients, administer necessary preventive interventions and deeply engage and counsel caregivers to have them understand the child's condition.	K-CSAM4-D, K-CSAM5-D, K-CSAM3-D, K-CHW4-D, K-CHW2-D	
Proper channelling and referrals of community findings to the RHU	Findings of CHWs were generally referred to the midwife and the midwife to the RHU. There were several instances when referral of malnourished children were directed to the RHU/OTC. K-CHW2-I: "Tinatawagan ko si NO kung dadalhin namin kay Doc. May referral form po para mag-refer" (<i>I call the NO directly if I will bring the child to doctor MHO. There is a referral form when referring</i>).	K-CHW1-I, K-CHW2-I, K-HCP1-I, K-CHW4-D, K-HCP2-D, K-HCP1-D	KII, IGD
CHW properly supervised by an OTC personnel	When asked if she is supervised by the OTC personnel, K-CHW2-I replied: "Opo, si Nutrition Officer, kagawad on health at si doc. Suportado po ako nila. Pag may igwa po akong mga tanong, nagpupunta lang po ako sa kanila. Nagtatanong lang po ako sa kanila, pinapaliwanagan nila ako.. Pag nag-evaluate nagpunta po sila dito" (<i>Yes the Nutrition Officer, Kagawad on Health and doctor (MHO). They support me. When I have questions, I go to them and they enlighten me. When they evaluate, they go here</i>).	K-CHW2-I, K-HCP1-I; FN	KII, O
COMMUNITY KNOWLEDGE ON SAM AND PIMAM			
Some general knowledge on malnutrition	Because of some community sensitization activities and frequent counselling of the CHWs, the community has better knowledge of malnutrition. K-HCP1-I: "And somehow maganda na rin po yung perception ng mga tao tungkol sa nutrition kasi bumaba na po yung malnutrition rate ng municipality. Dun po namin nakikita na yung impact na nagiging aware na po si mga mamamayan on malnutrition.." (<i>Somehow, the perception on nutrition of the people has improved because the malnutrition rate in the municipality decreased. This is how we gauge impact that people are getting aware of malnutrition</i>).	K-CHW1-I; K-CHW2-I; K-HCP1-I	KII
CAREGIVERS ATTITUDE AND CAPACITY			
Adherence to the treatment protocol	Beneficiaries adhered to the treatment protocol. This was made easy because the OTC services were made available at the barangay level. They stayed in the program. However, supply of	K-CSAM2-I K-CSAM2-D K-CSAM3-D K-CSAM4-D K-CSAM6-D	KII, IGD

	commodities was stopped.		
Acute Malnutrition is not stigmatized	When asked if malnutrition is stigmatized, most respondents said it is not as most believed that it is just a result of less food intake or after an illness.	K-CSAM1-I, K-CSAM2-I; K-CHW1-I, K-CHW2-I, K-HCP1-I, K-HCP2-I, K-T1-I, K-TBA-I, K-TH-I	KII,
Concerned about their child's undernutrition status	Majority of caregivers wanted their children to gain weight and get well just like other children and this encouraged them to accept the program K-CSAM2-I: "Gusto ko mam po subukan ta aram ko na pwede man po baga mapakaray si baby ko. Kaya po ako naengganyo man po ako na mag entra" (<i>I wanted to try because I know that it is possible for my baby to get well. And this is why I was encouraged to join</i>).	K-CHW1-I; K-CSAM2-I; K-CSAM3-D, K-CSAM4-D, K-CSAM6-D	KII, IGD
Acceptance of the PIMAM program	Beneficiaries who saw improvement in their child's condition were happy about the program. K-CSAM2-I: "Pag nakakaon sya ki plumpy nut, nagkalaman ang braso nya. Opo i-refer ko ibang aki sa PIMAM" (<i>Whenever she eats Plumpy Nut, her arms would gain mass. Yes I will refer other children to the program</i>). When asked how the beneficiaries perceive the program: KTBA-I: "I-accept ninda yan" (<i>They accept it</i>). K-CSAM1-I: "Nakakatulong naman po. Malaking tulong naman po. Kagaya ng pagbigay ng gatas" (<i>The program is able to help. It is of a big help. Like the giving of milk</i>).	K-TBA-I; K-CSAM2-I K-CSAM2-D K-CSAM3-D K-CSAM4-D K-CSAM6-D	KII, IGD

APPENDIX M

TOP BARRIERS, EXPLANATION AND TRIANGULATION

BARRIERS – C	EXPLANATION	SOURCE	METHOD
COMMUNITY CONTEXTS			
Poverty	Forty-one percent of the households in Municipality C were below the poverty line in 2018-2020. Most of the respondents attributed malnutrition to poverty and the lack of means to buy food.	C-T1-I, C-T2-I, C-HCP2-I, C-HCP1-I C-CHW1-I, C-CHW5-D, C-HCP4-D, SD	KII, IGD, FN, CP
Unemployment	CT1-I: “Pag wala silang trabaho, wala silang makakain” (<i>If they don’t have work, they won’t have anything to eat</i>). Unemployment is also always related to the lack of food on the table	C-T1-I, C-CHW1-I, C-CHW2-D, SD	KII, IGD, CP
COVID-19 pandemic affected community sensitization activities	The once-a-year community sensitization “Pabasa sa Nutrisyon” was stopped during the COVID pandemic. Imposition of lockdowns limited house-to-house visits and counselling by the CHWs. C-HCP1-D: “Di na po nakaka-focus, tulad ngayon na-busy na sa COVID” (<i>It is not focused anymore like right now, we are busy on COVID already</i>).	C-HCP1-I, C-HCP1-D C-CHW6-D, C-CHW4-D	KII, IGD
COVID-19 pandemic stopped OTC admissions	Because of limited SAM case findings and monthly anthropometric measurements, OTC admissions were stopped during the pandemic. Casual conversation with the NO revealed that OTC admissions were stopped during the COVID-19 pandemic and because of RUTF stockouts.	FN	O
LGU SUPPORT			
Very limited budget for PIMAM program	There was a budget being given to the Municipal Health Office for nutrition programs in general. Since this was limited, only a very small percent went to the PIMAM program which was not enough to fully implement the program. C-HCP1-I: “Alam naman ni Mayor, may budget pero sobrang kulang. Ang budget para sa buong nutrition program” (<i>The mayor knows about the PIMAM program and there is a budget but this is very limited. The budget is for</i>	C-HCP2-I, C-HCP1-I, C-HCP1-D, C-HCP2-D, C-HCP3-D, C-HCP4-D	KII, IGD

	<i>the whole nutrition program).</i>		
OTC PROCESSES			
RUTF stockouts	<p>The free supply of RUTF from the DOH was not consistent in 2019 to almost no supply in 2020. This barrier has always been mentioned as a limiting factor in the program's implementation. The LGU's lack of budget for the program hindered the OTC to purchase their own RUTF.</p> <p>C-HCP1-I: "Nung 2020 nga halos wala kaming stocks ng commodities, kaya nahirapan din ako kapag may nag-refer ng SAM.. wala ako maibigay. Ang advice ko na lang pakainin ng masustansyang pagkain" (<i>Last 2020, there were almost no commodities which was difficult for me when there is a SAM referral. I don't have anything to give and would just advise to feed the child nutritious food.</i>)</p> <p>When a carer of a SAM child (C-CSAM2-D) was asked about RUTF after it was described, her reply was "wara man po sya arog kadto, su garo Magic Sarap lang talaga" (<i>She was not given something like that, only the one like a seasoning – MNP</i>).</p>	C-CSAM1-I, C-CSAM2-I, C-CSAM1-D, C-CSAM2-D, C-HCP1-I, C-CHW1-I, C-CHW1-D, C-CHW5-D, C-CHW6-D, FN	KII, IGD, O
Inadequate number of trained OTC/HC Personnel to implement the PIMAM program	<p>Only one OTC personnel, the Nutrition Officer, was trained on PIMAM. He wanted to conduct training for the other HCPs and the CHWs but was hindered by the lack of budget. Those whom he was able to somehow teach at the RHU had temporary job positions (Job Order) and would easily be replaced and thus, there was no continuity of knowledge.</p> <p>When asked if they were trained, C-CHW1-4-D during an IGD all replied that they were not trained on the PIMAM program.</p>	C-HCP-2, C-HCP1-I, C-HCP1-D, C-HCP2-D, C-HCP3-D, C-HCP4-D, FN	KII, IGD, O
Inappropriate tools/ inaccurate techniques in taking anthropometric measurements	<p>When asked to validate findings in the OPT, HCPs go to the community. They weighed children with clothes on and height/length was taken only by one person.</p> <p>During the Direct Observation at the OTC, the Nutrition Officer had an error in taking the MUAC.</p> <p>The MUAC was not routinely taken.</p>	C-CHW2-I, C-HCP4-D, C-HCP1-D	KII, IGD, DO
Nutrition Officer/ Healthcare personnel handle multiple programs	<p>Multiple tasks and programs given to the Nutrition Officer and other health care personnel left the PIMAM program unfocused.</p> <p>C-HCP1-I: "Meron pa akong ibang program na kinakaputan.. ang hawak ko ngayon na ano, bagong program sa</p>	C-HCP1-I, C-HCP1-D, C-HCP2-D	KII, IGD

	<p>non-communicable diseases.. at saka yung isa yun naman sa drugs. Sa ngayon ang challenge ngayon sa akin ay yung papano ko ipa-plano. Pag minsan kasi pag may urgent focus yung sa NCD, na se-segway na yung sa nutrisyon” (<i>I handle other programs.. the new program I handle now is on NCDs.. and the other one is on drugs. The challenge for me right now is how to plan. Because sometimes when there is an urgent matter that needs to be</i></p> <p><i>focused on NCDs, nutrition is being set aside).</i></p> <p>C-HCP2-D: “..kung sa malnutrition kailangan mo i-focus sa pagmonitor which is hindi namin magagawa ngayon kasi and daming deadline sa iba pang programs” (<i>On malnutrition, you need to focus on this which we are not able to do because there are many other deadlines in other programs).</i></p>		
Lack of or insufficient counselling on child’s condition and PIMAM program to SAM caregivers	Once diagnosis and admission is done, the caregiver is just instructed on how to feed or give RUTF to the child and when to return for follow-up. No in-depth counselling on the child’s malnutrition and the PIMAM program was given to the caregivers. During the Direct Observation at the OTC, no explanation of the child’s condition was witnessed.	C-CSAM1-I, C-CSAM2-I, C-HCP2-D	KII, IGD, DO
Lack of systematic and complete taking of height and MUAC at the RHU	Not all children brought for consultation at the RHU were taken complete anthropometric measurements. Usually, only the weight is measured. C-HCP1-I: “Opo, wine-weigh namin lahat. Pero yung iba, hindi lahat nakukunan ng height. Pag ano po, kung sino ang naka-assign dito sa OPD, hindi naman yun trained, hindi naman nya alam kung pano. Kaya ang ano lang, yung weight lang. Ako naman di ako makapag-focus dyan kasi mag-isa lang ako. Syempre ang tatabahuhin ko yung ibang reports” (<i>Yes, we weigh all patients. However height is not taken on all patients. Whoever is assigned at the OPD is not trained).</i>	C-HCP1-I	KII, DO
COMMUNITY MOBILIZATION PRACTICES			
Insufficient number of community sensitization activities	Main community sensitization activities were done only once or twice a year in the form of the “Pabasa sa Nutrisyon”. The audience was often limited only to	C-HCP2-I, C-CSAM1-D, C-CSAM2-D, C-CSAM3-D, C-	KII, IGD

	<p>parents of children with acute malnutrition and pregnant women because of the limited budget. Other forms of counselling were done by the CHWs on the parents of SAM children only.</p> <p>C-HCP1-I: “Siguro kailangan pa ng time na mas madagdagan pa yung ganyan na nutrition na yan. Siguro mga 5 times dapat. Pero parang di ko na kaya gawin yun na lahat. Dahil nga yun na sinabi ko na limited budget” (<i>Maybe increasing activities for nutrition should be increased. Maybe it should be 5 times. But I think I can not accomplish all that. Because as I said, there is limited budget</i>).</p>	CSAM4-D, C-HCP1-I, C-CHW1-I, C-HCP2-D, C-HCP3-D	
COMMUNITY HEALTH WORKER CAPACITY			
Lack of knowledge/training on the PIMAM program	<p>All of the CHWs encountered never had a single training on the PIMAM program. Some even never heard about it.</p> <p>When asked about the PIMAM program, C-CHW2-I answered “Wala po akong alam. Ngayon ko lang po nadangog” (<i>I don’t know anything. I just heard of it right now</i>).</p> <p>C-HCP1-I: “Ang BHW, kasi sila wala naman training. Walang silang training about sa PIMAM. Budget pa rin ang problema” (<i>The BHWs, they have no training. They have no training on the PIMAM program. Still, budget is the problem</i>).</p>	C-CHW2-I, C-HCP1-I, C-CHW1-I, C-CHW5-D, C-CHW6-D, C-CHW1-D, C-CHW7-D, C-CHW2-D, C-CHW4-D, C-CHW3-D,	KII, IGD
Inappropriate tools/techniques in taking anthropometric measurements	<p>Proper standard tools used for accurate anthropometry were not available at all times. BHWs did not use height boards when going from house to house as it was heavy. So some removed the measuring steel bar and some used a tape measure. The clothes were not removed when taking the weight.</p> <p>MUAC is not part of routine anthropometry. These were observed during the SAM Case finding.</p> <p>C-CHW4-D: “Sa barangay namin, wala po talaga kami accurate na tools. Tape measure po ginagamit namin. Bawal talaga yun kasi mali nga yun” (<i>In our place we really don’t have accurate tools. We only use tape measure. We know it is not allowed because it is wrong</i>).</p>	C-CSAM1-I, C-CSAM2-I, C-CHW2-I, C-CSAM1-D, C-CSAM2-D, C-CSAM3-D, C-CSAM4-D, C-CHW1-I, C-CHW4-D, C-CHW2-D, C-CHW3-D, C-CHW5-D, C-CHW6-D, C-CHW7-D, FN	KII, IGD, O
Insufficient counselling to parents pertaining to malnutrition and	<p>The CHWs depth of counselling was not sufficient to educate parents on malnutrition. The PIMAM program was</p>	C-CSAM1-I, C-CSAM2-I, C-CSAM3-D, C-	KII, IGD

