Lessons Learned from Cost-Effectiveness Research for Specialized Nutritious Food Assistance in West Africa
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Background & Objective
- Burden of stunting and wasting remains high globally, but resources are limited for nutrition interventions targeting infant and young children at risk. Robust cost-effectiveness evidence is important for programme decisions, but literature is sparse on cost-effectiveness of specialized nutritious foods (SNFs) in supplementary feeding programs.
- As part of the Food Aid Quality Review (FAQR) Project, we conducted two field studies to evaluate the comparative cost-effectiveness of four specialized nutritious foods:
  1) to prevent stunting and wasting in a blanket supplementary feeding program for children 6-23mo in Burkina Faso (BK)
  2) to treat moderate acute malnutrition (MAM) in a targeted supplementary feeding program for children 6-59mo in Sierra Leone (SL)

Study Design
- 48 food distribution points in Sannatatanga Province
- Existing Title II USAID supplementary feeding program (VIM) targeting pregnant and lactating mothers and children (could not capture start-up costs)
- Four geographic regions randomly assigned to one of four iso-caloric study arms
- Enrolled 6,092 children at ~6 months old
- Monthly food distribution and anthropometric measurements for 18 months with additional data collection at households, communities and other relevant venues.

Burkina Faso (BK)  Sierra Leone (SL)
- 28 Health Clinics in Pujeah District
- New supplementary feeding program for treatment of MAM in the district (could capture start-up costs)
- 28 clusters (clinic catchment areas) randomly assigned to one of four iso-caloric study arms
- Enrolled 2,686 children with MAM
- Bi-weekly food distribution and anthropometric measurements at clinics until recovery for up to 12 weeks with additional data collection at households, communities and other relevant venues.

Study Foods (Comparators)
- Arm 1: Corn Soy Blend Plus
- Arm 2: Soy Blend
- Arm 3: Super Cereal Blend
- Arm 4: RUSF

Costing Methods
- Activity Based Costing- Ingredients Approach:
  - Program Perspective:
    - all cost to the program/funder, including opportunity cost of volunteers
  - Program + Caregiver Perspective:
    - adding caregiver opportunity cost

Study Instruments: (Observed vs. Self-reported)
- Delivery observations
- Distribution/Clinic observations
- In-home observations
- In-depth interviews with caregivers
- In-depth interviews with community health workers and lead mothers

Conclusions, Lessons, and Next Steps
- Cost varied substantially among the three products that were similar in effectiveness in the BK study, highlighting the importance of generating both cost and impact estimates from research.
- Considering opportunity costs (caregivers and program volunteers) is important in cost-effectiveness analysis for the sustainability of food assistance programs. Including caregiver perspective could affect relative cost-effectiveness rankings. How we value opportunity cost of time matters.
- Sensitivity analyses showed that starting at a rate of $0.37 USD/hr, RUSF arm began to have lower total cost per child reached than CSB+ arm.

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