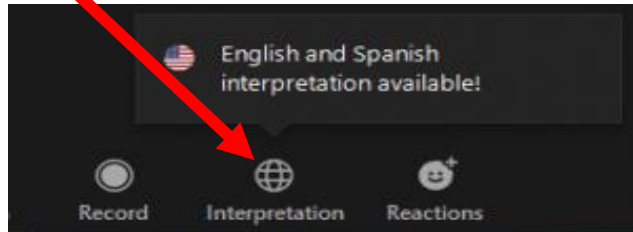**GLOBAL NUTRITION CLUSTER**
Technical Alliance

Webinar Series: Costing Child Wasting Treatment
The Use of Cost Data for Decision Making in Child Wasting Treatment

Translation is accessible by clicking the globe icon on the bottom of your screen.

La traduction est accessible en cliquant sur l'icône du globe terrestre au bas de votre écran.

Se puede acceder a la traducción haciendo clic en el icono del globo en la parte inferior de la pantalla.

يمكن الاستفادة من الترجمة الفورية عن طريق النقر فوق رمز الكرة الأرضية أسفل الشاشة.

English and Spanish interpretation available!

Record   Interpretation   Reactions
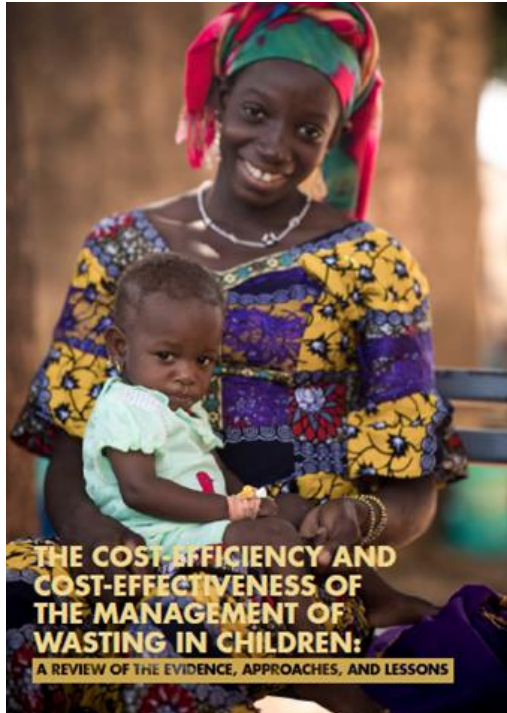
Webinar Working Group

Supporting Donors

Note: *This webinar is made possible by the generous support of all of our donors, however, the contents are the responsibility of the GNC Technical Alliance and the individual presenters and do not necessarily reflect the views of these donors.*

Child wasting costing and cost-effectiveness working group

THE COST-EFFICIENCY AND COST-EFFECTIVENESS OF THE MANAGEMENT OF WASTING IN CHILDREN: A REVIEW OF THE EVIDENCE, APPROACHES, AND LESSONS

- Review of available evidence on cost-efficiency and cost-effectiveness of the management of wasting in children found little available evidence

- Formed in 2021 as a sub-working group to Wasting GTWG:
  - Raise awareness on the importance and use of cost data for decision making relating to the treatment of wasting
  - And to increase availability and quality of costing data on wasting
  - Share information related to cost and cost-effectiveness of wasting treatment

Objectives:

- Raise awareness on the importance and use of cost data for decision making relating to the treatment of wasting
- Disseminate the key resources
- Inform on the existence of working group on the costing wasting treatment

Webinar Agenda

- Introduction
- Presentation 1: Specific introduction to cost analysis
- Presentation 2: CSO use of cost data
- Presentation 3: Government use of cost data
- Presentation 4: Donor use of cost data
- Q&A
- Poll
- Video and Presentation 5: GNC Technical Alliance
- Closing

