

HOME FIRST

Human-Centered Service Design

Supplementary Documentation | iF Social Impact Prize 2026

About This Document

This document provides additional drawings, diagrams, and descriptions to support the HOME FIRST submission — a human-centered service model that redesigns the transition from hospital to home for children dependent on life-sustaining technology and their families. The content is organized to directly address the five iF Scorecard evaluation criteria: Problem-Solving, Moral-Ethical Standards, Design Relevance, Reasonable Effort, and Beneficial Experiences.

Institution

Hospital Martagão Gesteira
Salvador, Bahia, Brazil

Operating Since

2012 — 12+ years of continuous
evidence-based implementation

SDG Alignment

SDG 03: Good Health & Well-Being ·
SDG 10 · SDG 1 · SDG 17

Target Population

Children dependent on mechanical ventilation, tracheostomy, and spinal muscular atrophy (SMA) — and their families — trapped in prolonged hospitalization

Core Innovation

Inverted the logic of home care: clinical skill transferred to families through immersive, competency-based training rather than costly professional home nursing

System Context

Operates within Brazil's public health system (SUS/SESAB) — institutionalized, free at point of care, and scalable without new technology or external funding

Design Method

Built through Human-Centered Design: empathy research, six-stage journey mapping, service blueprinting, field prototyping, and co-authorship with families

"What if the problem was not the child's medical condition, but the design of the care journey itself?"

The Problem: When Hospitals Become Permanent Homes



Children dependent on life-sustaining technology — mechanical ventilation, tracheostomy, spinal muscular atrophy — were living inside hospitals, some in ICUs for over six years. Their mothers lived there too. Healthcare systems were never designed for what comes next.

The Paradox

Children remain hospitalized for months or years — not because they require acute treatment, but because the obvious answer (professional home care) is economically unviable at scale for public systems and cannot reach the favelas where many families live.

For Children

Developmental delays, reduced social interaction, increased exposure to hospital-acquired infections, loss of family life and childhood milestones. Institutionalization compounds clinical complexity.

For Families

Parents abandon employment, experience severe psychological distress, and develop chronic anxiety — becoming permanent hospital residents instead of caregivers. Families are suspended between two worlds.

For Health Systems

ICU beds occupied by clinically stable patients; other critically ill children wait for access; resources consumed without corresponding health gains. System-wide inefficiency compounds individual suffering.

 **The Real Barrier Is Not Clinical — It Is Systemic and Social:** Professional home care is economically unviable at scale. HOME FIRST inverted the logic: it transfers clinical skill to families through immersive training and competency-based discharge, so safety no longer depends on a professional's presence. It also required a new institutional care protocol, formally approved by the hospital, authorizing ventilated children to live at home.