PIMAM program	<p>also not being mentioned in their encounters with caregivers.</p> <p>When asked whether the PIMAM program was mentioned when their child was called for admission, C-CSAM2-D answered: “Wara man po. May nagsabi lang sa kuya na magduman lang po ta nagbaba lang ang timbang. Di naman ako nataraman” <i>(There was no mention. Somebody just told me to go because my child lost weight. I was not informed).</i></p> <p>When asked if the CHW explained the child’s malnutrition, C-CSAM1-I replied: “Dae pa man po” <i>(Not yet).</i></p>	CSAM2-D, C-CSAM1-D, C-HCP1-I, C-CHW1-I	
Fast turnover of BHWs and BNS without endorsement of program knowledge	<p>The CHWs are commonly appointed by the incumbent Barangay Captain. If another Barangay Captain is appointed during the next election, the CHWs might also be replaced. In this process, knowledge and skills acquired through training of the previous CHWs will not be endorsed to the new set.</p> <p>C-CHW7-D: “Paano po Madam, once nagbabago Barangay Captain, magpapalit din ang BHW. Depende man po sa barangay Madam. Alam nyo na po an politika po” <i>(It’s like this, Madam, once the Barangay Captain changes, the BHWs change also. It depends on the barangay, Madam. You know how politics is).</i></p> <p>When asked if knowledge or programs are endorsed to the new set of BHWs: C-CHW4-D: “Wala po. Pati mga records ng bata wala” <i>(There is none. Even the records of the children are not endorsed).</i></p>	C-CHW7-D, CHW1-D, CHW2-D, CHW3-D, CHW4-D, CHW5-D, CHW6-D	IGD
COMMUNITY KNOWLEDGE ON SAM AND PIMAM			
Lack of knowledge on the PIMAM program	<p>In general, the community was not aware of the PIMAM program. Pabasa sa Nutrisyon activities only covered by and large general concepts on nutrition and the PIMAM program was not included in the lecture.</p> <p>C-HCP1-I: “Hindi pa masyado aware ang community. Yung mga naka enroll, aware na sila. Sana magka seminar bawat barangay” <i>(The community is not so aware. For those who are enrolled in the program, yes. I hope there will be a seminar in every barangay).</i></p>	C-CSAM1-I, C-CSAM2-I, C-T1-I, C-T2-I, C-HCP2-I, C-CHW2-I, C-TH1-I, C-HCP1-I, C-CHW1-I,	KII
Insufficient knowledge on malnutrition	The community by and large only understood malnutrition as the child	C-CSAM2-I, C-T1-I,	KII

	being thin because he does not eat well or he got sick. Malnutrition was not perceived as a disease and its causes and effects were not understood. C-HCP1-I on community perception on malnutrition: “Sa observation ko, ang tingin nila talaga dyan normal lang. Pag payat, ay okay lang ngaya yan. Baka kaya pumayat kasi nagkasakit yan” (<i>In my observation, they perceive it as something normal. The child got only got sick that is why he lost weight</i>)	C-T2-I, C-CHW2-I, C-TH1-I, C-TH2-I, C-HCP1-I, C-CHW1-I	
CAREGIVERS ATTITUDE AND CAPACITY			
Lack of knowledge on PIMAM program	Majority of the carers of SAM children encountered did not know exactly about the program. All they knew was their child was malnourished and that a commodity or food was to be given to make their child well.	C-CSAM2-I, C-CHW2-I, C-CSAM2-D, C-CSAM1-Q C-CSAM3-Q C-CSAM4-Q C-CSAM6-Q	KII, IGD, Q
Insufficient of knowledge on malnutrition	When asked if malnutrition is a disease, all of the participant caregivers responded it is not a disease. C-CSAM1-4-D: “Dae man helang. Sa pagkaon lang talaga maluya” (<i>It is not a disease. The child is not just eating well</i>)	C-CSAM1-I, C-CSAM2-I, C-HCP2-I, C-CHW2-I, C-CSAM1-D, C-CSAM2-D, C-CSAM3-D, C-CSAM4-D, C-HCP1-I, C-CHW5-D, C-HCP3-D, C-CSAM1-Q C-CSAM4-Q C-CSAM5-Q C-CSAM6-Q	KII, IGD, Q
Laziness and indifference of caregivers towards their child’s condition	Some caregivers were lazy and not responsive towards their child’s condition and perceived it as something acceptable. C-CHW4-D: “Pero parang accept man nila. Parang wala lang. Madakula man ngaya yan” (<i>But they accept the condition, as if nothing is wrong. They say: child will grow anyway</i>).	C-CSAM1-I, C-CSAM2-I, C-T2-I , C-HCP2-I, C-CHW4-D, C-CHW5-D, C-HCP1-D	KII, IGD
Laziness of caregivers to participate in sensitization activities	Sensitization activities in the form of the “Pabasa sa Nutrisyon” did not always catch the attention of the caregivers such that attendance was sometimes a challenge. C-HCP1-I: “Mahirap i-encourage yung mga magulang na mag-participate sa mga ganitong activities. Yun ang pinaka hamon dito” (<i>It is difficult to encourage parents to participate in this activities. That is the main challenge here</i>). C-CHW1-D: “Training man po sa mga	C-HCP1-I, C-CHW5-D, C-CHW1-D, FN	KII, IGD, O

	nanay ta igwa po talagang matatagas ang payo. Nagpapaapod ka na ki meeting, dae man nag-arattend, para sa kanila man yan” (<i>On training for mothers, there are some who are really hard-headed. You are calling for a meeting but they don’t attend, when the activity is for them.</i>)		
ACCEPTANCE OF RUTF			
RUTF Feeding difficulties (i.e. child is fed up to taste, child vomits RUTF)	Though the majority of beneficiaries tolerated and liked RUTF, there were some who rejected the RUTF or have been fed up with the taste. C-HCP2-D: “Nung una okay lang pero nung tumagal maamoy pa lang ayaw na.. ayaw na nya kainin” (<i>At first is was okay. But after some time, just by its scent, the child does not want to eat it.</i>)	C-CSAM1-I, C-CSAM2, C-CHW5-D, C-HCP2-D	KII, IGD

BARRIERS – K	EXPLANATION	SOURCE	METHOD
COMMUNITY CONTEXTS			
Poverty	<p>Around 50% of the population in Municipality K were below the poverty level in the 2014-2016 data. Many perceived it as the main challenge in the community which causes malnutrition.</p> <p>K-HCP1-I: “Isa po dyan is poverty as always” (<i>One of the challenges is poverty, as always</i>).</p>	K-CHW1-I, K-HCP1-I, K-T1-I, K-T2-I, K-HCP5-D	KII, IGD
Unemployment	<p>When asked about the challenges in the community, K-T1-I replied: “Siguro maam sa kahirapan. Ang iba may trabaho, an iba wara man trabaho” (<i>May Ma’am poverty. Some have work, some don’t have work</i>).</p> <p>Unemployment inevitably led to limited budget to buy food on the table</p> <p>K-CHW1-I: “Kasi po yung iba walang trabaho. Walang mga pambili ng pagkain.. Kaya gaya payatot yan kasi wala kaming trabaho” (<i>Because other don’t have work. They don’t have anything to buy food.. They say, the reason our child is thin is because we don’t have work</i>).</p>	K-HCP1-I, K-T1-I, K-TBA-I; K-CHW1-I	KII
Fixation to traditional beliefs and practices pertaining to food and health practices	<p>A good number of parents in the community still resort to traditional ways of healing and traditional beliefs on food.</p> <p>The traditional healer during the interview confirmed many children were still brought to him for consultation of their illnesses.</p> <p>K-TH-I: “Pano po kaya minsan may mga tao po kaya na maluya ang mga pagtubod syempre dito po sakun pinagadara” (<i>Sometimes people with weak beliefs, of course they still bring the sick to me</i>).</p>	K-HCP1-I, K-T2-I, K-TH-I K-CHW3-D, K-CHW4-D	KII, IGD
LGU SUPPORT			
Limited budget given by the LGU to the PIMAM Program	<p>Although a budget was allotted for the PIMAM program, it was limited.</p> <p>K-HCP1-I: “Very limited ang budget na nakukuha namin sa Gender and Development Fund. Tapos sa ngayon naka 1.3 million po akong nahinging budget. Sa ibang municipality mas mataas pa sa budget namin. Dun ako nabibitin sa budget. Kaya kahit gusto ko magpurchase ng madaming supplies to cater all ng RUTF, yun nabibitin so i-istop mo na lang” (<i>The budget that we get from the Gender and Development</i></p>	K-HCP1-I	KII

	<i>Fund is very limited. Now I was able to ask 1.3 million budget. In other municipalities their budget is higher. There I experience insufficient budget. That is why even if I want to purchase enough amount of the supplies to cater for the RUTF, it is not possible so we just stop).</i>		
OTC PROCESSES			
RUTF stockouts	<p>The supply of RUTF was very limited to none in 2019 and 2020.</p> <p>K-HCP1-I: “Ayun po ieenroll po namin siya sa PIMAM, kaso pag wala po available na RUTF, wala kami pang PIMAM, tinatanong namin sila: gusto nyo pa ma-refer sa BRTTH? Sasabihin nila, COVID, ayaw” (<i>And there we enrol a child in PIMAM, but when there is no available RUTF, we don’t have anything to implement PIMAM. We ask them, would you want to be referred to BRTTH? They would say ‘COVID, we don’t want’</i>).</p> <p>K-CSAM2-I: “Duwang patos po ng Plumpy Nut an pigpaubos sa usad na aldaw kaya 14 an pinagataw para sa usad na semana. Pero na-stop po su rasyon nu nakaaging taon. Wara po pidtaw samun ngana” (<i>Two sachets of Plumpy Nut are supposed to be consumed in a day so 14 sachets are given every week. But the ration stopped the other year. Nothing iis being given to us now</i>).</p>	K-CHW1-I, K-CSAM1-I, K-CSAM2-I, K-HCP1-I, K-HCP2-I, K-CSAM8-D, K-CSAM5-D, K-CHW3-D, K-HCP7-D, K-HCP5-D	KII, IGD
Inadequate number of trained OTC/HC Personnel to implement the PIMAM program	<p>There was only one OTC personnel trained in PIMAM. This was augmented by the DOH Nutritionist-Dietitian deployed in the area who covers several municipalities.</p> <p>K-HCP1-I: “Kulang sa tao na magtataguyod ng programa” (<i>There is lack of personnel who will carry out the program</i>).</p>	K-HCP1-I, K-HCP2-I; FN	KII, O, DO
Lack of systematic and accurate anthropometric measurements at RHU	<p>Complete anthropometric measurement was not routine during OPD consultations at the RHU. There were also errors in the anthropometric techniques.</p> <p>K-CSAM1-I: “Tinimbang naman sya sa RHU at sinukat. Hindi tinanggal ang damit nung tinimbang. Isa lang ang nagkuha ng haba nya” (<i>Yes she was weighed and measured. The clothes were not removed when she was weighed. Only one person took her length</i>).</p> <p>K-CSAM3-D when she brought her</p>	K-CSAM1-I, K-HCP1-I, K-T1-I, K-CSAM3-D	KII, IGD

	child to the RHU for consultation: “Yung timbang lang kinuha” (<i>Only the weight was taken</i>).		
No available supplier of RUTF	To make things worse, the Nutrition Officer (NO) tried purchasing RUTF from his limited budget, but the supplier of RUTF did not entertain him. K-HCP2-I: “Nag-try ata sila mag-purchase. Tumawag dun sa kinukuhaan ng RUTF at RUSF pero hindi man sya inentertain” (<i>I think they tried purchasing. They called the supplier of RUTF and RUSF but they were not entertained</i>). This problem was also narrated to the researcher by the NO.	K-HCP1-I, K-HCP2-I	KII
Lack of counselling on child’s condition and PIMAM program to SAM caregivers	In-depth counselling on the child’s malnutrition condition and the PIMAM program was insufficient. When asked if counselling on the causes and effects of malnutrition was done, K-CSAM1-I replied: “Hindi. Walang nakapagsabi sa akin.. Walang nagsabing kailangan i-enrol sa programa” (<i>No. Nobody told me. Nobody told me that I need to enrol my child in a program</i>). C-CSAM5-D: “Sa ako wara man” (<i>Nobody explained to me</i>)	K-CSAM1-I, K-CSAM2-I, K-CSAM5-D	KII, IGD, DO
COMMUNITY MOBILIZATION PRACTICES			
Insufficient number of community sensitization activities	Though there were sensitization activities, these were not enough to inculcate messages on malnutrition and the PIMAM program to the community. K-HCP1-I: “Hindi po ganun kasapat. Kasi kung ako tatanungin, gusto ko ma-reach every year at least siguro twice a year” (<i>It is not yet enough. If I were to be asked, I want it to be at least twice a year</i>).	K-CHW1-I, K-CHW2-I, K-HCP1-I	KII
Not all of the target population are included in the community sensitization activities	Community sensitization activities only targeted caregivers of malnourished children, pregnant and lactating women. Other members of the community were not included.	K-CHW1-I, K-CHW2-I, K-HCP1-I	KII
COMMUNITY HEALTH WORKER CAPACITY			
Inappropriate techniques in taking anthropometric measurements	As narrated by the caregivers, the CHWs had several errors in the technique in taking anthropometric measurements.	K-HCP2-I; K-CSAM3-D, K-CSAM4-D, K-CSAM6-D, K-CSAM5-D	KII, IGD
Lack of training on the	The CHWs conveyed that they did not	K-CHW1-I, K-	KII, IGD