GLOBAL NUTRITION CLUSTER
Technical Alliance

Today's Facilitators and Presenters

Emily Keane
Senior Nutrition Advisor
Save the Children

Bernardette Cichon
Senior Research Advisor
Action Against Hunger UK

Stacie Gobin
Senior Economist
Save the Children

Chloe Puett
Independent consultant, Researcher
Stony Brook University - Public Health

Caitlin Tulloch
Director for Best Use of Resources
International Rescue Committee

Blandina Rosalina Bait
Nutrition Specialist
UNICEF Indonesia

*Eric Anderson*
Nutrition Advisor
USAID/BHA

Introduction to cost analysis and its use in decision-making

Chloe Puett, PhD
Independent Consultant
Stony Brook University, Public Health Program

Why is cost data important?

- Limited humanitarian resources
- Practical complement to data on coverage, effectiveness
- Contextual decision-making
  - Feasibility of alternative options
  - Finance scale-up
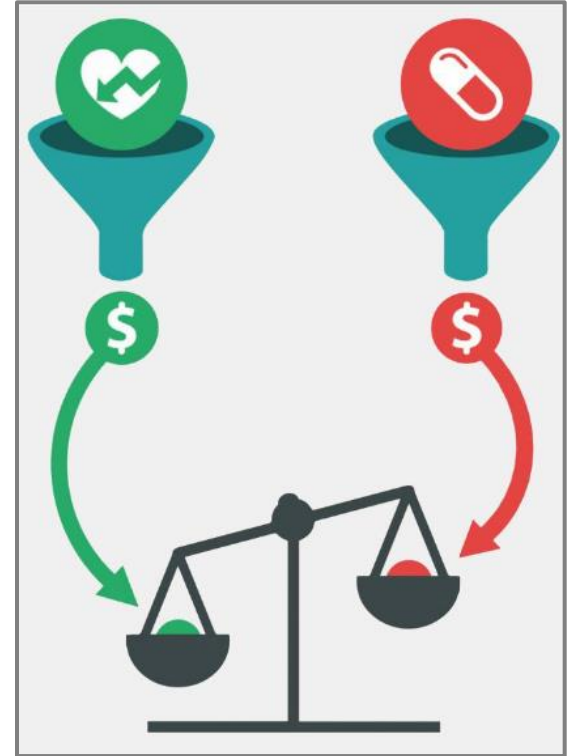
Types of economic evaluation

Method of Analysis	Cost	Effect
Cost-Efficiency	$	Output achieved: cost per child treated/enrolled *Example: compare resource use across programs*
Cost-Effectiveness	$	Disease-related outcome: cost per child recovered *Example: compare with other wasting programs*
Cost-Utility	$	General measure of death & disability: DALY, QALY *Example: compare w/ broader programs (other diseases)*
Benefit-Cost	$	$ *Example: compare program benefits ($) with costs*

Other analyses focus only on costs, the best method depends on specific objectives

Why do we need more cost data?

- New approaches emerging
- Limitations in existing evidence[1]
- Costs vary greatly by (e.g.)
  - Country
  - Implementer (CSO, Gov't)
  - Included costs (institutions vs household, data sources used)

[1]Action Against Hunger & Save the Children. (2020). *The cost-efficiency and cost-effectiveness of the management of wasting in children: A review of the evidence, approaches and lessons*. London: Save the Children.

Why do we need more cost data?

Vicious cycle of poor quality cost data

Poor program quality → Under-report costs "cheap" competitive → ∞ under-resourced programs

*Minimum standards: **transparent reporting** to understand generalizability of cost estimates*

How (by whom) is cost data used?

- Unit costs per output/outcome
  - Enables benchmarking (max/target price per output)
  - Ultimately aid in deciding what to implement where
- Not always so straightforward…
- Survey of 6 major AAH donors[1] found:
  - All donors requested "cost-effectiveness analysis" of field programs
  - Definitions, criteria varied by agency
  - Donors felt they needed capacity building on economic assessments

[1] Puett C, Salpéteur C. (2018). Donor requests for economic analysis of humanitarian field programmes. *Development in Practice*, 28(7).

