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

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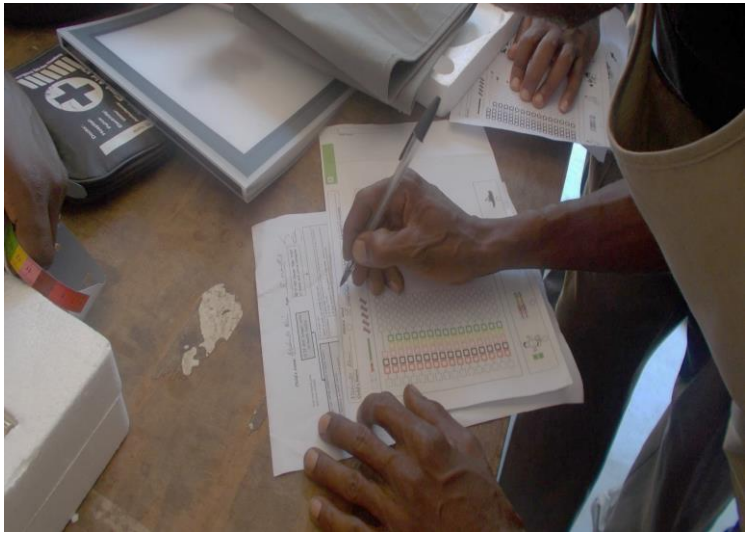

Outline

- Background
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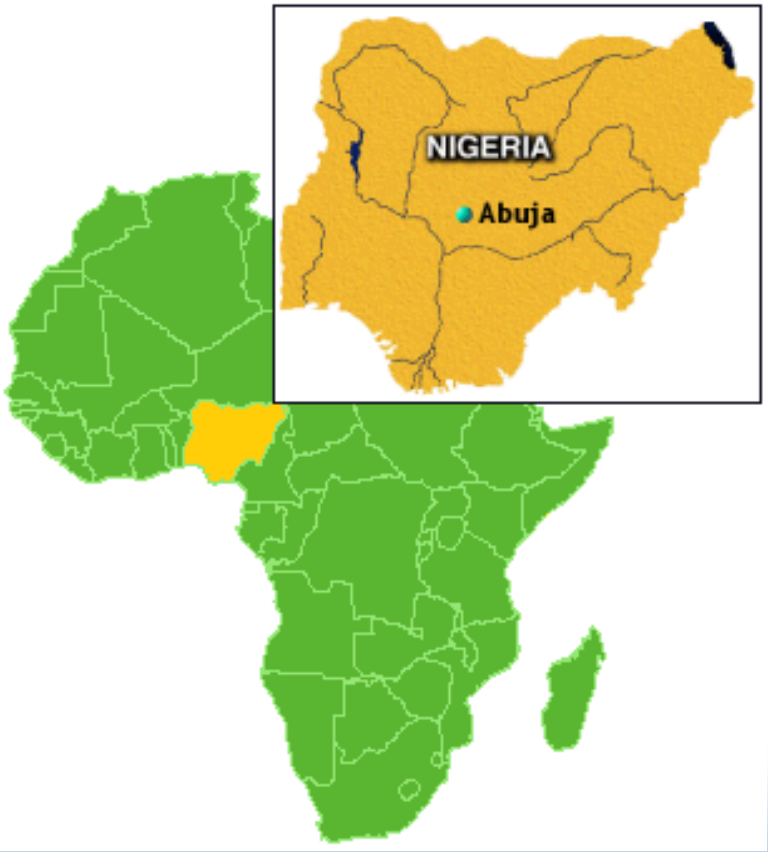
Background