PIMAM program	<p>have training on the PIMAM program. Among the NDs deployed only K-HCP2-I was trained.</p> <p>When asked about the weaknesses of the program: K-HCP2-I: “Lack of knowledge pa din regarding PIMAM, kasi kung titignan po parang ako lang yung trained kaya nahihirapan din ako pagdating sa barangay” (<i>Still lack of knowledge regarding PIMAM. I think I am the only one trained that is why I find it difficult when I go to the barangay</i>).</p>	CHW2-I; K-CHW1-D, K-CHW4-D; K-HCP2-I	
Inadequate of knowledge on the PIMAM program	<p>When asked about the PIMAM program, K-CHW1-I replied: “Parang narinig na pero nakalimutan na” (<i>I think I heard about it already but I forgot about it now</i>).</p> <p>K-CHW2,3,4-D: “Hindi man kami masyadong aware” (<i>We are not that aware</i>).</p>	K-CHW1-I, K-CHW2-I, K-HCP2-I, K-CHW3-D, K-CHW2-D, K-CHW4-D, K-HCP7-D, K-HCP1-D	KII, IGD
Insufficient counselling to parents pertaining to malnutrition and PIMAM program	<p>CHWs inadequate knowledge on malnutrition and the PIMAM program will result in insufficient counselling to the caregivers.</p> <p>K-CSAM2-I: “Wara man po eksplasyon sa center kin nyanga arog san an baby ko” (<i>There was no explanation from the health center why my baby’s condition is like this</i>).</p> <p>During the IGD, when asked whether the CHWs explained to them what are the causes of their child’s malnutrition, all K-CSAM-D answered “none”</p>	K-CSAM2-I; K-CSAM5-D, K-CSAM3-D, K-CSAM4-D, K-CSAM1-D	KII, IGD
Inadequate knowledge on malnutrition	The CHWs lacked a deep knowledge of the causes and effects of malnutrition.	K-CHW2-D, K-CHW4-D	IGD
COMMUNITY KNOWLEDGE ON SAM AND PIMAM			
Insufficient knowledge on malnutrition	<p>When asked if malnutrition was perceived as an illness in the community, K-HCP1-I replied: “Sa napansin po namin, hindi po nila ito nakikita as sakit. Nakikita nila ito as yun nga po, kulang. Yun po tingin nila. Pag kulang ka sa pagkain, yun po napayat ka” (<i>What we notice, they don’t perceive it as illness. They see it as deficiency. That is how they see it. When you are deficient in food, then you will get thin</i>).</p>	K-CHW1-I, K-CHW2-I, K-CSAM1-I, K-CSAM2-I, K-HCP1-I, K-HCP2-I, K-T1-I, K-T2-I, K-TBA-I, K-CSAM2-D, K-CSAM5-D, K-CHW7-D, K-HCP5-D	KII, IGD
Lack of knowledge on	When asked about the challenges of	K-HCP1-I;	KII, IGD

the PIMAM program	the PIMAM program, K-HCP2-D answered: “Siguro po yung awareness pa. Yung mga nanay kasi hindi pa aware na meron palang ganung programa” (<i>Maybe it is awareness. Because mothers are not aware that there is such a program</i>).	K-CHW1-I, K-CSAM1-I, K-CSAM2-I, K-T2-I, K-TBA-I, K-TH-I, K-CSAM6-D, K-HCP2-D, K-HCP5-D, K-HCP7-D	
Thin and underweight children are common and generally accepted in the community	K-CHW2-I: “Kung sa community, usad nanay tatay sa balay ang tingin sa community natural lang magkakaroon silang akus na malnourished” (<i>In the community, the mother and the father in the house thinks in the community that it is natural for them to have a child who is malnourished</i>). Others perceive being thin is just because the child plays a lot. K-CSAM1-I: “Pero meron akong nakikitang mga payat. Pero baka nasobrahan lang sa laro” (<i>But I see thin children. But I guess it is because they play a lot</i>).	K-CHW2-I; K-CSAM1-I, K-HCP1-I, K-T2-I; FN	KII, O
CAREGIVERS ATTITUDE AND CAPACITY			
Laziness and indifference of caregivers towards their child's condition	Most caregivers were not aware that malnutrition is an illness and so it was perceived as something acceptable and also because the parents are the same. K-CHW1-I: “Parang okay lang yan kasi wala naman sakit ngaya. Pag sinabihan na mababa, sasabihan ka ng nanay na ako mababa man”. (<i>They'd say: 'I think that is okay since he does not have illness'. If you tell them the child is short, the mother would tell you that she herself is short</i>). K-HCP1-I: “May iba na binabalewala for the sake na ‘wala man ngaya sa aram ko na sabi sadto san mga gurang” (<i>Others take the condition for granted. They would say 'I don't know anything about this that was mentioned by the elders'</i>). K-CHW2-I: “Hard-headed and ugak ang caregivers” (<i>The caregivers are hard-headed and lazy</i>).	K-CHW1-I, K-CHW2-I, K-CSAM1-I, K-HCP1-I; K-HCP2-I, K-T1-I, KT2-I, K-CHW2-D, K-HCP7-D, K-HCP5-D, K-HCP1-D	KII, IGD
Financial incapacity to go to the OTC	Because of poverty, transportation expenses going to the RHU and even to the BHS was a challenge for the caregivers. K-HCP1-I: “Kasi kung magyaya kami sa nanay na punta ka sa health center, wala po ako pamasaha” (<i>Because if we invite mothers to go to the health</i>	K-CSAM1-I, K-HCP1-I, K-CSAM6-D, K-HCP1-D	KII, IGD

	<p>center, they would reply, I don't have money for transportation).</p> <p>K-CSAM1-I: "Minsan ako po ang hindi pumupunta kasi walang budget sa pamasaha at maraming gawain sa bahay" (<i>At times, I don't go because I don't have a budget for the transportation and there are many house chores</i>)</p>		
Discouraged caregivers due to lack of improvement on their child's condition	<p>When the caregivers did not see improvement in their child, they got discouraged and asked for alternative treatments.</p> <p>K-HCP1-I: "Sinasabi sa amin ng mga nanay: ang mga pigtatao mong pagkaon, ayo man samon sa balay, wala naman further na improvement, pwede ngaya monthly na lang magbalik? .. Na didiscourage na magbalik balik kasi wala naman changes dahil walang supply ng RUTF" (<i>The mothers tell us: the food that you give are also available in our house and there is no further improvement in my child. Can we just go back monthly? They are discouraged to go back since there is no improvement because there is no supply of RUTF</i>).</p> <p>K-CSAM1-I: "Parang nagdadalawang-isip ako pumunta kasi wala namang nangyayari sa bata" (<i>I was having second thoughts in going since there was no improvement in my child</i>).</p> <p>K-HCP1-I: "Isa lang nag-abandon dati. Hindi man ngaya nagbabago estado ng baby ko, ganon pa rin naman sya. Sige ngaya ayoko na" (<i>There was only one who abandoned the treatment before. She said, there is no change in my baby's condition, it is still the same. Okay I don't want to continue anymore</i>).</p>	K-HCP1-I; K-CSAM1-I; K-HCP7-D	KII, IGD
Lack of knowledge on PIMAM program	<p>Even caregivers of enrolled SAM patients were not aware of the PIMAM program:</p> <p>K-CSAM1-I: "Hindi ko pa narinig. Hindi naman nabanggit sa akin ang PIMAM program" (<i>I haven't heard of it. PIMAM program was not mentioned to me</i>).</p> <p>K-CHW1-I: "Hindi pa po nila alam ang PIMAM program" (<i>They don't know the PIMAM program yet</i>).</p>	K-CSAM1-I; K-CSAM2-I	KII
ACCEPTANCE OF RUTF			
RUTF Feeding difficulties (i.e. child is fed up with taste, allergic reactions to	<p>There were a handful of RUTF feeding difficulties learned from the interviews and group discussions from allergies, spitting up and refusal to feed because</p>	K-HCP2-I, K-CSAM2-D, K-HCP7-D, K-CSAM1-D, K-	KII, IGD

<p>RUTF, child vomits RUTF)</p>	<p>the child had been fed up with the taste. K-CSAM4-D: "Namumula po tas nangangati ang katawan.. yung RUTF nga po, dun sya nagre-react" (<i>She reddens and is her body is itchy.. the RUTF was the one which caused her to react</i>). K-HCP2-I: "Hindi na kaya i-consume kasi nagsasawa ang bata. Hindi sinusunod ang prescribed amount, hindi nila nauubos" (<i>The RUTF is not consumed, the child gets fed up with taste. The prescribed amount is not followed, the child does not finish the ration</i>). K-CSAM1-D: "Palagi po pumupunta yung BHW sa health center, tinitimbang tapos binibigyan po ng peanut, yung green. Kaso po nasusuka" (<i>The BHW always goes to the center, weighs my child and gives the peanut, green in color. The problem is she is nauseated by it</i>).</p>	<p>CSAM4-D</p>	
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APPENDIX N

IN-COMMUNITY CASE FINDING QUESTIONNAIRES FOR SQUEAC STAGE 2

(Source: Action Against Hunger, Coverage Monitoring Network)

Questionnaire for Caregivers of SAM Patients Enrolled in the Program

Municipality: Barangay:	Ethnic Group: Date:
<p>1. Is this the first time that your child has been enrolled in the PIMAM program? (Ito ba ang unang pagkakataon na na-enrol ang inyong anak sa PIMAM program?) (Ini daw an inot na nag-enrol an saimong aki sa programang PIMAM?)</p> <p style="text-align: center;"> <input type="checkbox"/> YES (Oo) (Iyo) <input type="checkbox"/> Q5 <input type="checkbox"/> No (Hindi) (Bako) <input type="checkbox"/> Q2 </p>	
<p>2. How many times has your child been enrolled in the PIMAM program? (Ilang beses nang na-enrol ang inyong anak sa PIMAM program?) (Pirang beses na nag-enrol an saimong aki sa programang PIMAM?)</p> <p style="text-align: center;"> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> >3 </p>	
<p>3. Why has your child returned to the program? (Bakit bumalik ang anak mo sa programa?) (Nata nagbalik ang aki mo sa programa?)</p> <p><input type="checkbox"/> a. Child has discontinued the program and returned. (Tumigil ang bata sa programa at bumalik) Why? (Bakit?) (Pinundo kan aki ang programa buda nagbalik. Nata?)</p> <p><input type="checkbox"/> b. Child was cured and relapsed. (Gumaling ang bata subalit bumalik ang kanyang karamdaman o malnutrisyon) Why? (Bakit?) (Narahay na an aki kaso buminalik an saiyang kamatian o malnutrisyon. Nata?)</p>	
<p>4. Do you have other children enrolled in the program? (Meron ka bang ibang anak na naka enroll sa programa?) (Igwa kang ibang aki na naka enroll sa programa?)</p> <p style="text-align: center;"> <input type="checkbox"/> Yes (Meron) (Igwa) How many? (Ilan?) (Pira?) <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> No (Wala) (Wara) </p>	
<p>5. Why did you decide to enroll your child in the PIMAM program? (Ano ang dahilan kung bakit ka nag desisyon i-enrol ang inyong anak sa PIMAM program?) (Ano an dahilan kun nata ka nag desisyon na i-enroll an saimong aki sa programang PIMAM?)</p>	
<input type="checkbox"/> a. Recognition of the disease (Pagkilala sa karamdaman) (Pagmidbid sa helang)	<input type="checkbox"/> n. Support and encouragement of a community health worker (Suporta at paghihikayat ng

<ul style="list-style-type: none"> <input type="checkbox"/> b. Disease diagnosed by health personnel (<i>Ang karamdaman ay sinabi ng nars/doctor sa health center</i>) (<i>An kamatian na tinaram kan nars/doctor sa health center</i>) <input type="checkbox"/> c. Failed traditional treatment (<i>Hindi siya gumaling sa tradisyonal na gamutan</i>) (<i>Dai siya narahay sa tradisyonal na bulungan</i>) <input type="checkbox"/> d. Referral by traditional healer (<i>Ni-refer ng albularyo</i>) (<i>Tig-refer kan albularyo</i>) <input type="checkbox"/> e. Short distance; estimation _____ km (<i>Malapit sa health center: _____ km</i>) (<i>Rani sa health center: _____ km</i>) <input type="checkbox"/> f. Minimal or non-existing security risks (<i>Walang panganib sap ag-enrol</i>) (<i>Warang dapat ikatakot sa pag-enrol</i>) <input type="checkbox"/> g. Accessibility (no seasonal barriers) (<i>Madaling puntahan, di Makakahadlang ang panahon</i>) (<i>Madali dumanan, bako hulang sa panahon</i>) <input type="checkbox"/> h. Availability of transport (<i>Mayroong masasakyan</i>) (<i>Igwang malulunadan</i>) <input type="checkbox"/> i. Availability of financial resources for transport (<i>Mayroong pamasaha</i>) (<i>Igwang pamasaha</i>) <input type="checkbox"/> j. Availability of company during the journey to the health center (<i>Maroong makakasama papunta sa health center</i>) (<i>Igwang makakaiba sa pagduman sa health center</i>) <input type="checkbox"/> k. Support and encouragement of the husband (<i>Suportado at hinihikayat ako ng asawa ko</i>) (<i>Suportado asin tigkokombensir ako kan sakuyang agom</i>) <input type="checkbox"/> l. Support and encouragement of another family member (<i>Suportado at hinihikayat ako ng ibang myembro ng pamilya</i>) <input type="checkbox"/> m. Support and encouragement of parents with SAM children (<i>Suporta at paghihikayat ng mga</i> 	<p><i>health worker sa komunidad</i>) (<i>Suporta asin pagkokombensir kan health worker sa lugar</i>)</p> <ul style="list-style-type: none"> <input type="checkbox"/> o. Support and encouragement of neighbors (<i>Suporta at paghihikayat ng mga kapitbahay</i>) (<i>Suporta asin pagkokombensir Kan mga kataraning</i>) <input type="checkbox"/> p. Support and encouragement of a community leader (<i>Suporta at paghihikayat ng leader sa komunidad</i>) (<i>Suporta asin pagkokombensir kan leader sa lugar</i>) <input type="checkbox"/> q. Program appreciated by the Community (<i>Ang programa ay Pinapahalagahan ng komunidad</i>) (<i>An programa pinapahalagahan Kan lugar</i>) <input type="checkbox"/> r. Program staff is friendly and patient (<i>Ang staff ng programa ay mabait at matiyaga</i>) (<i>An staff kan programa maboboot asin matiyaga</i>) <input type="checkbox"/> s. Availability of RUTF (<i>Pagkakaroon ng RUTF</i>) (<i>Pagkakaigwa ki RUTF</i>) <input type="checkbox"/> t. Availability of systemic treatment (<i>Pagkakaroon ng iba pang mga gamut para sa kanyang karamdaman</i>) (<i>Pagkakaigwa kan iba pang mga bulong para sa saiyang kamatian</i>) <input type="checkbox"/> u. Free service (<i>Libre ang serbisyo</i>) (<i>Libre an serbisyo</i>) <input type="checkbox"/> v. Efficiency of treatment, quick and visible results (<i>Mabisa ang gamutan, mabilis at kita ang resulta</i>) (<i>Epektibo an pagbulong, makaskas asin hiling an resulta</i>) <input type="checkbox"/> w. Known child cured (<i>May alam akong parehong bata na gumaling</i>) (<i>May aram akong parehong aki na narahay</i>) <input type="checkbox"/> x. Access to RUTF (<i>Ang RUTF ay kayang i-access</i>) (<i>An RUTF kayang i-access</i>)
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<i>magulang na may anak na malnourished</i>	<input type="checkbox"/> y. Other <hr/> <i>(iba pang dahilan)</i> <i>(Iba pang rason)</i>
COMMENTS (<i>Mga Komento</i>)	