How (by whom) is cost data used?

How (by whom) is cost data used?

- In today's webinar:
  - **CSO example:** Caitlin Tulloch (IRC) uses cost-efficiency data for internal decision-making and benchmarking
  - **Government example:** Blandina Rosalina Bait (UNICEF Indonesia) used cost estimates of wasting treatment for gov't integration & scale-up
  - **Donor example:** Eric Anderson (USAID/BHA) considers practical challenges, limitations of cost data

Enjoy the presentations!

CSO use of cost data

How cost efficiency data is used within IRC for internal decision making and benchmarking

Caitlin Tulloch
Director for Best Use of Resources
International Rescue Committee
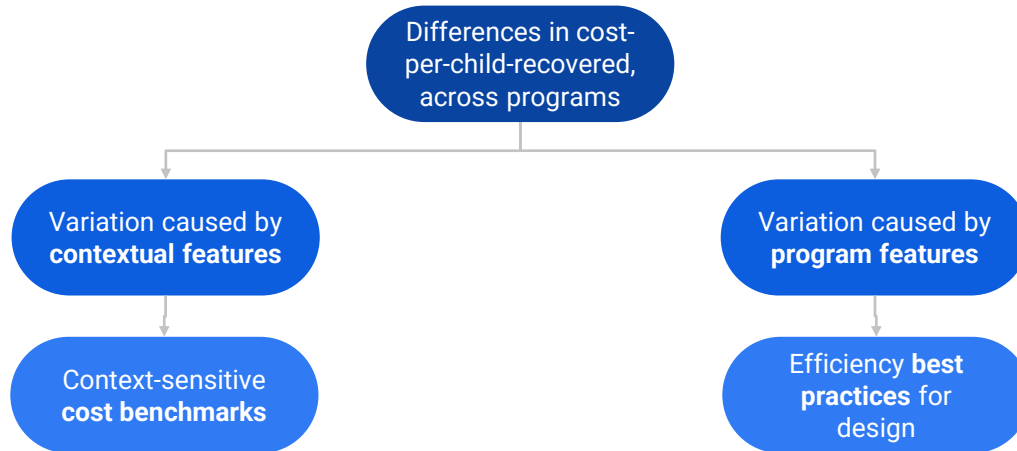
IRC Investment in Cost Evidence

- Since 2015, IRC has invested in creation of cost evidence to drive internal learning and help us respond to donor questions

- Cost analyses are produced in collaboration with program teams
    - Critical to ensure we understand programs we study, and what drove their efficiency
    - Also critical when interpreting differences and identifying "best practices"

#	Project	T1	Country	CHW Delivery	# treated	2021 Total Cost		2021 Cost/Output
1	Chad SAM Treatment	EC385	Chad		6,722	984,469	$	146
2	North rift-Nutrition Ready: capacity Building for Nutrition Resilien	EC326	Kenya		4,204	281,819	$	67
3	North Rift- Nutrition Ready: Capacity Building for Nutrition Resili	DF074	Kenya		3,949	254,826	$	65
4	Supporting Integrated Nutritional Interventions in Under-Fives in	EC297	Mali		2,838	1,196,842	$	422
5	Contribuer à la réduction de la morbidité et la mortalité ches les	EC325	Mali		2,874	981,316	$	341
6	Programme intégré de lutte contre la mortalité infantile	EC334	Mali		6,324	928,352	$	147
7	Analyse de Traitement Traditionelle 2017-2018 Nara	EC402, EC429	Mali		3,797	310,375	$	82
8	Mali Nara 2019 Simplified	EC429, EC452	Mali		8,221	583,105	$	71
9	Nara 2020 SP	EC476,EC487	Mali	Yes	9,890	770,374	$	78
10	Mali Nara 2021 Simplified	EC476, OD207, OP:	Mali	Yes	10,024	609,507	$	61
11	SAM Treatment	TFI26	Nigeria		1,242	325,494	$	262

Header spanning: Programmatic Information | Reach | Cost

Objective is to Learn from Variation

- We use a consistent costing methodology, to ensure that variation in results isn't driven by different math

- But then we *expect to see* variation in cost-efficiency across our programs: understanding variation is the whole point!

