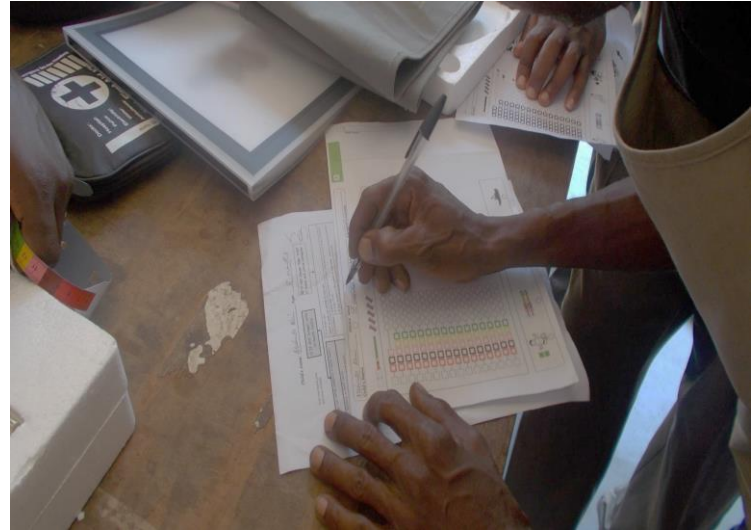




**Examining the feasibility of  
Community Health Worker delivery  
of Severe Acute Malnutrition  
treatment using simplified low-  
literacy tools: Preliminary Results  
NIGERIA**

Olusola Oresanya  
Malaria Consortium



# Outline

- Background
- Nigeria's profile
- Description of context
- Methodology
- Preliminary results
- Summary of key findings

# Background

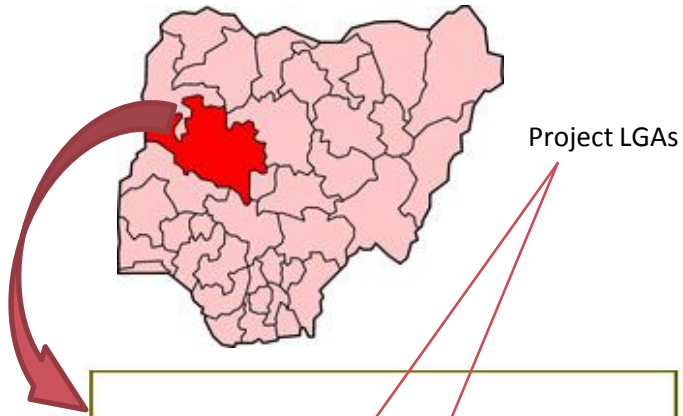
- Malaria, diarrhea, and pneumonia are the leading causes of death among U5 children worldwide, malnutrition being an underlying cause in half of the cases
- Although iCCM is recognized as strategy to increase access to life-saving treatment, malnutrition is not currently addressed
- Uncomplicated SAM cases are treated at OTPs, which are only accessible to a subset of the population, underscoring the need for a community delivery model.
- Promising models exist, however, adapting such models for low-literacy settings have not been studied.
- A pilot study was implemented to determine whether iCCM CORPs can use simplified tools to treat SAM without medical complications

# Nigeria's Profile



- **Location:** West coast of Africa
- **Rural:Urban Pop: 63:37**
- **Population** 204m (projected 2018)
- **Life expectancy:** M=55.5; F=57.5
- **Literacy rate:** 15-24yr= 71.5%
- **Wasting** 10.8%
- **Stunting** 43.6%
- **Fertility rate:** 5.5%
- **Death rate:** 12.4/1000
- **MMR:** 576/100,000 live births
- **U5 mortality:** 128/1000 live births
- **IMR:** 69/1000 live births
- **Skilled attendance at birth:** 38%