Questionnaire for Caregivers of SAM Patients Not Enrolled in the Program

Municipality: Barangay:	Ethnic Group: Date:
<p>1. Do you think your child is ill? <i>(Sa iyo bang palagay ang iyong anak ay may sakit?)</i> <i>(Sa iling mo may helang an aki mo?)</i></p> <p><input type="checkbox"/> YES (<i>Oo</i>) (<i>Iyo</i>) <input type="checkbox"/> No (<i>Hindi</i>) (<i>Dae</i>) <input type="checkbox"/> Q4</p>	
<p>1a. What symptoms is your child suffering from? <i>(Ano ano ang mga sintomas ng iyong anak?)</i> <i>(Ano an mga sintomas kan saimong aki?)</i></p> <p><input type="checkbox"/> a. Vomiting (<i>pagsusuka</i>) (<i>Pagsuka</i>) <input type="checkbox"/> b. fever (<i>lagnat</i>) (<i>kalentura</i>) <input type="checkbox"/> c. diarrhea (<i>pagtatae</i>) (<i>pag-udo udo</i>) <input type="checkbox"/> d. Weight loss (<i>pangangayayat</i>) (<i>pagniwang</i>) <input type="checkbox"/> e. Loss of appetite (<i>Walang gana kumain</i>) (<i>Warang gana magkaon</i>) <input type="checkbox"/> f. Apathy (<i>matamlay</i>) (<i>Kulang sa kusog</i>) <input type="checkbox"/> g. Swelling (<i>pamamanas</i>) (<i>May mga pag-ubag</i>) <input type="checkbox"/> h. Loss of hair (<i>Paglagas ng buhok</i>) (<i>Pag-orot ning buhok</i>) <input type="checkbox"/> i. Skin lesion (<i>sugat sa balat</i>) (<i>lugad lugad</i>) <input type="checkbox"/> j. Others (<i>Iba pa</i>)</p>	
<p>1b. What illness has caused these symptoms? <i>(Anong karamdaman ang sanhi ng mga sintomas na ito?)</i> <i>(Anong kamatian an sanhi kan mga sintomas na ini?)</i></p> <p><input type="checkbox"/> a. I don't know (<i>Hindi ko alam</i>) (<i>Dae ko aram</i>) <input type="checkbox"/> b. Malnutrition (<i>Malnutrisyon</i>) <input type="checkbox"/> c. Spiritual disease/witchcraft (<i>Kulam</i>) <input type="checkbox"/> d. Weight loss (<i>pangangayayat</i>) (<i>Pagniwang</i>) <input type="checkbox"/> e. Malaria <input type="checkbox"/> f. Diarrhea (<i>Pagtatae</i>) (<i>Pag udo-udo</i>) <input type="checkbox"/> g. Others (<i>Iba pa</i>)</p>	
<p>1c. How have you tried to treat this illness or how are you going to treat it? <i>(Papano mo ginagaot o gagamutin ang karamdamang ito?)</i> <i>(Pano mo tigbubulong o bubulungon an kamatian na ini?)</i></p> <p><input type="checkbox"/> a. Medicinal herbs (<i>Mga halamang herbal</i>) (<i>Herbal</i>) <input type="checkbox"/> b. Enriched meals (<i>Masustansyang pagkain</i>) (<i>Masustansyang kaunon</i>) <input type="checkbox"/> c. Fast (<i>Hindi pakakainin</i>) (<i>Dae papakaunon</i>)</p>	

<input type="checkbox"/> d. Medicinal products from market (<i>Mga gamot na nabibili sa palengke</i>) (<i>Mga nababakal na bulong sa saod</i>) <input type="checkbox"/> e. Medicinal products from pharmacy (<i>Mga gamot na nabibili sa botika</i>) (<i>Mga nababakal na bulong sa botika</i>) <input type="checkbox"/> f. Prayer (<i>Dasal</i>) (<i>Pagpamibi</i>) <input type="checkbox"/> g. Consultation of a traditional healer (<i>Kukunsulta sa albularyo</i>) (<i>Ipapailing sa albularyo</i>) <input type="checkbox"/> h. Consultation at the health center (<i>Kukunsulta sa health center</i>) (<i>Ipapahiling sa Health center</i>) <input type="checkbox"/> i. No treatment (<i>Hindi ipapagamot</i>) (<i>Dae lang ipapabulong</i>) <input type="checkbox"/> j. Others (<i>Iba pa</i>)
<p>1d. Who made the decision about the choice of treatment? (<i>Sino ang nag-desisyon sa napiling gamutan?</i>) (<i>Sisay an nagdesisyon sa pagpili kan pagpabulong?</i>)</p>
<p>2. Do you know that there is a service at the health facility dedicated to the treatment Of malnutrition? What do you know about the service? (<i>Alam mo ba na mayroong serbisyo sa health center na para lang sa pag-gamot ng malnutrisyon? Ano ang alam mo sa serbisyong ito?</i>) (<i>Aram mo man na igwang serbisyo sa health center na para sana sa pagbulong kan malnutrisyon? Ano an aram mo sa serbisyong ini?</i>)</p> <p> <input type="checkbox"/> Yes (<i>Oo</i>) (<i>Iyo</i>) <input type="checkbox"/> No (<i>Hindi</i>) (<i>Dae</i>) <input type="checkbox"/> STOP </p>
<p>3. Why didn't you bring your child to the health center for treatment? (<i>Bakit hindi mo dinala ang iyong anak sa health center para sya ay ipagamot?</i>) (<i>Nata dae mo dinara an aki mo sa health center para maipabulong siya?</i>)</p> <p> <input type="checkbox"/> a. Too far; distance in km; how many hours on foot (<i>Malayo, gaano kalayo, ilang oras</i>) (<i>Arayo, gurano kaarayo, pirang oras</i>) <input type="checkbox"/> b. Insecurity (<i>Delikado</i>) (<i>Delikado</i>) <input type="checkbox"/> c. Inaccessibility, seasonal flooding (<i>Mahirap puntahan – maulan, pangit na daan</i>) (<i>Mapagal dumanan-mauran, bako maray an agihan</i>) <input type="checkbox"/> d. Non-availability of means of transportation (<i>Walang masasakyan</i>) (<i>Warang malulunadan</i>) <input type="checkbox"/> e. Non-availability of the company for the journey (<i>Walang makakasama sa pagpunta</i>) (<i>Warang kairiba sa pagduman</i>) <input type="checkbox"/> f. Non-availability of financial resources for the journey (<i>Walang pamasaha</i>) (<i>Warang pamasaha</i>) <input type="checkbox"/> g. Husband/family refusal (<i>Tutol ang asawa o pamilya</i>) (<i>Tutol an agom o pamilya</i>) <input type="checkbox"/> h. Non-availability of financial resources for the treatment (<i>Walang perang pangpagamot</i>) (<i>Warang kwartang ipabulong</i>) <input type="checkbox"/> i. Carer ill (<i>May sakit ang taga pangalaga</i>) (<i>May helang an taga bantay</i>) </p>

- j. Family member ill (*May sakit ang myembro ng pamilya*) (*May helang an myembro kan pamilya*)
- k. Too busy. Reason: (*Masyado akong abala. Ano ang dahilan?*) (*May mga kahulangan. Ano an rason?*)
- l. No one to look after other children (*Walang magaalaga sa mga anak*) (*Warang mabantay sa mga aki*)
- m. Ashamed to enroll in the program (*Nahihiyang mag-enrol sa programa*) (*Nasusupog mag-enrol sa programa*)
- n. Lack of conviction that the program can help the child (*Kulang sa pananalig na matutulungan ng programa ang bata*) (*Kulang an pagtubod na matatabangan kan programa an aki*)
- o. Fear of hospital stay – away from home, fees (*Takot na ma-ospital ang bata*) (*Takot na ma-ospital an aki*)
- p. Preference of traditional treatment (*Mas gusto ang gamutan sa albularyo*) (*Mas gustong ipabulong sa albularyo*)
- q. Previous rejection of a child. When? (*Dati nang tinanggihan ang bata. Kailan?*) (*Dati nang dae inako an aki. Kasuarin?*)
- r. Rejection of a known child (*May kilalang bata na dati nang tinanggihan*) (*May midbid na aki na dati nang dae inako*)
- s. Quantity of RUTF is too little to justify the journey (*Ang binibigay na RUTF ay napaka konti para magbyahe pa kami*) (*Diiton an tigataong RUTF para magbyahe pa kami*)

4. Has your child been already enrolled in a PIMAM program?
 (*Dati na bang naka-enrol ang anak mo sa PIMAM program?*)
 (*Dati nang naka enrol na an aki mo sa programang PIMAM?*)

Yes (*Oo*) (*Iyo*)

No (*Hindi*) (*Dae*)

STOP

4a. Why isn't your child still in the program?
 (*Bakit wala pa din ang anak mo sa programa?*)
 (*Nata wara pa giraray an aki mo sa programa?*)

a. Defaulted (*Umalis na hindi tinatapos ang gamutan*) (*Nag-ali na dae tigtapos an pagbulong*)

When? (*Kailan?*) (*Kasuarin*) _____

Why? (*Bakit?*) (*Nata*) _____

b. Discharged as cured (*Discharged na sya kasi magaling na*) (*Discharged na siya ta narahay na*)

When? (*Kailan?*) (*Kasuarin*) _____

c. Discharged but not cured (*Discharged na sya kahit hindi pa magaling*) (*Discharged na siya*)

dawa dae pa nararahay

When? (*Kailan?*) (*Kasuarin*) _____

Why? (*Bakit?*) (*Nata*) _____

d. Other reason. Please specify. (*Ibang dahilan. Ano ito?*) (*Ibang rason. Ano ini?*)

Comments: (*Mga komento*) (*Komento*)

APPENDIX O

LETTER TO CITY/MUNICIPAL HEALTH OFFICERS

December 7, 2020

_____, MD
City/Municipal Health Officer
City/Municipality of _____

Dear Dr _____,

Good day! The Philippine Integrated Management of Acute Malnutrition Program started its implementation in the Bicol region in 2017. One of its components, the Out-patient Therapeutic Care (OTC) has been in place in different City/Municipal Health Offices in the province of Albay. Since monitoring and evaluation of the program is crucial for its success, I am motivated to do assessment research of the PIMAM program's OTCs in terms of access and coverage. It would be a mixed method research entitled: "The Philippine Integrated Management of Acute Malnutrition (PIMAM) Program in Albay Province, Philippines: An Assessment".

May I then humbly invite your OTC to participate in this research. Participation will entail sharing of your OTC data to me and my research team as part of the quantitative part of the research. If chosen to be included in the qualitative part of the research, participation will further involve being interviewed, being directly observed during a patient encounter at the OTC and assisting in the community assessment part of the research. The study will benefit the OTC as it may improve the program coverage through its results and recommendations. Rest assured that the name of the OTC or Municipal Health Office will be kept confidential throughout the research process and final paper reporting.

Should you agree to participate, an INFORMED CONSENT shall be accomplished after its thorough explanation. I am looking forward to working with you.