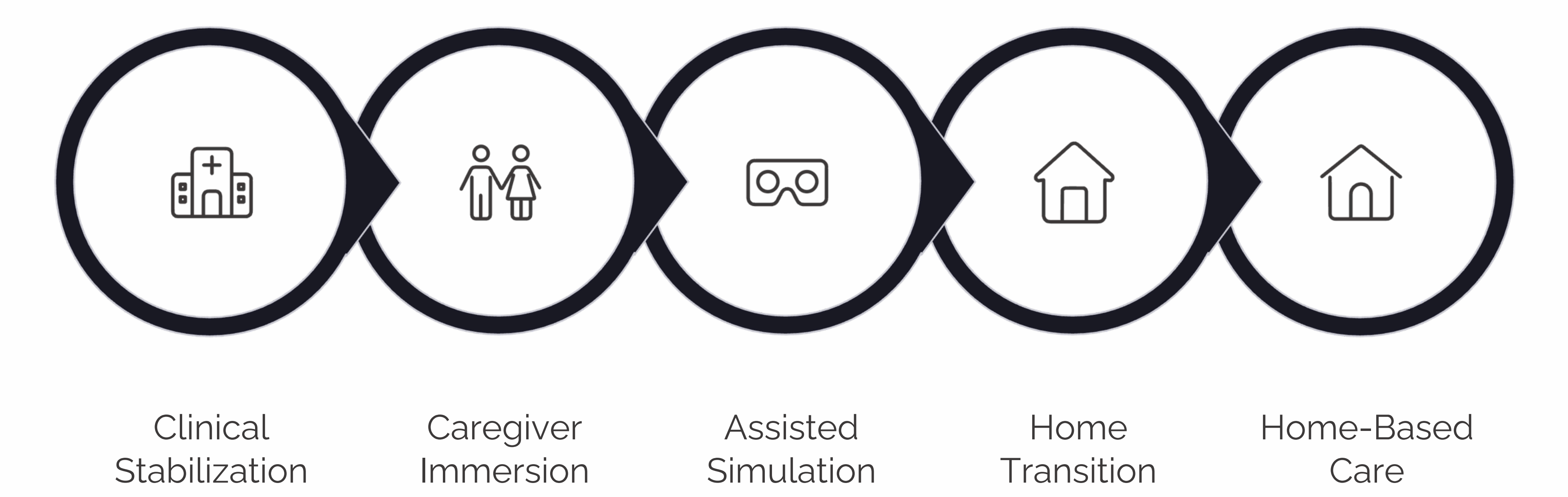
Traditional Model vs. HOME FIRST Model

Dimension	Traditional Hospital Model	HOME FIRST Model
Care focus	Hospital-centered	Family-centered
Caregiver role	Passive recipient of instructions	Active co-designer of care
Discharge	Single isolated event	Carefully designed transition journey
Post-discharge	Fragmented or absent follow-up	Continuous integrated home support
Primary care environment	Hospital	Home
Knowledge	Concentrated in institutions	Distributed to families & communities

The Service Journey: 6 Interconnected Stages



HOME FIRST is organized as a seamless, end-to-end service journey — not a sequence of isolated clinical interventions. Each stage is intentionally designed to reduce uncertainty and build caregiver confidence, spanning from hospital stabilization to long-term community reintegration.



The journey moves from hospital-based clinical stabilization through immersive family training, into a carefully managed home transition backed by social infrastructure, and culminates in long-term empowerment where families become autonomous caregivers.

01

Clinical Stabilization

Physicians stabilize the child's condition and determine eligibility for home-based care. Families are introduced to the possibility of a safe return home. Hope begins to replace uncertainty.

02

Caregiver Immersion (UTD)

Families move into the Dehospitalization Training Unit. Through hands-on learning embedded in daily clinical routines, caregivers master airway management, tracheostomy & gastrostomy care, ventilator management, medication administration, infection prevention, and emergency response. Training begins with empathy: fears are voiced and answered through dialogue, never silenced.

03

Assisted Simulation

Healthcare professionals gradually reduce direct intervention while caregivers independently perform increasingly complex procedures. Competence is validated through observed practice — not written exams. Mistakes become learning opportunities in a safe environment.

04

Home Transition (Clinical + Social)

A carefully orchestrated discharge on two fronts: **Clinical** — environmental conditions verified, medical equipment installed, emergency channels established. **Social** — Solidarity Rent funds and adapts a house (safe wiring, air conditioning), social workers recover all social benefits, food baskets are donated. The system prepares the home; families are not left to adapt alone.

05

Home-Based Care (PAVD)

The Home Mechanical Ventilation Program extends specialized care into the child's home: weekly visits from pediatricians, physiotherapists and psychologists, equipment maintenance, reserved ICU beds for complications, and emergency response articulation with SAMU. Home becomes an extension of the healthcare system.