# Description of Context



Project LGAs



- **Niger State** located in Nigeria's North Central Zone
- **Land mass:** 76,263 km<sup>2</sup>
- **Total population:** 5,586,003 (projected 2017)
- **Fertility rate:** 6.1% (Nigeria average 5.5 percent)
- **Literacy rate:** about 50% of adult population is literate
- **Children <5 sleeping under net:** 10.5%
- **Health seeking behaviour:** fever 38%, diarrhoea 42%, ARI 29%
- **Children fully immunized for age:** 23%
- **GAM** prevalence 6.1%
- **SAM** prevalence: 0.5%
- **MAM** prevalence: 5.6%

# Methodology

- A feasibility and acceptability study with both qualitative and quantitative components using simplified protocol and tools
- 60 CORPs and 20 supervisors (CHEWs) selected and trained on the simplified protocol and tools for SAM, including Job Aides for treating co-morbidities.
- Exclusion criteria for pilot:
  - Implementing iCCM for less than 2 years
  - located within 5km of the health facility
- Implementation period was 7 months in 2 LGAs, Niger state
- Number of eligible children (6mo-5yr) to be sampled, 176
- CHEWs supervised the CORPs weekly for the first 2 months, then biweekly in the remaining months

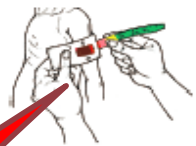
# Simplified Approach

- Screening for danger signs following the regular iCCM algorithm + Appetite test.
- Admission to CORP's nutrition treatment was MUAC-based, with modified colour coding.



Traditional tape		Revised tape	
Categories	Action	Categories	Action
<b>Red: &lt;math&gt;&lt; 11.5\text{cm}&lt;/math&gt;</b>	Treatment at OTP	Red: <math>< 9\text{cm}</math>	Refer to nearest nutrition clinic – likely to need inpatient care
		Dark red: 9 - <math>< 10.25\text{cm}</math>	Treatment by CORP
		Pink: 10.25 - <math>< 11.5\text{cm}</math>	Treatment by CORP
<b>Yellow: 11.5 to &lt;math&gt;&lt; 12.5\text{cm}&lt;/math&gt;</b>	Nutrition counselling	Yellow: 11.5 - <math>< 12.5\text{cm}</math>	Nutrition counselling as per iCCM guidelines
<b>Green - &lt;math&gt;\geq 12.5\text{cm}&lt;/math&gt;</b>	No treatment	Green - <math>\geq 12.5\text{cm}</math>	No treatment

# Simplified SAM Treatment Algorithm:



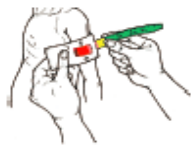
or other danger signs



Referral to Health facility



Red on MUAC



Appetite Test



Pass



Fail



Appetite Test



Pass



Fail



Referral to TSFP



Normal

Tell the caregiver their child is not malnourished and encourage them to continue feeding their child the same way.



# Simplified Approach 2

## Week 3-12 follow up and Discharge criteria

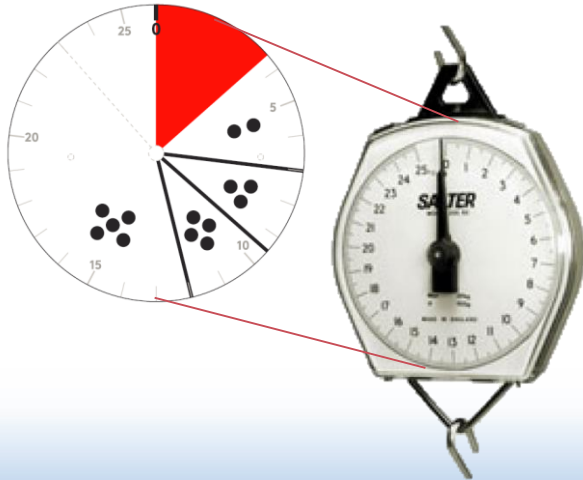
MUAC colour	CORP's Action
Dark red	<b>Refer</b> to health facility
Two greens in a row	Recovered, <b>DISCHARGE</b>
Two missed visits in a row	Defaulted, <b>DISCHARGE</b>
MUAC is below admission MUAC	Deteriorated, <b>refer, DISCHARGE</b>
If 12 <sup>th</sup> week and never had two greens in a row	Non-response, <b>refer, DISCHARGE</b>
Otherwise	Continue treatment