Differences in cost-per-child-recovered, across programs

Variation caused by **contextual features**

Variation caused by **program features**

Context-sensitive **cost benchmarks**

Efficiency **best practices** for design

Now imagine if we could do this study of variation using cost-efficiency studies from many implementers!

Our Data

Programs ranging from 300 admissions to 10,000 admissions

Programmatic Information				Reach	Cost	
Project	T1	Country	CHW Delivery	# treated	2021 Total Cost	2021 Cost/Output
Chad SAM Treatment	EC385	Chad		6,722	984,469 $	146
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SAM Treatment	TFI26	Nigeria		1,242	325,494 $	262
Renforcement des capacités locales de prise en charge de la ma	EC316	Niger		4,976	659,803 $	133
STC and EYN, Nigeria traditional with screening and treatment,	Nigeria joint respons	Nigeria		569	109,333 $	192
Somalia Combined Protocol	EC478	Somalia		5,650	203,759 $	36
CMAM analysis for Somalia	DF203	Somalia		300	185,746 $	619
IRC Somalia CP SAM MAM Hannan hospital Dhusamareb	DF203	Somalia		221	76,803 $	348
Enabling Treatment of Acute Malnutrition in the Community: a S	OD108	South Sudan	Yes	308	220,600 $	716
Integrated Health, Nutrition, and WASH Services for Conflict-Affe	GO269	Yemen		340	320,805 $	944
SVFA- Mobile Health and Nutrition Team support to IDPs, returr	SV482	Yemen		200	80,435 $	402

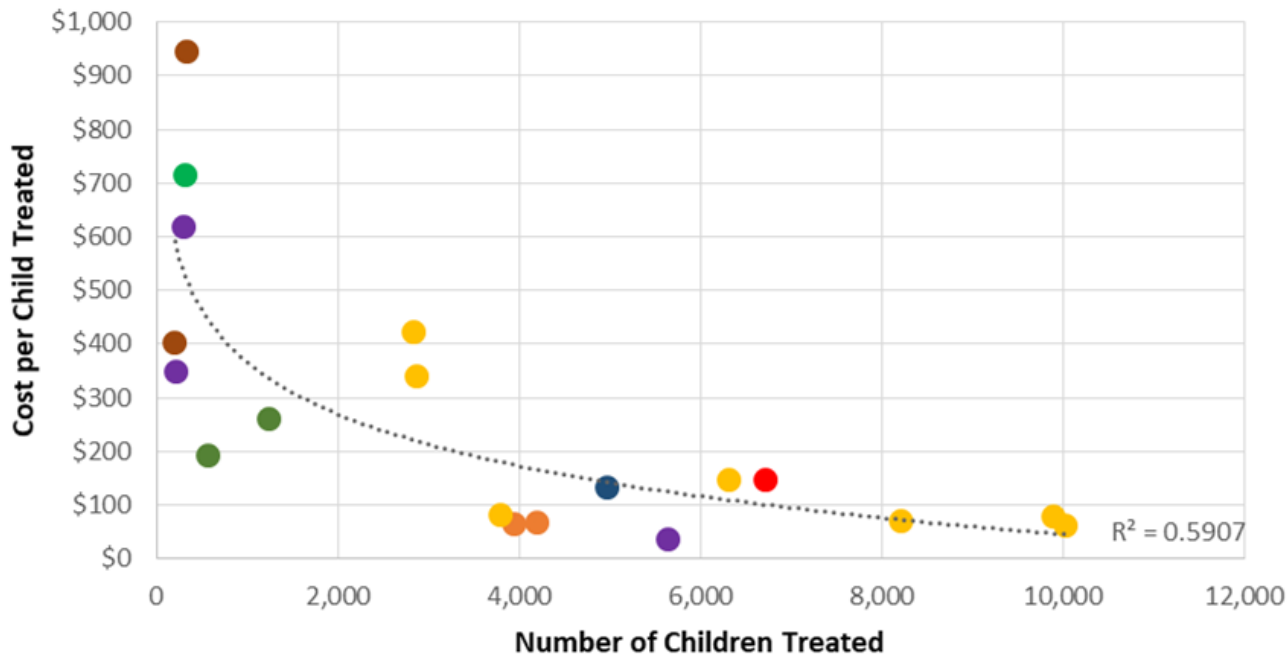* Note that these data do not include costs of RUTF at present