06

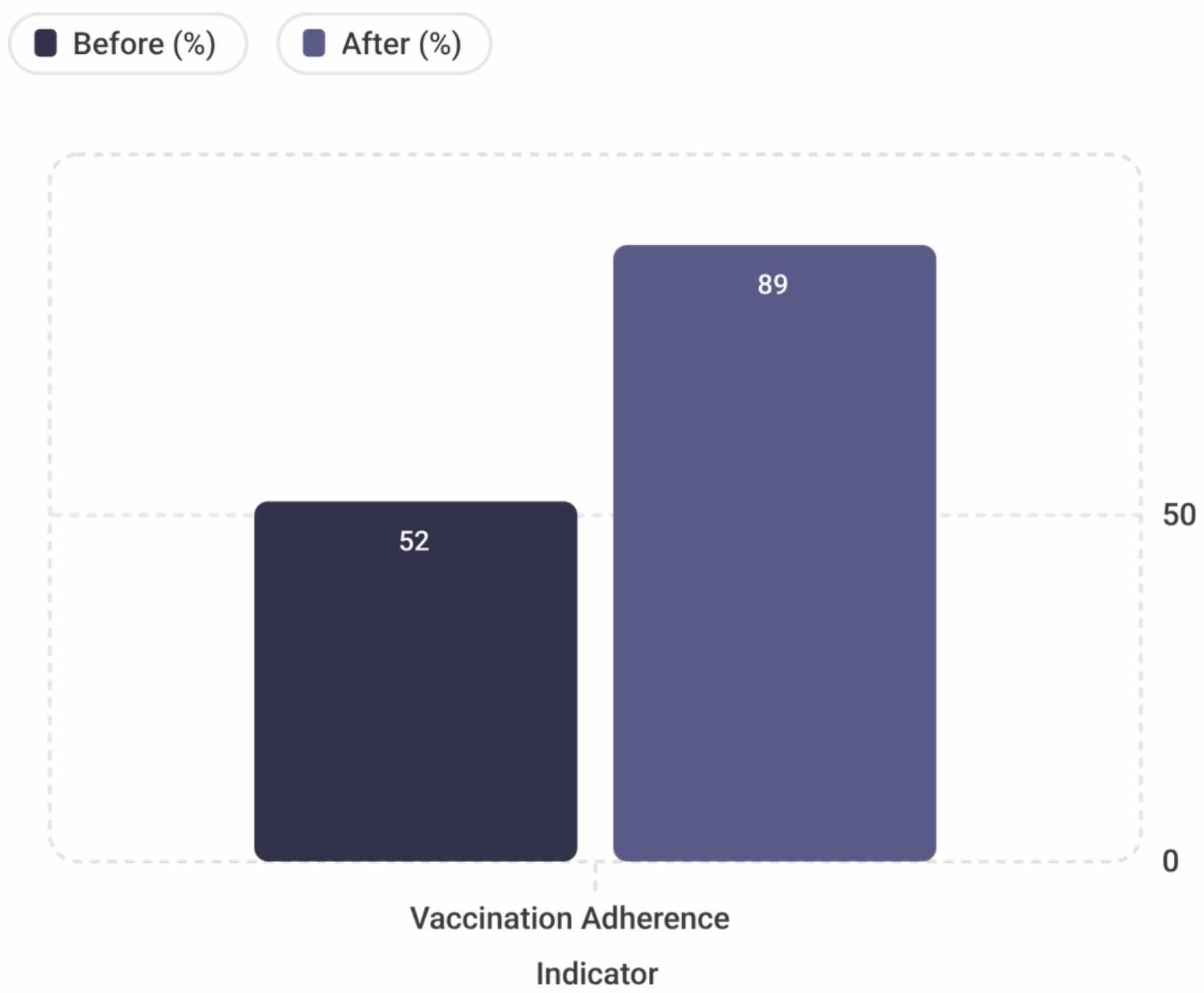
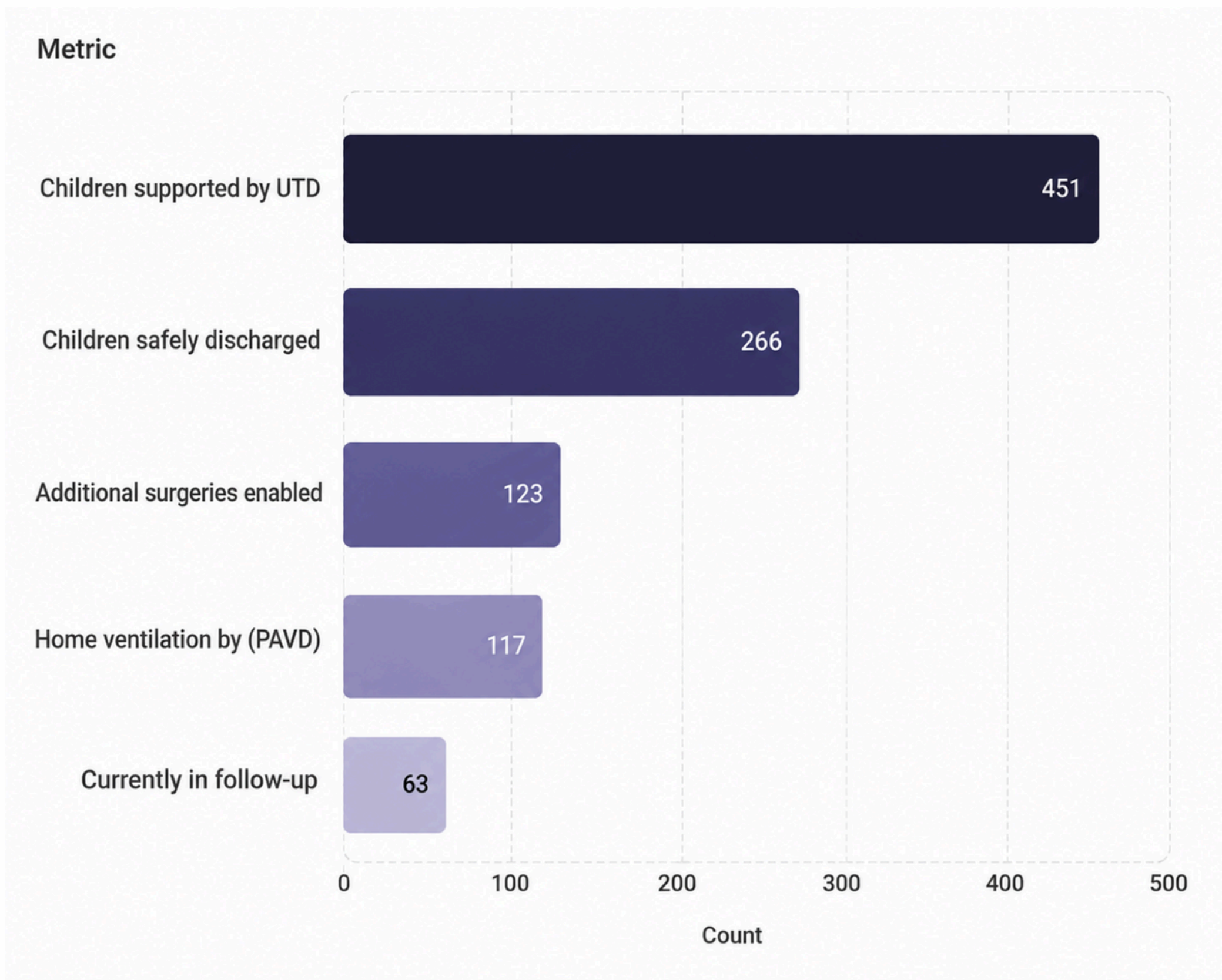
Long-Term Empowerment