Thank you very much for your kind consideration

Sincerely yours,

ARLENE P. CALLEJA, MD
Chair, BRTTH PIMAM Program

APPENDIX P.1

INFORMED CONSENT FOR THE OTC TO PARTICIPATE IN A PIMAM ASSESSMENT RESEARCH

1. The _____ Municipal Health Office' Philippine Integrated Management of Acute Malnutrition (PIMAM) Out-patient Therapeutic Care (OTC) has been invited to participate in an assessment research to be conducted by Dr. Arlene P. Calleja of the Department of Pediatrics of the Bicol Regional Training and Teaching Hospital (BRTTH) and her team.
2. The purpose of the research is to assess our PIMAM OTC in terms of access and coverage and identify positive and negative factors affecting coverage for the period January to December 2019. It entails collecting quantitative data and possibly direct observation of activities at the OTC and gathering qualitative data by doing a community assessment through key-informant interviews, informal group discussions and other forms of community assessment to understand the contexts in the population which may influence PIMAM program access and coverage.
3. This participation is voluntary and the office may withdraw anytime for any reason without a penalty. I understand that the Municipal Health Office OTC will not be paid nor incur any amount for its participation. I understand that this assessment research may in fact benefit the OTC as it may improve the program coverage through its results and the researcher's recommendations. One possible risk to the OTC is its discrimination because of the results. This will be mitigated since the assessment will observe fairness and objectivity and that the name of our City/Municipality will be kept confidential through the use of codes in the data collection, analysis and final paper reporting. Furthermore, we are assured that all data will be kept secured and stored safely in a locked filing cabinet at the BRTTH Pediatric office.
4. Participation involves sharing our OTC data to the researcher and her team, being interviewed, being directly observed on how we conduct diagnosis and treatment of patients with severe acute malnutrition (SAM) at the OTC, and assisting in the community assessment part of the evaluation.
5. Collection of routine program data shall be done using online platforms as much as possible. I was assured that the researcher and her assistants will observe social distancing and infection prevention and control measures during possible additional data collection and observation of the OTC processes.

6. I understand that the research has been reviewed and approved by the BRTTH Institutional Review Board. For any problems or questions during the conduct of the research involving the participants at the OTC or in our catchment areas in the community, we may consult the BRTTH IRB chair Dr. Marlyn Daguno with contact number +639193305977.
7. I have read the informed consent thoroughly and understand the explanation provided to me. All my questions were answered to my satisfaction.
8. The duration of our OTC's participation shall commence once the Informed Consent is signed until the end of the data collection which will last for approximately 2 months.
9. I understand that this informed consent is valid for 12 months from the time of IRB approval.
10. I was informed that the Municipal Health Office OTC will receive the results and the recommendations of the evaluation research.
11. I have been given a copy of the consent form.
12. On behalf of the PIMAM OTC of the Municipality of _____, I voluntarily consent to participate in the study.

Representative Name and Signature
Of Municipality of _____ OTC

Date: _____

Researcher: ARLENE P. CALLEJA, MD

Contact Details: Mobile Phone: 0917-7959458
Email: annecalleja@yahoo.com

APPENDIX P.2

INFORMED CONSENT TO PARTICIPATE IN AN INFORMAL GROUP DISCUSSION FOR A PIMAM PROGRAM ASSESSMENT RESEARCH (ENGLISH VERSION)

1. I, _____, _____ years of age, _____ residing _____ at _____, has been invited to participate in an informal group discussion as part of an assessment research for the Philippine Integrated Management of Acute Malnutrition (PIMAM) Out-patient Therapeutic Care (OTC) of the Municipality of _____. The research will be conducted by Dr. Arlene P. Calleja of the Department of Pediatrics of the Bicol Regional Training and Teaching Hospital (BRTTH) and her team.
2. The purpose of the research is to assess our PIMAM OTC in terms of access and coverage and identify positive and negative factors affecting coverage for the period of January to December 2019. It entails collecting quantitative data and direct observation of activities at the OTC and gathering qualitative data by doing a community assessment through key-informant interviews, informal group discussions and other forms of community assessment to understand the contexts in the population which may influence PIMAM program access and coverage.
3. I understand that my participation is voluntary and that I may withdraw anytime without penalty. I also understand that I will be given a decent compensation for the time and transportation expenses that I will incur for my participation.
4. Participation in the group discussion will entail responding to questions of the interviewer and sharing my perceptions on the assigned topic which would revolve around reasons why children with severe acute malnutrition would default from or are not enrolled in the PIMAM program. I will also listen and may comment on the answers and views of the other participants in the group discussion. I was assured that my answers and insights will not be used against me nor will discriminate against me. Should I feel uncomfortable during the group discussion, I may withdraw from it anytime without question or penalty.
5. The discussion which would be in an informal and conversational tone may last from one to two hours and note-taking and audio-taping will be used to record our responses. It would be held at an assigned place which is an open space or a well ventilated room where it is

comfortable and convenient for the group. Social distancing and infection prevention and control measures will be observed.

6. The informal group discussion which I am to join will contribute valuable information as to the reasons why the program coverage in our OTC may be high or low. It will benefit the community where the results of the study will improve the program's coverage and eventually its impact in the identification and treatment of children with severe acute malnutrition.
7. A possible risk that I may face by participating is being reprimanded, discriminated against or losing my job because of my honest answers and perceptions. I was assured though that the researcher will not identify my name in any of her reports or final paper using information obtained from the group discussion nor will she divulge our names and responses to the municipal health office. Furthermore, my participation will remain confidential and that the anonymity of all the participants of the group discussion will be secured even in future uses of the data.
8. I understand that the evaluation research has been reviewed and approved by the BRTTH Institutional Review Board. For any problems or questions that might compromise my integrity and privacy during the conduct of the research, I may consult the BRTTH IRB chair Dr. Marlyn Daguno with contact number +639193305977.
9. I have read the informed consent thoroughly and understand the explanation provided to me. All my questions were answered to my satisfaction.
10. I understand that this informed consent is valid for 12 months from the time of IRB approval.
11. I was assured that I have the right to know the results of the evaluation research.
12. I have been given a copy of the consent form.
13. I hereby voluntarily consent to participate in the aforementioned informal group discussion for this evaluation research.

Printed Name and Signature

Date: _____

Researcher: ARLENE P. CALLEJA, MD

Contact Details: Mobile Phone: 0917-7959458
Email: annecalleja@yahoo.com

APPENDIX P.3

INFORMED CONSENT TO PARTICIPATE IN AN INFORMAL GROUP DISCUSSION FOR A PIMAM PROGRAM ASSESSMENT RESEARCH (FILIPINO VERSION)

PAHINTULOT PARA MAKIBAHAGI SA ISANG TALAKAYANG PANG GRUPO PARA SA ISANG RESEARCH SA PAGSUSURI NG PIMAM PROGRAM

1. Ako si _____, _____ na _____ taong _____ gulang, _____ nakatira sa _____ ay naimbitahan na makibahagi sa isang talakayang pang grupo bilang bahagi ng isang pananaliksik o research sa pagsusuri ng Philippine Integrated Management of Acute Malnutrition (PIMAM) Out-patient Therapeutic Care (OTC) ng _____ Municipality. Ang research ay isasagawa ni Dr. Arlene P. Calleja ng Department of Pediatrics ng Bicol Regional Training and Teaching Hospital at ng kanyang mga kasama.
2. Ang layunin ng research ay upang suriin ang access at coverage ng aming PIMAM OTC at ng mga kadahilanan na nakakaapekto sa mga ito para sa mga buwan ng Enero hanggang Disyembre 2019. Kinakailangan nilang mangolekta ng mga datos at direktang mag-observe sa aming OTC at mangolekta din ng mga datos mula sa pagusuri sa komunidad sa pamamagitan ng mga interbyu, talakayang pang grupo at iba pang mga paraan upang maintindihan ang mga konteksto sa komunidad na nakakaapekto sa aming PIMAM OTC coverage.
3. Naiintindihan ko na ang aking pagsali sa talakayan ay boluntaryo at maaari akong umurong sa kahit anong kadahilanan sa ano mang oras ng walang pataw na kaparusahan. Naiintindihan ko din na ako ay pagkakalooban ng kabayaran para sa panahon at pamasaha na aking gugugulin sa pagsali.
4. Sa pakikibahagi ko sa talakayang pang grupo, ako ay inaasahang sumagot sa mga katanungan ng nag-interbyu at ibahagi ang aking mga pananaw patungkol sa mga kadahilanan kung bakit hindi nagtatapos o hindi nakakasali ang mga batang may malnutrisyon sa programa. Hinihikayat din akong makinig at mag-komento sa mga sagot at pananaw ng aking mga kasama sa talakayan. Itinitiyak na ang aking mga kasagutan at pananaw ay hindi gagamitin labas sa akin at hindi ako pakikitunguhan ng kaiba dahil dito. Kung ako ay magiging hindi

komportable habang nasa talakayan, maaari akong umurong o umalis ng walang tanong at kaparusahan.

5. Ang talakayan ay magiging impormal at hahaba ng isa hanggang dalawang oras. Itatala at ire-record mula sa isang audio-recorder and aming mga sagot at pananaw. Ang talakayan ay gagawin sa isang lugar na komportable, panlabas na lugar o silid na malayang dumadalos ang hangin at madaling puntahan para sa aming lahat. Pananatilihin ang social distancing at mga paraan upang maiwasan ang maaaring pagkahawa sa anumang impeksyon.
6. Ang talakayang pang grupo na aking sasalihan ay magbibigay ng mahalagang impormasyon patungkol sa mga dahilan kung bakit ang coverage ng PIMAM OTC sa aming bayan ay mataas o mababa. Ito ay magbibigay ng pakinabang sa komunidad kung saan ang mga resulta ng pagsusuri ay magpapabuti sa coverage ng programa upang lalong mapabuti ang pagkilala at paggamot ng mga batang may manutrisyon.
7. Ang posibleng panganib na aking haharapin sa pakikibahagi sa talakayan ay ang mapagalitan, pakitunguhan ng kaiba o mawalan ng trabaho dahil sa aking mga tapat na sagot at pananaw. Tiniyak naman sa akin ng mananaliksik o researcher na ang aking pangalan ay hindi makikilala sa lahat ng kanyang mga report at hindi rin ibibigay ang aming mga pangalan sa municipal health office. Bukod pa dito, ang aking paglahok sa talakayan ay mananatiling kompidensyal at ang anonimungan ng lahat ng mga kalahok sa talakayan ay secure sa hinaharap na paggamit ng datos.
8. Naiitindihan ko na ang research an ito ay pinagaralan at inaprobahan na ng BRTTH Institutional Review Board. Para as anumang mga problema o katanungan na maaaring ikompromiso ng aking integridad at privacy sa panahon ng pagsasagawa ng research, maaari kong konsultahin ang pinuno ng BRTTH IRB na si Dr. Marlyn Daguno na may telepono bilang +639193305977.
9. Nabasa ko nang lubusan ang ipinaalam na pahintulot at naintindihan ko ang mga paliwanag sa akin. Lahat ng aking mga katanungan ay nasagot nang mabuti.
10. Naiintindihan ko na itong ipinaalam na pahintulot ay may bias sa loob ng 12 buwan matapos ang IRB approval ng research.
11. Ako ay panatag na ako ay may karapatan na malaman ang mga resulta ng research.
12. Ako ay binigyan ng kopya nitong ipinaalam na pahintulot.
13. Ako ay boluntaryong nagpapahintulot na makibahagi sa talakayang pang grupo para sa research ng pagsusuri sa PIMAM OTC.

Nakalimbag na Pangalan at Lagda

Petsa: _____

Mananaliksik: ARLENE P. CALLEJA, MD

Contact Details: Mobile Phone: 0917-7959458
Email: annecalleja@yahoo.com

APPENDIX P.4

INFORMED CONSENT TO PARTICIPATE IN AN INFORMAL GROUP DISCUSSION FOR A PIMAM PROGRAM ASSESSMENT RESEARCH (BIKOLANO VERSION)

PAGTUGOT PARA MAKI-INTRA SA SARONG TALAKAYANG PANG GRUPO PARA SA SARONG RESEARCH SA PAGESUSURI NING PIMAM PROGRAM

1. Ako si _____, _____ anyos, _____ nakaistar sa _____ sa _____, naimbitaran na makisabay sa sarong talakayang pang grupo na kaintra sa sarong pag-aadal o research sa pagsusuri kan Philippine Integrated Management of Acute Malnutrition (PIMAM) Out-patient Therapeutic Care (OTC) sa Munisipalidad kan _____. An research na ini ay gigibuhon ni Dr. Arlene P. Calleja kan Department of Pediatrics kan Bicol Regional Training and Teaching Hospital asin kan saiyang mga kairiba.
2. An gustong maipaabot kan research na ini ay para surion an access asin coverage kan samong PIMAM OTC asin man kan mga kadahilanan na nakakaapektar digdi para sa mga bulan kan Enero hanggang Disyembre 2019. Kinakaipuhan ninda mangolekta ki mga datos asin direktang mag-oberba sa samong OTC asin man mangolekta ki mga datos ali sa pagsusuri sa komunidad sa tabang kan mga interbyu, talakayang pang grupo asin iba pang mga paagi para masabotan an mga konteksto sa komunidad na nakakaapektar sa samong PIMAM OTC coverage.
3. Nasasabotan ko na an sakong pag-intra sa talakayang ini ay boluntaryo asin pwede akong umatras sa maski anong rason sa ano mang oras na daeng pataw na kaparusahan. Nasasabotan ko man na tatawan ako ning kabayadan para sa panahon asin pamasaha na sakong gagastuson sa pag-intra.
4. Sa pag-intra ko sa talakayang pang grupo, tig-aasahan akong magsimbag sa mga kahapotan kan nag-iinterbyu asin magtao kan sakong mga opinyon patungkol sa mga kadahilanan kun nata dae natatapos o dae nakakaintra an mga kaakiang may malnutrisyon sa programa. Inaagda man akong makidangog asin mag-komento sa mga simbag asin pananaw ning sakong mga kairiba sa talakayan. Sinisigurado na an sakong mga kasimbagan asin opinyon dae gagamiton laban sakuya asin dae ako pakikiibahan na dae maray dahil digdi. Kun ako magiging dae komportable habang yaon sa talakayan,

pwede akong umatras o umali ning warang kahapotan asin kaparusahan.