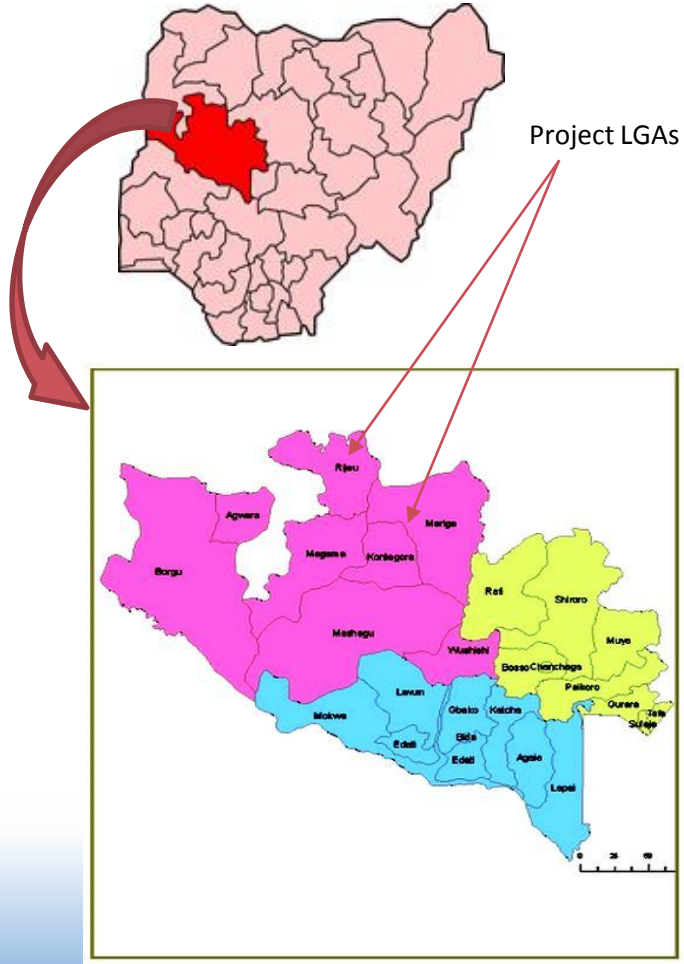
- Malaria, diarrhea, and pneumonia are the leading causes of death among U5 children worldwide, malnutrition being an underlying cause in half of the cases
- Although iCCM is recognized as strategy to increase access to life-saving treatment, malnutrition is not currently addressed
- Uncomplicated SAM 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



- **Niger State** located in Nigeria's North Central Zone
- **Land mass:** 76,263 km^2
- **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

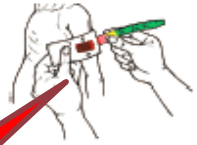
- A feasibility and acceptability study with both qualitative and quantitative components using simplified protocol and tools
- 60 CORPs and 20 supervisors (CHEWs) selected and trained on the simplified protocol and tools for SAM, including Job Aides for treating co-morbidities.
- Exclusion criteria 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**
Red: <11.5cm	Treatment at OTP	Red: <9cm	Refer to nearest nutrition clinic – likely to need inpatient care
		Dark red: 9 - <10.25cm	Treatment by CORP
		Pink: 10.25 - <11.5cm	Treatment by CORP
Yellow: 11.5 to <12.5cm	Nutrition counselling	Yellow: 11.5 - <12.5cm	Nutrition counselling as per iCCM guidelines
Green - ≥12.5cm	No treatment	Green - ≥12.5cm	No treatment

Simplified SAM Treatment Algorithm:



Red on MUAC

or
other danger signs

Referral to Health facility

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

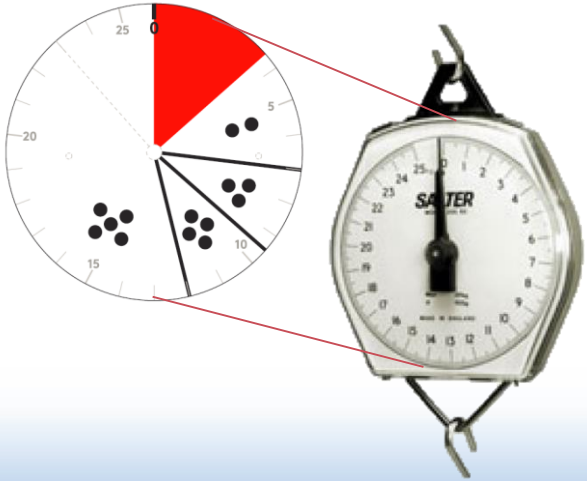
Week 3-12 follow up and Discharge criteria

