Breakthrough Innovations to Significantly Reduce the Cost of Severe Acute Malnutrition Treatment

Before applying, applicants should familiarize themselves with the supporting documents for this Grand Challenge, including the terms and conditions of the Gates Foundation, the Rules and Guidelines, Application Instructions, and Frequently Asked Questions

constraints, improving outcomes will require not only expanding budgets but fundamentally improving the cost-effectiveness of SAM treatment.

While Ready-to-Use Therapeutic Food (RUTF) is central to SAM treatment, it represents only one component of total treatment cost. In many contexts, logistics, staffing, supervision, visit frequency, and system overhead account for a substantial share of the total cost per child treated.

This Grand Challenge seeks innovations that can substantially increase the number of children treated per dollar spent by reducing the total cost per child treated, without changing the ex-factory price of RUTF or substituting RUTF with an alternative product.

This initiative is designed as an idea-sourcing and proof-of-concept mechanism to identify transformative, system-level innovations.

The Challenge

We seek innovative approaches capable of achieving a 20 - 30% or greater reduction in the total cost per child successfully treated for SAM in Sub-Saharan Africa and South Asia.

We recognize that reductions may result from a single breakthrough innovation or from a combination of product, logistics, protocol, and delivery efficiencies that collectively achieve meaningful cost reduction.

Solutions must:

- Provide a validated pathway to a 20% - 30% or greater reduction in total cost per child treated.
- Include a transparent cost model with clear assumptions, key drivers, and sensitivity analyses.
- Demonstrate proof-of-concept feasibility (e.g., modeling, simulation, pilot data).
- Present a credible pathway to normative and/or regulatory acceptance, where relevant.
- Show a clear scalability pathway and explain why cost reductions are durable at scale.

Logistics and distribution (transport, storage, losses, inefficiencies) often represent a significant share of total SAM treatment cost.	transport frequency or distance • Community- or facility-linked delivery models reducing parallel systems • Consolidated deliveries across other programs (e.g., immunization, MDAs, REACH) • Inventory optimization tools to reduce stockouts • Warehousing solutions • Storage optimization for shelf life and efficiency • Loss-reduction strategies (spoilage, leakage, diversion) • Digital demand forecasting tools • Route optimization or fleet management systems	• Clear causal pathway to a 20% - 30% or greater reduction in total cost per child treated • Analytical or pilot feasibility evidence • Contextual assumptions (e.g., emergency vs. non-emergency settings)
Treatment Protocols and Regimen Design Treatment protocols influence cost through product consumption, visit frequency,	• Adaptive dosage or duration based on child response • Regimens reducing total RUTF consumption	• Clear differentiation from existing simplified protocols • Identification of affected cost drivers (e.g., RUTF

	Proposals relying solely on already widely adopted simplified protocols will be considered nonresponsive.	
Program Delivery Models Delivery models significantly affect total treatment cost, especially through staffing, visit schedules, supervision, and system overhead.	• Community-based or decentralized care models • Task-shifting to community health workers or volunteers • Reduced-touchpoint or simplified monitoring strategies • Integrated service delivery models • Alignment with routine health systems to reduce parallel structures	• Description of how the delivery model differs from current practice • Identification of affected delivery cost drivers • Modeling or evidence supporting plausible 20% - 30% or greater cost reduction • Discussion of quality and safety safeguards
Complicated (In-patient) SAM Care Optimization Concepts that reduce the cost of inpatient/complicated SAM care while maintaining or improving clinical outcomes. (In many settings, 10–20% of children with	• Innovations reducing length of stay without compromising safety • Clinical pathway optimization • Resource-efficient stabilization models • Integrated inpatient–	• Clear identification of inpatient cost drivers affected • Cost model demonstrating plausible 20 - 30% or greater reduction in total cost per child successfully treated

    - A baseline cost decomposition and explanation of how the proposed innovation changes the cost structure
    - A transparent and credible cost model quantifying a 20% - 30% or greater reduction in total cost per child treated
    - Proof-of-concept evidence supporting feasibility (e.g., modeling, pilot data, simulations)

  All proposals must include a cost model clearly aligned with the proposed operational or technical innovation.

- For the purposes of this call, "cost per child treated" refers at minimum to the cost per child successfully discharged according to standard SAM program exit criteria.
    - Proposals must clearly describe safeguards to ensure that cost reductions do not compromise clinical outcomes, quality of care, or safety standards.
- Data Sharing and Transparency
    - Commitment to share relevant data (with appropriate safeguards) to support replication and policy processes
    - Contribution to cross-project learning where possible
- Environmental Considerations
    - Brief discussion of environmental implications (e.g., energy use, waste, system efficiencies) and how these are managed
- Responsible Use of AI and Digital Technologies (if applicable)
    - Clear articulation of data privacy and security safeguards
    - Consideration of explainability and usability for nonexpert users in LMIC contexts

Funding Structure

For any of the Focus Areas we will consider proposals under two funding options. Please consider which is most relevant to your proposal.

- **Option A:** We will consider several proposals for awards of **up to $500,000 USD** for each project, with a grant term of **up to 18 months**. Application budgets should be commensurate with the scope of work

Individuals and organizations classified as individuals for U.S. tax purposes are not eligible to receive an award from the foundation as part of this initiative.

What we are looking for

Successful proposals will:

- Demonstrate a 20% - 30% or greater reduction in total cost per child treated.
- Include a transparent and credible cost model.
- Show proof-of-concept feasibility.
- Clearly articulate affected cost components and durable savings.
- Present a credible pathway to scalability.
- Address real-world adoption constraints and data availability.

We will not fund proposals that:

- Fund clinical trials or definitive efficacy studies.
- Scale or geographically expand existing simplified protocols.
- Support routine implementation or business-as-usual operations.
- Replicate existing approaches without step-change potential.
- Lack a plausible pathway to a 20% - 30% or greater cost reduction.

Initiative: Grand Challenges

Challenge Topic: Nutrition

Date Open: Mar 17, 2026, 9:00 am PDT

Deadline: Apr 28, 2026, 11:30 am PDT

Supporting Materials:

- Reduce Cost of Severe Acute Malnutrition Treatment - RFP
- Reduce Cost of Severe Acute Malnutrition Treatment RFP - Chinese