5. An talakayan na ini magiging impormal asin lalawig ki saro hanggang duwang oras. Isusurat asin ire-record ali sa sarong audio-recorder an samong mga simbag asin opinyon. An talakayan na ini gigibuhon sa sarong lugar na komportable, panluwas na lugar o kwarto na nagdadalos ang paros asin pasil dumanan para sa samo gabos. Maipapangako an social distancing asin mga paagi para malikayan an posibleng pagkalat kan arin mang impeksyon.
6. An talakayang pang grupo na sakong iintrahan magtatao ning importanteng impormasyon patungkol sa mga dahilan kun nata an coverage kan PIMAM OTC sa samong lugar alangkaw o hababa. Ini magtatao ki pakinabang sa komunidad kun sain an mga resulta ning pagsusuri makakarabay sa coverage kan programa para lalo pang maparahay an pagmidbid asin pagbulong kan mga kaakiang igwang manutrisyon.
7. An sarong posibleng delikado na sakong kakahampangon sa pag-intra sa talakayang ini an madagitan, paki-ibahan ki bako maray o mawaran ning trabaho resulta kan sakuyang mga lehitimong simbag asin prinsipyo. Sinigurado man sako kan mananaliksik o researcher na an sakong pangaran dae mamimidbid sa gabos ning saiyang mga report asin dae man itatao an samong mga pangaran sa municipal health office. Lain pa digdi, an sakong pag-intra sa talakayan na ini mananatiling kompidensyal asin an pagkakamidbidan kan gabos na mga kaintra sa talakayan na ini ay secure sa hinaharap na paggamit ning datos.
8. Nasasabotan ko na an research na ini inadalan asin inaprobahan na kan BRTTH Institutional Review Board. Para sa anumang mga problema o kahapotan na pwedeng ikompromiso kan sakong integridad asin privacy sa panahon ning paggibo kan research, pupwede kong konsultahon an pinuno kan BRTTH IRB na si Dr. Marlyn Daguno na may telepono bilang +639193305977.
9. Nabasa ko ning maray an ipinapaaram na pagtugot asin nasasabotan ko an mga paliwanag sakuya. Gabos na sakong mga kahapotan na ini nasimbag ki maray.
10. Nasasabotan ko na itong ipinaaram na pagtugot igwang bisa sa laog ki doseng (12) bulan pagkatapos maaprobahan ng IRB ang research.
11. Panatag ako na igwa akong karapatan na maaraman an mga resulta kaining research.
12. Tinawan ako ki kopya kaining ipinapaaram na pagtugot.

13. Boluntaryo akong nagtutugot na mag-intra sa talakayang pang grupo na ini para sa research ning pagsusuri sa PIMAM OTC.

Nakasurat na Pangaran asin Pirma

Petsa: _____

Mananaliksik: ARLENE P. CALLEJA, MD

Contact Details: Mobile Phone: 0917-7959458
Email: annecalleja@yahoo.com

APPENDIX P.5

INFORMED CONSENT FOR A KEY INFORMANT INTERVIEW FOR A PIMAM PROGRAM ASSESSMENT RESEARCH (ENGLISH VERSION)

1. I, _____, _____ years of age, _____ residing _____ at _____, has been invited to be interviewed as part of an assessment research for the Philippine Integrated Management of Acute Malnutrition (PIMAM) Out-patient Therapeutic Care (OTC) of the Municipality of _____. The research will be conducted by Dr. Arlene P. Calleja of the Department of Pediatrics of the Bicol Regional Training and Teaching Hospital (BRTTH) and her team.
2. The purpose of the research is to assess our PIMAM OTC in terms of access and coverage and identify positive and negative factors affecting coverage for the period of January to December 2019. It entails collecting quantitative data and direct observation of activities at our OTC and gathering qualitative data by doing a community assessment through key-informant interviews, informal group discussions and other forms of community assessment to understand the contexts in the population which may influence PIMAM program access and coverage.
3. I understand that my participation is voluntary and that I may withdraw anytime without penalty. I also understand that I will be given a decent compensation for the time and transportation expenses that I will incur for the interview.
4. Being interviewed will entail responding to questions of the interviewer and sharing my perceptions on the assigned topic. The interview would be done through an online platform if feasible. Otherwise, it would take place in an open space or a well-ventilated room where it is convenient for me, observing social distancing and infection prevention and control measures. It may last for about one hour and note-taking and audio-taping will be used to record my responses. I was assured that my answers and insights will not be used against me nor will discriminate against me. Should I feel uncomfortable during the interview, I may withdraw from it or request it to be stopped anytime without question or penalty.
5. My answers and responses gathered from the interview will contribute valuable information as to the reasons why the program coverage may be high or low. It will benefit the community where the results of the

study will improve the program's coverage and eventually its impact in the identification and treatment of children with severe acute malnutrition.

6. Possible risks that I may face by being interviewed is being reprimanded, discriminated against or losing my job because of my honest answers and perceptions. I was assured though that the researcher will not identify my name in any of her reports or final paper using information obtained from the interview nor will she divulge my name and responses to the municipal health office. Furthermore, my participation will remain confidential and that my anonymity will be secured even in future uses of the data.
7. I understand that the evaluation research has been reviewed and approved by the BRTTH Institutional Review Board. For any problems or questions that might compromise my integrity and privacy during the conduct of the research, I may consult the BRTTH IRB chair Dr. Marlyn Daguno with contact number +639193305977.
8. I have read the informed consent thoroughly and understand the explanation provided to me. All my questions were answered to my satisfaction.
9. I understand that this informed consent is valid for 12 months after the IRB approval.
10. I was informed that I have the right to know the results of the evaluation research.
11. I have been given a copy of the consent form.
12. I hereby voluntarily consent to be interviewed for this evaluation research.

Printed Name and Signature

Date: _____

Researcher: ARLENE P. CALLEJA, MD

Contact Details: Mobile Phone: 0917-7959458
Email: annecalleja@yahoo.com

APPENDIX P.6

INFORMED CONSENT FOR A KEY INFORMANT INTERVIEW FOR A PIMAM PROGRAM ASSESSMENT RESEARCH (FILIPINO VERSION)

PAHINTULOT NA MAINTERBYU PARA SA ISANG RESEARCH SA PAGESUSURI NG PIMAM PROGRAM

1. Ako si _____, _____
na _____ taong _____ gulang, _____ nakatira sa _____ ay
naimbitahan na mainterbyu bilang bahagi ng isang pananaliksik o
research sa pagsusuri ng Philippine Integrated Management of Acute
Malnutrition (PIMAM) Out-patient Therapeutic Care (OTC) ng
_____ Municipality. Ang research ay isasagawa ni Dr.
Arlene P. Calleja ng Department of Pediatrics ng Bicol Regional
Training and Teaching Hospital at ng kanyang mga kasama.
2. Ang layunin ng research ay upang suriin ang access at coverage ng
aming PIMAM OTC at ng mga kadahilanan na nakakaapekto sa mga
ito para sa mga buwan ng Enero hanggang Disyembre 2019.
Kinakailangan nilang mangolekta ng mga datos at direktang mag-
obserba sa aming OTC at mangolekta din ng mga datos mula sa
pagusuri sa komunidad sa pamamagitan ng mga interbyu, talakayang
pang grupo at iba pang mga paraan upang maintindihan ang mga
konteksto sa komunidad na nakakaapekto sa aming PIMAM OTC
coverage.
3. Naiintindihan ko na ang aking pakikibahagi ay boluntaryo at maaari
akong umurong sa kahit anong kadahilanan sa ano mang oras ng
walang pataw na kaparusahan. Naiintindihan ko din na ako ay
pagkakalooban ng kabayaran para sa panahon at pamasahe na aking
gugugulin sa interbyu na ito.
4. Sa pagpahintulot ko na mainterbyu, ako ay inaasahang sumagot sa
mga katanungan ng nag-interbyu at ibahagi ang aking mga pananaw
patungkol sa paksa. Ang interbyu ay magaganap sa pamamagitan ng
isang online na plataporma hanggat maaari. Kung hindi man, ito ay
gaganapin sa isang panlabas na lugar o di kaya sa isang silid na
libreng dumadaloy ang hangin, na maginhawa para sa akin at kung
saan pananatilihin ang social distancing at mga paraan upang
maiwasan ang maaaring pagkalat ng anumang impeksyon. Ito ay
hahaba ng mahigit kumulang na isang oras. Itatala at ire-record mula
sa isang audio-recorder and aking mga sagot at pananaw. Itinitiyak na
ang aking mga kasagutan at pananaw ay hindi gagamitin labas sa akin
at hindi ako pakikitunguhan ng kaiba dahil dito. Kung ako ay magiging

hindi komportable habang iniinterbyu, maaari akong umurong o ipatigil ito ng walang tanong at kaparusahan.

5. Ang mga sagot ko sa interbyu ay magbibigay ng mahalagang impormasyon patungkol sa mga dahilan kung bakit ang coverage ng PIMAM OTC sa aming bayan ay mataas o mababa. Ito ay magbibigay ng pakinabang sa komunidad kung saan ang mga resulta ng pagsusuri ay magpapabuti sa coverage ng programa upang lalong mapabuti ang pagkilala at paggamot ng mga batang may manutrisyon.
6. Ang mga posibleng panganib na aking haharapin dahil sa interbyu ay ang mapagalitan, pakitunguhan ng kaiba o mawalan ng trabaho dahil sa aking mga tapat na sagot at pananaw. Tiniyak naman sa akin ng mananaliksik o researcher na ang aking pangalan ay hindi makikilala sa lahat ng kanyang mga report at hindi rin ito ibibigay sa municipal health office. Bukod pa dito, ang aking paglahok sa interbyu ay mananatiling kompidensyal at ang aking anonimungan ay secure sa hinaharap na paggamit ng datos.
7. Naiitindihan ko na ang research an ito ay pinagaralan at inaprobahan na ng BRTTH Institutional Review Board. Para sa anumang mga problema o katanungan na maaaring ikompromiso ng aking integridad at privacy sa panahon ng pagsasagawa ng research, maaari kong konsultahin and pinuno ng BRTTH IRB na si Dr. Marlyn Daguno na may telepono bilang +639193305977.
8. Nabasa ko nang lubusan ang ipinaalam na pahintulot at naintindihan ko ang mga paliwanag sa akin. Lahat ng aking mga katanungan ay nasagot nang mabuti.
9. Naiintindihan ko na itong ipinaalam na pahintulot ay may bisa sa loob ng 12 buwan pagkatapos ng IRB approval ng research.
10. Ako ay panatag na ako ay may karapatan na malaman ang mga resulta ng research.
11. Ako ay binigyan ng kopya nitong ipinaalam na pahintulot.
12. Ako ay boluntaryong nagpapahintulot na mainterbyu para sa research ng pagsusuri sa PIMAM OTC.

Nakalimbag na Pangalan at Lagda

Petsa: _____

Mananaliksik: ARLENE P. CALLEJA, MD

Contact Details: Mobile Phone: 0917-7959458
Email: annecalleja@yahoo.com

APPENDIX P.7

INFORMED CONSENT FOR A KEY INFORMANT INTERVIEW FOR A PIMAM PROGRAM ASSESSMENT RESEARCH (BIKOLANO VERSION)

PAGTUGOT NA MAINTERBYU PARA SA SARONG RESEARCH SA PAGSUSURI NING PIMAM PROGRAM

1. Ako si _____, _____
anyos, _____ nakaistar _____ sa
_____,
naimbitaran na mainterbyu na kaintra sa sarong pag-aadal o research
sa pagsusuri kan Philippine Integrated Management of Acute
Malnutrition (PIMAM) Out-patient Therapeutic Care (OTC) sa
Munisipalidad kan _____. An research na ini gigibuhon ni
Dr. Arlene P. Calleja kan Department of Pediatrics kan Bicol Regional
Training and Teaching Hospital asin kan saiyang mga kairiba.
2. An gustong maipaabot kan research na ini ay para surion an access
asin coverage kan samong PIMAM OTC asin man kan mga
kadahilanan na nakakaapektar digdi para sa mga bulan kan Enero
hanggang Disyembre 2019. Kinakaipuhan ninda mangolekta ki mga
datos asin direktang mag-oberba sa samong OTC asin man
mangolekta ki mga datos ali sa pagsusuri sa komunidad sa tabang kan
mga interbyu, talakayang pang grupo asin iba pang mga paagi para
masabotan an mga konteksto sa komunidad na nakakaapektar sa
samong PIMAM OTC coverage.
3. Nasasabotan ko na an sakong pag-intra ay boluntaryo asin pwede
akong umatras sa maski anong rason sa ano mang oras na daeng
pataw na kaparusahan. Nasasabotan ko man na tatawan ako ning
kabayadan para sa panahon asin pamasaha na sakong gagastuson sa
interbyu na ini.
4. Sa pagtugot ko na mainterbyu, tig-aasahan akong magsimbag sa mga
kahapotan kan nag-iinterbyu asin magtao kan sakong mga opinyon
patungkol sa paksa. Ang interbyu ay mangyayari sa paagi kan sarong
online na plataporma hanggat posible. Kun bako man, ini gigibuhon sa
sarong panluwas na lugar o di kaya sa sarong kwarto na libreng
nagdadalos an paros, na komportable para sako asin kun saen
ipapangako an social distancing asin mga paagi para malikayan an
posibleng pagkalat kan arin mang impeksyon. Ini maghahaloy na
pwedeng abuton ki mga sarong oras. Isusurat asin ire-record ali sa
sarong audio-recorder an sakong mga simbag asin opinion.
Sinisigurado na an sakong mga kasimbagan asin opinyon dae

gagamiton laban sakuya asin dae ako pakikiibahan na dae maray dahil digdi. Kun ako magiging dae komportable habang tig-iinterbyu, pwede akong umatras o ipapundo ini na warang kahapotan asin kaparusahan.