Data from 8 countries, up to 7 observations per country

Cost-per-child ranges from less than $100 to almost $1,000

Context features that __constrain__ cost-efficiency

Cost-per-Child vs. Program Scale

Programmatic features that <u>drive</u> cost-efficiency

*Once I have decided to implement wasting treatment in a given context, what **program design choices** can I make with an eye towards greater impact per dollar?*

of Health Centers

Changeable, to a point

Cost per Health Center

Set by context

$$\text{Cost per Child Treated} = \frac{\text{Total Cost}}{\text{# of Outputs}} = \frac{\text{# of Health Centers} \times \text{Cost per Health Center}}{\text{Population} \times \text{Malnutrition Rate} \times \text{Coverage Rate}}$$

Population

Set by context

Malnutrition Prevalence

Set by context

Treatment Coverage

Actually changeable!

Government use of cost data

an example from UNICEF's work in Indonesia on costing analysis

Blandina Rosalina Bait
Nutrition Specialist - UNICEF Indonesia

Severe Child Wasting in Indonesia

- Indonesia has the second-highest children under five affected by severe wasting

- 1 in 10 children under five in Indonesia suffer from wasting

- \> 2 million are severely wasted

- <5% of severely wasted children received treatment in a year
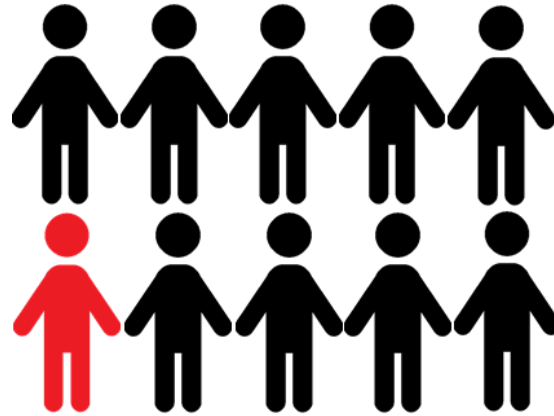
Target on Child Wasting: Global and Indonesia

Reduce child wasting to <5% by 2025 (WHA) and < 3% by 2030 (SDGs)

By 2024 the Government of Indonesia aims to:
- Reduce child wasting from 10.2% to **<7%**
- **90%** of severely wasted children receive treatment
- **60%** of primary health care centres provide IMAM services

Cost analysis of IMAM services in Indonesia: A case study from NTT Province

- First ever cost analysis of IMAM in Indonesia

- Supported by an International Consultant (Lani Trenouth), UNICEF EAPRO and UNICEF Indonesia in partnership with the Government of Indonesia

Involvement from Government of Indonesia (GoI)

Strong buy-in from the GoI (the Ministry of Health and Ministry of Development and Planning):

1) Preparation of the study (e.g. selection of focus areas, costing drivers, secondary data, etc.)
2) Tools development and contextualization to Indonesia context
3) Actively providing inputs from preliminary results up to final report, including the IMAM programme implementation and policy implication.