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

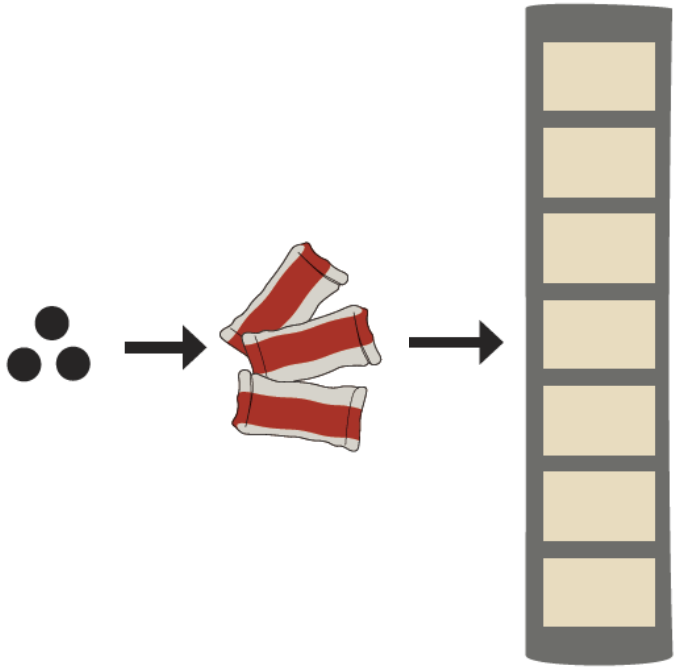
Simplified Tools

1. Simplified MUAC tape

2. Dosage scale



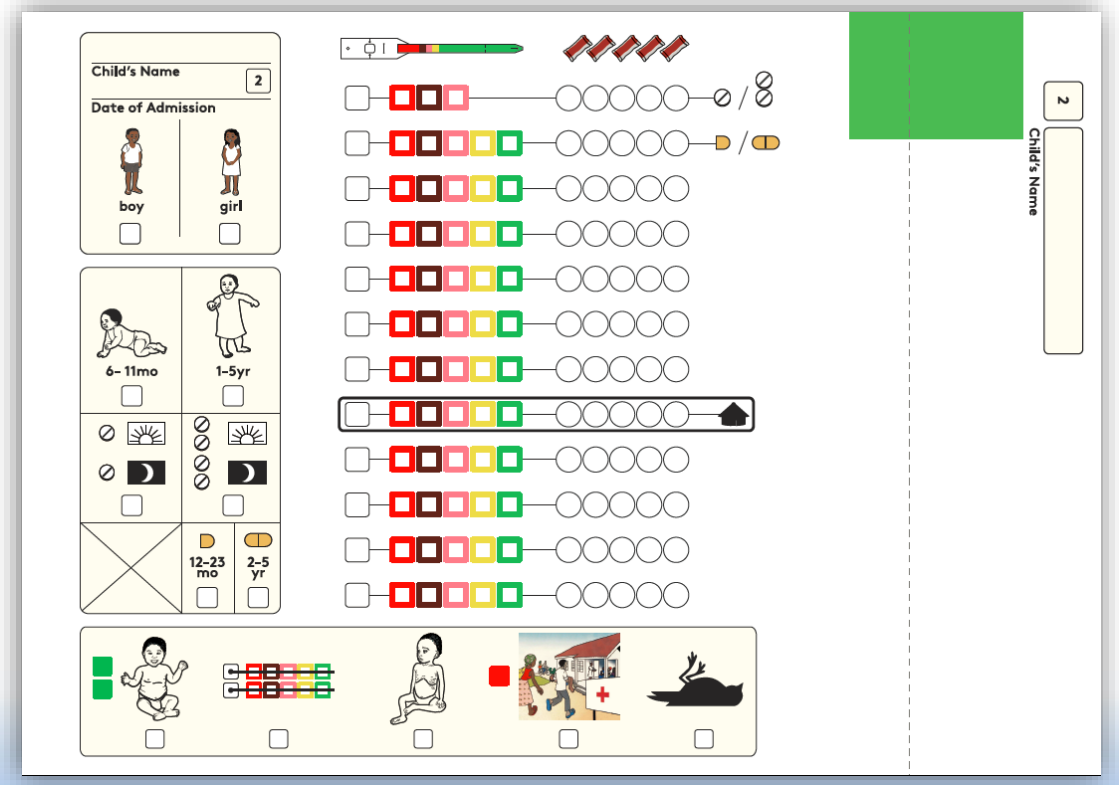
3. Dosage Calculator



Simplified Tools -2

4. Flip chart

5. Patient register



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

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INTERNATIONAL RESCUE COMMITTEE

ELEANOR CROOK FOUNDATION

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