5. An mga simbag ko sa interbyu na ini magtatao ning importanteng impormasyon patungkol sa mga dahilan kun nata an coverage kan PIMAM OTC sa samong lugar alangkaw o hababa. Ini magtatao ki pakinabang sa komunidad kun sain an mga resulta kan pagsusuri na ini makakarabay sa coverage kan programa para lalo pang maparahay an pagkakamidbid asin pagbulong sa mga kaakiang igwa ki malnutrisyon.
6. An mga posibleng delikado na sakong kakahampangon resulta kan interbyu na ini an madagitan, pakiiibahan na bako maray o mawaran ning trabaho resulta kan sakong tunay na mga simbag asin opinyon. Sinisigurado man sako kan mananaliksik o researcher na an sakong pangaran dae mamimidbidan sa gabos ning saindang mga report asin dae man ito itatao sa municipal health office. Lain pa digdi, an sakong pag-intra sa interbyu na mananatiling kompidensyal asin an sakong pagkakamidbidan ay secure sa hinaharap na paggamit kan datos.
7. Nasasabotan ko na an research na ini inadalan asin inaprobahan na kan BRTTH Institutional Review Board. Para sa anumang mga problema o kahapotan na pwedeng ikompromiso kan sakong integridad asin privacy sa panahon ning paggibo kan research, pupwede kong konsultahon an pinuno kan BRTTH IRB na si Dr. Marlyn Daguno na may telepono bilang +639193305977.
8. Nabasa ko ning maray an ipinapaaram na pagtugot asin nasasabotan ko an mga paliwanag sakuya. Gabos na sakong mga kahapotan na ini nasimbag ki maray.
9. Nasasabotan ko na itong ipinapaaram na pagtugot igwang bisa sa laog ki doseng (12) bulan pagkatapos maaprobahan ng IRB ang research.
10. Panatag ako na igwa akong karapatan na maaraman an mga resulta kaining research.
11. Tinawan ako ki kopya kaining ipinapaaram na pagtugot.
12. Boluntaryo akong nagtutugot na mainterbyu para sa research ning pagsusuri sa PIMAM OTC.

Nakasurat na Pangaran asin Pirma

Petsa: _____

Mananaliksik: ARLENE P. CALLEJA, MD

Contact Details: Mobile Phone: 0917-7959458
Email: annecalleja@yahoo.com

APPENDIX Q

ETHICAL CONSIDERATIONS

Informed Consent

Gathering of routine program data from each of the OTCs and doing interviews and informal group discussion required obtaining an informed consent from the participants. A formal letter of invitation to participate in the research together with a written informed consent (Appendix O) were given and discussed personally or by phone to the City/Municipal Health Officers. Informed consent to participants who took part in the key informant interviews and informal group discussions were obtained prior to the commencement of the data gathering. The informed consent form was written in a language that the participants understood (Filipino and Bicolano dialect) and was thoroughly explained by the researcher. It contained the purpose and procedure of the evaluation, anticipated benefits and risks, clear statement that participation is voluntary, statement of confidentiality and privacy, the compensation that the participant may receive, the expiration of the consent and the name and contact number of the researcher.

Confidentiality and Data Privacy

The study complied with the Philippine Data Privacy Act and observed confidentiality by protecting the identity of the OTCs and participants during the key informant interviews and informal group discussions. Codes or identity letters were used instead of names of the OTCs. In the same manner, codes were given to the respondents so as not to identify them with their answers and accounts during the qualitative data collection. All data collected were kept securely and confidentially in a locked filing cabinet or computer files at the BRTTH Pediatric office. Only the researcher and research assistants shall have access to all the data.

Openness and Integrity

The researcher observed integrity throughout the study by being honest, sincere and consistent in all of the procedures that were undertaken and in the reporting and interpretation of results. Sharing of the results, tools and resources and being open to suggestions and criticism ensured openness.

Autonomy

The study observed autonomy by respecting the decision of the participants to join or not or to withdraw from the study anytime without consequence after having given them enough information to make a proper decision.

Beneficence and Non-maleficence

The results of this assessment research form the basis for its improvement in program coverage. This will inevitably also improve program effectiveness and impact which would benefit the participants and the whole community especially children with severe acute malnutrition. Interviews and informal group discussions were part of the qualitative data collection which may have posed risks to the participants when their position could have been jeopardized because of their answers in the interviews. This was prevented by observing confidentiality and data privacy. Since the research was conducted in the midst of COVID-19 pandemic, another risk to the participants and the researchers was exposure to possible COVID-19 infection during the interviews, group discussions and SAM case findings. This was mitigated by observing proper infection prevention and control measures such as social distancing, wearing of personal protective equipment and using hand sanitizers. Social distancing and observation of minimum health standards were observed during the SAM case finding. The researcher and the research assistants inhibited from taking part in any form of data gathering during occasions when the risk of transmitting COVID-19 to the participants was possible.

Conflict of Interest

The researcher is the Chair of the Bicol Regional Training and Teaching Hospital (BRTTH) PIMAM program and a trainer of the PIMAM program in the province of Albay. She observed objectiveness and fairness in all the steps of data collection, analysis and recording of results. The researcher is likewise an alternate member of the BRTTH-IRB and did not influence and respected all decisions of the board. The researcher does not have any financial interest in the study.

APPENDIX R

GANTT CHART OF ACTIVITIES

	May 2020	July 2020	Nov 2020	Feb 2021	March 2021	April 2021	May 2021	July 2021	August 2021
Research Proposal Presentation to Adviser									
Research Proposal Oral Presentation									
Institutional Review Board Approval									
Data Collection, Processing and Analysis									
Writing and Approval of the final paper									
Final Paper Oral Presentation/ Defense									

APPENDIX S

GCP CERTIFICATE



APPENDIX T

RESEARCH PROTOCOL CERTIFICATE OF TECHNICAL APPROVAL



UNIVERSITY OF THE PHILIPPINES
OPEN UNIVERSITY
FACULTY OF MANAGEMENT AND DEVELOPMENT STUDIES

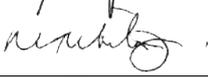
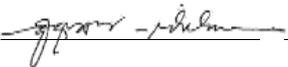
Date: July 7, 2020

DR. PRIMO G. GARCIA
Dean, Faculty of Management and Development Studies
UP Open University

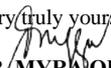
Through PROPER CHANNELS

Dear Dean Garcia:

We have the honor to inform you that the undersigned served in the oral examination of ARLENE P. CALLEJA, MIH/Health Service Development candidate who presented his/her thesis defense entitled THE PHILIPPINE INTEGRATED MANAGEMENT OF ACUTE MALNUTRITION (PIMAM) PROGRAM IN ALBAY PROVINCE, PHILIPPINES: AN ASSESSMENT on 10 July 2020, 4:30 AM at UPOU Headquarters, Faculty of Management and Development Studies, UP Open University and voted as follows:

PANEL MEMBERS	FOR APPROVAL	FOR DISAPPROVAL
DR. MYRA ORUGA Panel Chair/Adviser		_____
DR. RAYMUNDO CELESTINO HABITO, JR. Critic		_____
DR. LESTER SAM GEROY Member		_____
ASST. PROF. QUEENIE RIDULME Member		_____
ASST. PROF. RITA RAMOS Member		_____
Committee's Decision:	(/) PASSED	() FAILED

Additional Remark/s: _____

Very truly yours,

DR. MYRA ORUGA
Panel Chair/Adviser
Program Chair, MIH

APPENDIX U

BRTTH IRB CERTIFICATE OF APPROVAL

	BRTTH – INSTITUTIONAL REVIEW BOARD	Form No.:	2.6
	CERTIFICATE OF APPROVAL	Version No.:	4
		Approval Date:	May 2018
		Effective Date:	May 2018

Date (mm/dd/yyyy):	November 23, 2020		
This is to certify that the following protocol and related documents have been granted approval by the BRTTH IRB for implementation			
IRB Protocol No.	2020-025	Sponsor Protocol No.	n/a
Principal Investigator/s	Dr. Arlene Calleja	Sponsor	n/a
Title:	THE PHILIPPINE INTEGRATED MANAGEMENT OF ACUTE MALNUTRITION (PIMAM) PROGRAM IN ALBAY PROVINCE, PHILIPPINES: AN ASSESSMENT		
Protocol Version No.	1	Version Date:	October 19, 2020
ICF Version No.	1	Version Date:	October 19, 2020
Other documents	none		
Study sites	City and Municipality PIMAM OTCs in the Province of Albay.		
Type of Review	<input checked="" type="checkbox"/> Full board	Duration of Approval From	Frequency of continuing review: 1 year or as required by the IRB
	<input type="checkbox"/> Expedited		
	<input type="checkbox"/> Exempt		
Date of Meeting	November 21, 2020	November 21, 2020 to November 21, 2021	
Investigator Responsibilities after Approval	<ul style="list-style-type: none"> Submit document amendments for IRB approval before implementing them Submit SAE and SUSAR reports to the IRB within 7 days Submit progress report every ____ months Submit final report after completion of protocol procedures at the study site Report protocol deviation/ violation Comply with all relevant international and national guidelines and regulations Abide by the principles of good clinical practice and ethical research 		


MARLYN A. DAGUNO, RN, MAEd-NE, MAN, PhD
 Chairperson, Institutional Review Board
 Date: November 23, 2020

Received by: 
ARLENE P. CALLEJA, MD
 Name and Signature
 Date (mm/dd/yyyy): 11/24/2020



APPENDIX V

CERTIFICATE OF BRTH IRB APPROVAL OF RESEARCH PROTOCOL AMENDMENT

	BRTH – INSTITUTIONAL REVIEW BOARD	Form No.:	4.4
	NOTIFICATION OF IRB DECISION	Version No.:	4
		Approval Date:	May 2018
		Effective Date:	May 2018

May 7, 2021

DR. ARLENE P. CALLEJA
Researcher
Bicol Regional Training and Teaching Hospital
Legazpi City

Dear **Dr. Calleja**:

We wish to inform you that the **BRTH INSTITUTIONAL REVIEW BOARD (BRTH-IRB)** acknowledged receipt of *Amendment* on your study with protocol code 2020-025 entitled: **"THE PHILIPPINE INTEGRATED MANAGEMENT OF THE ACUTE MALNUTRITION (PIMAM) PROGRAM IN ALBAY PROVINCE, PHILIPPINES: AN ASSESSMENT"** dated May 27, 2021.

Upon review of *Amendment*, the BRTH-IRB Primary reviewers' action is **APPROVED**. The report is noted and has been included in the protocol file.

Thank you for your continuing compliance with the requirements of the **BRTH-IRB**.

Very truly yours,


MARLYN A. DAGUNO, RN, MAEd-NE, MAN, PhD
Chairperson, BRTH-IRB

fw
Encl'd: 4/8/21

CURRICULUM VITAE



ARLENE PABUSTAN-CALLEJA, MD, FPPS

Birthday: September 30, 1967

Home Address: 603 White St. Sunrise Subdivision Legazpi City, Albay

Email: annecalleja@yahoo.com

Mobile number: +63917-7959458

EDUCATION

College: B.S. Biology, University of Santo Tomas, 1984-1988

Doctor of Medicine, University of Santo Tomas College of Medicine and Surgery, 1988-1992

POSTDOCTORAL TRAINING

Post-graduate Internship - Cardinal Santos Medical Center, 1992-1993

Award: Most Outstanding Intern 1992-1993

Residency Training in Pediatrics at Capitol Medical Center, QC 1995-1997

Chief Resident, January to December 1997

Diploma in International Health, Major in Health System - University of the Philippines Open University, August 2017 to May 2019

Current enrollment: Master of International Health, Major in Health System, University of the Philippines Open University 2019-2021

RESEARCH

An Evaluation of Lactoferrin Latex Agglutination Assay as a New Marker for Inflammatory Diarrhea in Pediatric Patients in a Private Community Based Hospital
1997

Treatment Outcome of Patients with Severe Acute Malnutrition Admitted at the In-patient Therapeutic Care of the Bicol Regional Training and Teaching Hospital: A Retrospective Cohort Study
2019

ADDITIONAL TRAINING RELATED TO RESEARCH

Biostatistics 201 at the University of the Philippines Open University 1st semester 2017-2018

IH 204 – Health Research Methods 1st semester 2019-2020

LICENSURE AND CERTIFICATION

Doctor of Medicine, August 15, 1993; Rating 84.42; License number 0079275

Diplomate, Philippine Pediatric Society Inc., April 4, 2001

Fellow, Philippine Pediatric Society Inc., December 12, 2011

Good Clinical Practice (GCP) on Health Research Ethics Certified (August 2018)

LECTURER/SPEAKER EXPERIENCES

“The Power of Twin Supplementation: Immune Enhancing Role of Vitamin C and Zinc” – 2007

“The Profile of an Advanced Generation Cephalosporin” - 2008

“Cefixime: More Than a Decade of Clinical Success in the Treatment of Pediatric Bacterial Community Acquired Infections” – 2010

“Global and Local Disease Burden of Rotavirus Gastroenteritis” – 2011

“Mandatory Vaccine Recommendation” – 2012

“Enhancing Vaccine Recommendation: Leveraging on HPV Patient Education Opportunities”- 2013

“Recommended Childhood Immunization Schedule 2013: Focus on Rotavirus Vaccine and MMR” – 2013

“Steroids in a Child with Allergic Rhinitis: Should we be Afraid?” – 2014

“The Unfinished Business of Vaccine-Preventable Diseases: The Burden of Rotavirus, Varicella and HPV Infections” – 2016

“Immunological Advantage of a Three-dose Pentavalent Rotavirus Vaccine”- 2016

“Revisiting Rotavirus Infection: Targeting Local Prevalence with Real World Experience” – 2017

Resource Speaker on Growth and Development during the First PWD Health Summit on July 21, 2016 at Hotel St. Ellis, Legazpi City.