Relevance of IMAM costing to the GoI scale-up effort

1) Contextually grounded cost estimate, relying less on proxies and assumptions from other contexts or programs; makes cost assumptions transparent and increases the reliability of results.

2) Costing tool facilitates budget impact analysis (e.g. increasing coverage).

3) Provides cost data relevant for decisions on resource allocation needed to operationalize scale-up plans

Core Wasting Treatment Program Components

IMAM model

- Inpatient care for all <6 mo and complicated cases 6-59 mo

- Outpatient care for uncomplicated cases 6-59 mo

- Community outreach

Inpatient-only model

- Inpatient care for cases 0-59 mo, complicated and uncomplicated

- No outpatient care

- Community outreach

Costing Objectives

1) Estimate the total financial envelope required to implement IMAM in the sampled districts at the scope and scale outlined in the National Nutrition Plan

2) Compare the cost of service delivery through IMAM model with the cost of an inpatient-only care model for all cases including those without complications

3) Identify cost drivers for the purpose of seeking opportunities to improve cost-efficiency

Results of IMAM Costing

1) IMAM is 22% more cost-efficient than the inpatient-only model.

2) Focus on increasing treatment coverage in high burden areas; consider trade-off with equity.

3) Top three cost drivers of IMAM: 1) Community outreach personnel (28%); 2) RUTF & supply logistics (19%); 3) Outpatient care staff training (8%).

4) Early detection may reduce cost.

Thank you
Terima kasih

The Value of Costing Data and Analysis for USAID/BHA

- Scale of BHA CMAM Funding
- Increased cost effectiveness = more children reached

Cost Effectiveness Work Stream of FAQR

- Four Foods Study
- FACET4SNF - Decision Support Tool (facet4snf.org)
- FACET4SNF Training

Calculated Results based on User Inputs

Total Quantity and Total Cost Indicators:

170.2 MT: **Total Loss-Adjusted Quantity** of *Selected Specialized Nutritious Food*

$544,616 USD: **Total Procurement Cost** of *Selected Specialized Nutritious Food*

$0 USD: **Total Economic Cost to Volunteers and Recipients/Caregivers**

$5,408,262 USD: **Total Financial Cost to Program**

$5,408,262 USD: **Total All Inclusive Cost**

Cost-efficiency Indicators:

$203 USD: **Financial Cost per Targeted Child**

$203 USD: **All-Inclusive Cost per Targeted Child**

*Cost-effectiveness Indicators:*

$271 ($239, $312) USD: **Financial Cost per Recovered Child**

$271 ($239, $312) USD: **All-Inclusive Cost per Recovered Child**

$429 ($318, $578) USD: **Financial Cost per Sustained-Recovered Child**

$429 ($318, $578) USD: **All-Inclusive Cost per Sustained-Recovered Child**

Indicators related to MAM Burden:

65%: Total MAM Burden Will **Be Targeted** by the Program

49% (42 %, 55 %) : Percentage of Total MAM Burden with **Recovery** Due to This Program

31% (23 %, 41 %) : Percentage of Total MAM Burden with **Sustained Recovery** within *User-defined Post-treatment Period Due to This Program*
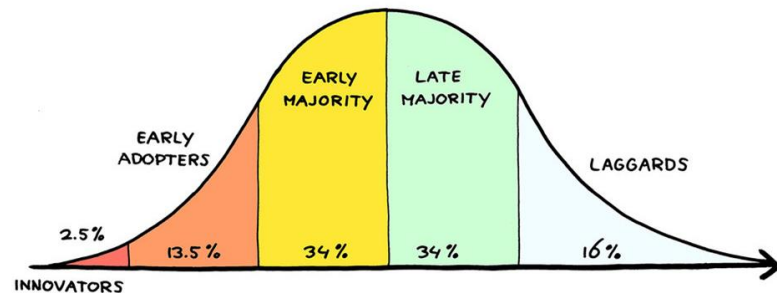
Practical Challenges