# Simplified Tools

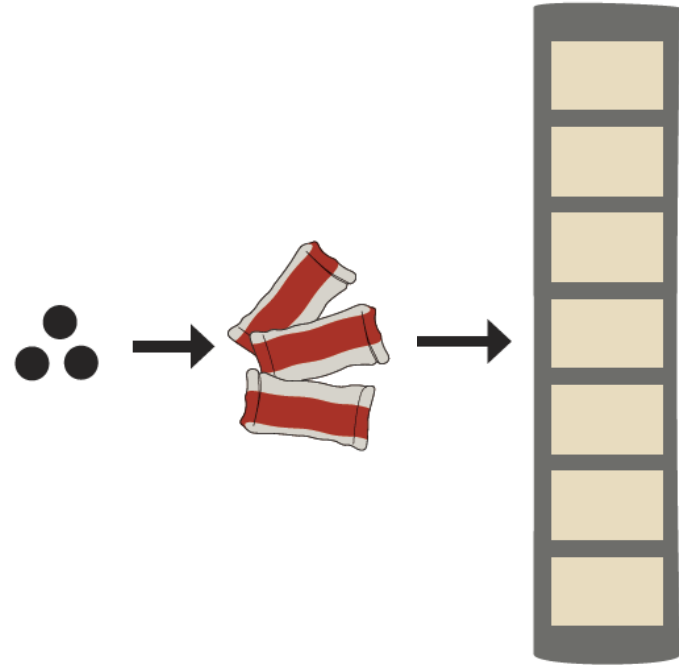
## 1. Simplified MUAC tape



## 2. Dosage scale



## 3. Dosage Calculator





# Preliminary Results: Treatment outcomes

- 302 children enrolled (actual burden of SAM under-estimated by available data)
- Preliminary data analysis N=286
- 20.2% in severe (DR), 79.5% in less severe range (P)
- Median weeks to cured: 6.5 (range 4-12 weeks)

	Without referrals in denominator	With referrals in denominator
Cured	190 (78.5%)	190 (66.9%)
Non-response	8 (3.3%)	8 (2.8%)
Default	44 (18.2%)	44 (15.5%)
Referred		42 (14.8%)

# Reasons for default/referral

Default	N (%)
Caregiver decided not to continue care/ decided to seek care elsewhere	16 (36%)
Relocation	6 (14%)
Other	2 (5%)
Unknown / missing	20 (46%)

Referral	N (%)
Failed appetite test	24 (59%)
4 consecutive weeks in DR	1 (2%)
4 consecutive weeks in pink	10 (24%)
Had danger sign	4 (10%)
Unknown	2 (5%)

# Summary of key findings

- Overall, cure rate was 78.5% which is above the Sphere humanitarian standards of 75%.
- Non-response rate was 3.3%
- Median number of weeks to cure was 6.5 weeks (combined)
- Referrals appear to have been difficult, given that the care provided by the CORP is free and the referral would cost money.
- Program well accepted by CORPs listing reasons such as free care and shorter distance to reach care as positives.
- CORPs felt motivated by the children's recovery and being respected in the community having acquired this skill to treat children with SAM.
- Caregivers indicated that a child's successful recovery and the service being free were some positives.

Thank you



**malaria  
consortium**  
*disease control, better health*

This study was implemented by Malaria Consortium in collaboration with the Federal and Niger State Ministries of Health, as part of a multi-country study led by International Rescue Committee with funding from Eleanor Crook Foundation.

[www.malariaconsortium.org](http://www.malariaconsortium.org)



# Improving Nutrition Services in the Care of the Ill and Vulnerable Newborn and Child Workshop

30 October–2 November 2018

Accra, Ghana



photo by Kate Holt/MCSP