Resource Speaker on Philippine Integrated Management of Acute Malnutrition during the First Regional Conference of Nutrition Advocates on July 26, 2017 at the Legazpi City Convention Center

Moderator and Resource Speaker, DOH Philippine Integrated Management of Acute Malnutrition Orientation, Training and Workshop

“Addressing Childhood Obesity: What We Should Know” on the occasion of the Philippine Pediatric Society Bicol Chapter Parenting Symposium “Ang Mga Batang Milenyo; December 2018

“Rotavirus Vaccination: It’s a DEAL” – 2018

“Addressing Childhood Obesity – What Physicians Should Know” - 2018

“A Journey with Rotavirus Vaccination” – 2019

“Vaccine Milestones – Equipping the Filipino Child Before Entering School” – 2019

Speaker during the 2019 Philippine Pediatric Society Bicol Chapter Scientific Symposium – “The Identification and Management of Acute Malnutrition in Children: A Pressing Need”; July 2019

“Identification of Undernutrition and Lactose Intolerance for School-Based Feeding Programs” on the occasion of the Department of Education Schools Division of Legazpi City Program Implementation Review on School Based Feeding Program; January 2020

Speaker on “PIMAM Implementation in the Hospital and Community Setting in the Context of COVID-19” during the Integrated Updates on Nutrition Webinar Series Part 1: “Nutrition Program Implementation Amidst COVID-19 Pandemic”, sponsored by the DOH Center for Health Development Bicol and the National Nutrition Council Bicol, June 4, 2020.

Lecturer/Trainer of DOH Regional Office V on the Philippine Integrated Management of Acute Malnutrition.

PAST POSITIONS AND APPOINTMENTS

Secretary, Philippine Pediatric Society Bicol Chapter 2003-2004

Vice President, Philippine Pediatric Society Bicol Chapter 2004-2006 and 2008-2010

President, Philippine Pediatric Society Bicol Chapter (2010-2012)

Chair, Department of Pediatrics, Aquinas University Hospital Legazpi City (2005-2010)

Councilor, 2nd District, Albay Medical Society 2011-2013

MEMBERSHIPS AND ASSOCIATIONS

Philippine Pediatric Society Bicol Chapter, Past President and presently Member of the Board of Directors

Community Pediatrics Society of the Philippines Bicol Chapter, Member

Philippine Medical Association, Regular Member

Albay Medical Society, Inc, Member

UST Medical Alumni Inc., Member

Tomasinong Bikolano Inc., Member

Capitol Medical Center Pediatric Residency Graduates Inc. (PRGI), Member

PRESENT AFFILIATIONS AND POSITIONS:

Medical Specialist III Full Time, Bicol Regional Training and Teaching Hospital

Training Officer, Department of Pediatrics, Bicol Regional Training and Teaching Hospital

Overall Chair, BRTTH Philippine Integrated Management of Acute Malnutrition (PIMAM) Program

Alternate Member, Bicol Regional Training and Teaching Hospital Institutional Review Board (IRB)

Member of the Board of Directors and Chair of the Council on Community Service and Child Advocacy of the Philippine Pediatric Society Bicol Chapter

Associate Professor in Pediatrics, AMEC Bicol Christian College of Medicine
Associate Professor in Pediatrics, Bicol University College of Medicine

An Active Consultant at the University of Santo Tomas Hospital Legazpi, Ago General Hospital and Estevez Memorial Hospital, Legazpi City

Visiting Consultant at the Albay Doctors Hospital, Legazpi City and Daraga Doctors Hospital, Daraga Albay

SEMINARS/CONFERENCES/WORKSHOP/SHORT COURSES ATTENDED

Refresher on Dengue Clinical Practice Guidelines given by the DOH Bicol Center for Health Development, September 14 to 16, 2021

Philippine Pediatric Society, Council on Community Service and Child Advocacy “Keeping Informed in Disaster Situations (KIDS)”, July 1-2, 2021

Basic EPI Crash Course, given by the DOH Bicol Center for Health Development, May 25 & 26, 2021

58th Philippine Pediatric Society Annual Convention “Cultivating Resilience in Times of Adversity”, July 25-28, 2021

28th PIDSP Annual Convention “All Roads Leads to PIDSP: Valiant, Viral, Virtual!”, February 15 – 19, 2021

57th Philippine Pediatric Society Annual Convention “Glocalizing Pediatrics: Evidence and Practices from a Virtual Platform”, November 23-25, 2020

European Academy of Pediatric Societies Virtual Congress, October 16-19, 2020

Philippine Society of Newborn Medicine, Inc., 14th Annual Meeting and 5th International Conference “Vision: New Horizons in Newborn Medicine” January 20-21, 2020, Hennis Convention Center, Panglao, Bohol

PPS Bicol Chapter Scientific Symposium “Basic Insights and Concepts Overlooked at the Front Line” July 10-11, 2019 at the Casablanca Convention Hall, Legazpi City

Training on Early Childhood Care and Development given by the Department of Health and the National Nutrition Council, February 14-15, 2019 at Casablanca Hotel, Legazpi City

University of the Philippines NIH Training Center for Health Research Ethics and Good Clinical Practice: Training Workshop on Health Research Ethics and Good Clinical Practice, August 22 – 24, 2018, Hotel Kimberly, Malate Manila

Telemedicine Training of Clinical Subspecialists, July 11, 2018, Bicol Regional Training and Teaching Hospital

55th Philippine Pediatric Society Annual Convention “New Emerging and Evolving Directions in Pediatrics”, April 8-11, 2018, PICC Pasay City

Philippine Pediatric Society, Inc. Pre-Convention Course: PPS Advocacy on the First 1000 Days “Optimizing the Filipino Child’s First 1000 Days – An Investment for a Healthier Tomorrow”, April 8, 2018, PICC, Pasay City

Department of Health Disease Control and Prevention Bureau, Training of Trainers on the Use of the Guidelines on the Management of Moderate Acute Malnutrition for Under-Five Year Old Children, March 13-14, 2018, Marco Polo Hotel, Ortigas Pasig City

Philippine Society of Pediatric Gastroenterology, Hepatology and Nutrition 13th Annual Convention “The Dynamic Trio: Gastroenterology, Hepatology and Nutrition in the 21st Century”, March 12-13, 2018 at Crowne Plaza Hotel Ortigas Avenue Pasig City

7th Annual Wyeth Nutrition Science Center Global Summit, February 28 to March 1, 2018, Paris, France

University of the Philippines and the Association of Pacific Rim Universities, 2017 APRU Global Health Program: 11th Annual Conference, October 16-18, 2017 at Novotel Hotel Cubao Quezon City

Growth and Nutrition Forum “From ‘Normal’ to the Chronically Ill, Supporting Growth Through Good Nutrition”, June 9, 2017, Peninsula Hotel Makati City

The Community Pediatrics Society of the Philippines 24th Annual Convention “Integrated Community healthcare Advocacies”, May 25, 2017 at Hotel St. Ellis, Legazpi City

54th Philippine Pediatric Society Annual Convention “#PPS@70: A Continuing Commitment to the Filipino Child”, April 2-5, 2017, PICC Pasay City

Philippine Pediatric Society, Inc. Pre-Convention Course “Screening the Under-five: Basic Screening Tools a Pediatrician Should Know”, April 2, 2017, PICC, Pasay City

Albay Medical Society 5th Annual Postgraduate Convention “Emerging Trends”, March 12, 2017, Casablanca Convention Center, Legazpi City

Growth and Nutrition Forum “Tipping the Balance Towards Ideal Height and Weight Through Good Nutrition”, March 10, 2017, Peninsula Hotel Makati City

University of Santo Tomas Faculty of Medicine and Surgery 36th Dr. Mariano M. Alimurung Memorial Postgraduate Course “Our Generation Heroes: Unique Survival Tales from the Medical Frontline”, January 12-13, 2017, CME Auditorium UST Medicine Building, Manila

American Academy of Pediatrics 2016 National Conference and Exhibition, October 21-25, 2016, San Francisco California

Training of Trainers (TOT) Course on the “National Guidelines for the Management of Severe Acute Malnutrition (SAM)”, August 1-5, 2016, Icon Hotel, Timog Avenue, Quezon City

Center for Learning Excellence Continuing Medical Education Program on Pediatrics, June 20-21, 2016, Sick Kids Hospital, Toronto, Canada

53rd Philippine Pediatric Society Annual Convention “Transforming the Practice of Pediatrics in Response to the 21st Century Health Issues”, April 3-6, 2016, PICC Pasay City

Community Pediatrics Society of the Philippines Bicol Chapter Scientific Forum “Trending Appropriate Guidelines and their Relevance to Healthcare Workers”, March 10, 2016, Avenue Convention Center, Naga City

Pediatric Infectious Disease Society of the Philippines 23rd Annual Convention “Pediatric Infectious Disease Scenarios providing Practical Solutions”, February 17 – 18, 2016, Crowne Plaza Galleria Manila.

Philippine Society of Newborn Medicine 10th Annual Meeting and Postgraduate Course “Newborn Emergencies 24/7”, February 5 – 7, 2016, Vigan City, Ilocos Sur

American Academy of Pediatrics 2015 National Conference and Exhibition, October 24 – 27, 2015, Washington DC, USA
Brain Summit “Exploring the Brain and Beyond”, September 8-10, 2015, Sofitel Philippine Plaza, Manila

Philippine Pediatric Society Bicol Chapter Scientific Forum, Pediatric Pearls “Bringing Integrative and Comprehensive Lectures to Bicolano Doctors, August 27-28, 2015, Naga City

52nd PPS Annual Convention “Harmonizing Health Priorities and Programs for the Filipino Child”, April 19-22, 2015, PICC, Pasay City – Philippine Pediatric Society

Department of Health “Training of Trainers on Community Management of Acute Malnutrition”, April 6-10, 2015, La Roca Veranda Suites and Restaurant, Legazpi City

19th Annual Convention “Healthy Kidneys for Filipino Kids”; November 17 - 18, 2014, Crowne Plaza Manila – Pediatric Nephrology Society of the Philippines

“Multiple Intelligences for Success in Life, Work and Learning”; July 13-17, 2014, Kensington, London

Module “Enhancing Child Development”; June 4, 2014, Baguio City – Philippine Society of Developmental and Behavioral Pediatrics

Medical Education Program “Brain and Beyond” and “Total Feeding Solutions”; June 4-5, 2014, Baguio City

51st Annual Convention “The Filipino Pediatrician in the Forefront of Global Health Advances”; April 6-9, 2014, PICC Pasay City – Philippine Pediatric Society

UMED Medical Education Activity and Workshop “Identification of the High Risk Neonate”; March 20, 2014, Venezia Hotel Legazpi City – United Laboratories

Annual Convention “What’s New in Your Practice: Specialty Updates”; March 16-17, 2014, La Piazza Hotel and Convention Center, Legazpi City – Albay Medical Society

10th Biennial Convention “Cutting Edge Issues in Pediatric GI and Nutrition”; March 13-14, 2014, Taal Vista Lodge, Tagaytay City – Philippine Society of Pediatric Gastroenterology Hepatology and Nutrition

8th Annual Meeting and Post-Graduate Course “The Adventures of the Small Baby: Management of the Extremes”; January 29-30, 2014, Édsa Shangri-La Hotel, Mandaluyong City – Philippine Society of Newborn Medicine

31st Annual Meeting of the EUROPEAN SOCIETY FOR PAEDIATRIC INFECTIOUS DISEASES; May 28-June 1, 2013, Milan Italy

50th Annual Convention “Level Up! Enhance Your Pediatric Practice”; April 14-17, 2014, PICC Pasay City – Philippine Pediatric Society

Annual Convention “Amazing AMS at 80: What’s Trending?”; March 10-11, 2014, Hotel St. Ellis, Legazpi City- Albay Medical Society

Seminar and Workshop “Pediatric Education in Disasters”; May 2-3, 2012, Virac Catanduanes – Philippine Pediatric Society Bicol Chapter

Postgraduate Course “Practices in Medicine: Myths, Misperception, Facts”; April 19-20, 2012, Hotel St. Ellis Legazpi City – Albay Medical Society

49th Annual Convention “Pinoy Pedia Amidst Global Challenges”; April 10 – 13, 2012, PICC Pasay City – Philippine Pediatric Society

IMCI Computerized Application Technology Tools Training; February 29, 2012, Hotel Venezia Legazpi City – Philippine Pediatric Society

19th Annual Convention “Learning Evidence-based Approaches to Pediatric Infections (LEAP) towards Millennium Development Goal No. 4; February 15-16, 2014, Crowne Plaza Galleria Manila Quezon City – Pediatric Infectious Disease Society of the Philippines

Nutrition Module “WHO Growth Standard and WHO Guidelines in Feeding the Severely Undernourished Child”; November 16, 2011’La Piazza Hotel and Convention Center Legazpi City – Philippine Pediatric Society

The 1st GLOBAL CONGRESS FOR CONSENSUS IN PEDIATRICS AND CHILD HEALTH; February 17 – 20, 2011, Paris France

Postgraduate course “Forum on Common Childhood Neurologic Problems”; October 28, 2011, Naga City - Child Neurology Society of the Philippines and Bicol Medical Center

Pediatric Training PPS Committee Modules Scientific Meeting “Dengue and Nutrition-Related Disorders”; September 25, 2011’, Avenue Plaza Hotel Naga City – PPS Committee on Pediatric Training Modules

4th Biennial Conference “Infectious Diseases and Tropical Medicine 2011 Updates”; April 28-29, 2011, Hotel St. Ellis, Legazpi City - UP-PGH Society of Infectious Diseases Alumni

48th Annual Convention “Kalusugan ng Kabataan para sa Kinabukasan: Ngayoy Paghandaan”; April 3-6, 2011, PICC Pasay City – Philippine Pediatric Society

19th PAPP Annual Convention; March 22-23, 2011, Makati Shangri-La, Makati City – Philippine Academy of Pediatric Pulmonologists

Scientific Forum “Revisiting Uncertainties and Barriers in the Young”; March 7-8, 2011, Hotel St. Ellis Legazpi City – Philippine Pediatric Society Bicol Chapter

The 26th INTERNATIONAL PEDIATRIC ASSOCIATION CONGRESS OF PEDIATRICS “Simunye – We Are One”; August 4-9, 2010, Johannesburg South Africa