- Incomplete costing data
- (In)flexibility of choice
- Imprecise attribution of shared costing elements
- End to end programming costs straddling multiple organizations
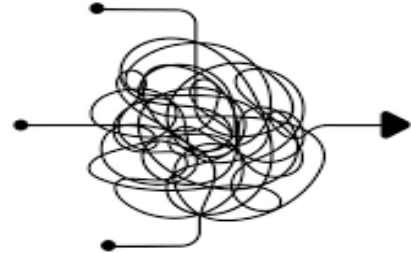
How do we envision using costing data going forward at USAID/BHA?

- Niche expertise to common practice
- Improved fluency in costing
- Supporting the community to develop and use costing tools and analyses

Q&A

Poll

What we do: The GNC Technical Alliance explained

2 minutes 30 seconds

How we provide support

Technical Support Team

Helpdesk Support

- ✓ NiE programming
- ✓ Intersectoral Collaboration
- ✓ Cluster Coordination
- ✓ IM/Nutrition Information for Coordination
- ✓ Advocacy

Deployable Advisors

In-country support

Technical Advisors deployed to provide technical support

Remote support

Technical Advisors work with teams remotely to provide technical support

Consultant Roster

We provide profile recommendations of technically vetted consultants.

You select the best consultant and bring them on board.

Where to find the Alliance
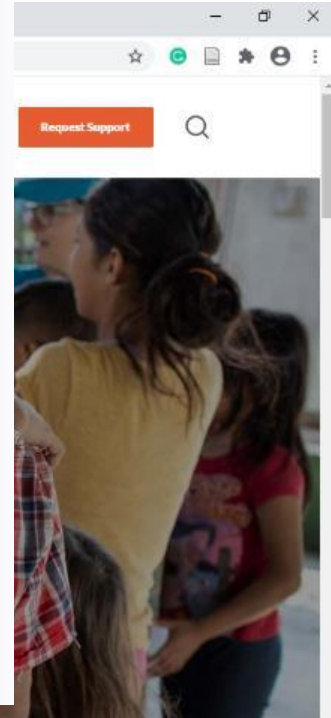
ta.nutritioncluster.net

Child wasting costing and cost-effectiveness working group

https://acutemalnutrition.org/en/cost-effectiveness
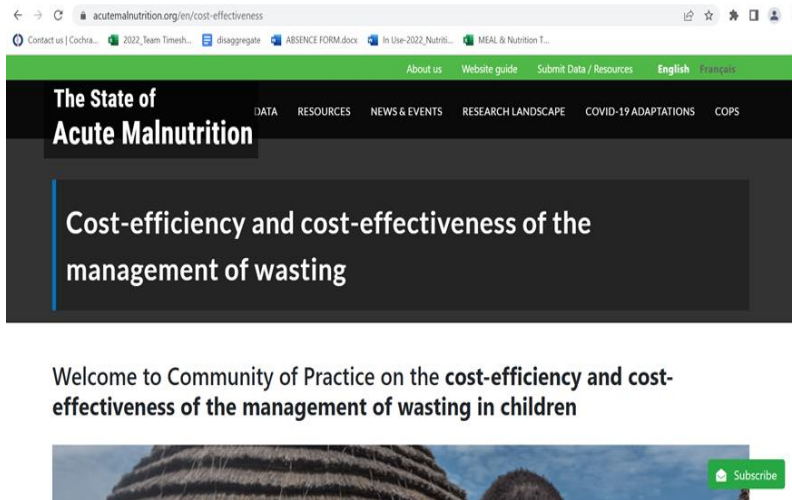
- Webpage for information sharing under construction

- Tools, guidance available evidence

- Link to ENN Forum

Please fill out the brief webinar evaluation
it will take less than 5 minutes
(*it will pop up when you leave the webinar*)

Thank you!