Over time, families become increasingly autonomous. Professionals transition from direct providers to trusted advisors. Children regain childhood and are reinserted into their communities. Families recover a life of their own. The outcome is the restoration of family life and dignity.

Measured Impact: 12+ Years of Evidence



Since 2012, HOME FIRST has generated measurable outcomes across four dimensions — children, families, healthcare professionals, and the hospital system. The model runs inside existing hospital infrastructure and public funding (SUS/SESAB), requiring no new technology. It replaces continuous professional home care — costlier and territorially unfeasible — with trained family competence, backed by weekly visits and reserved ICU beds.



Vaccination adherence increased from **52% to 89%** — a 37-percentage-point improvement reflecting stronger family engagement in long-term health management.

451

Children Supported by UTD

Families trained to safely continue complex care at home.

266

Children Discharged

Safely transitioned from prolonged hospitalization to home-based care since 2012

63

Home Ventilation

Children supported with home mechanical ventilation — among the most complex forms of pediatric home care

40%

Infection Reduction

Reduction in hospital-acquired infections among children discharged through the program

123

Surgeries Enabled

Additional elective pediatric surgeries enabled in a single year through improved bed availability

12+

Years Operating

Continuous institutionalized operation within SUS/SESAB — not a pilot, not a grant-dependent project

❏ The ICU beds released by HOME FIRST enabled 123 additional elective pediatric surgeries in a single year — demonstrating that dehospitalization benefits the entire pediatric healthcare network, not only the families it directly serves. Caregiver well-being also showed substantial reductions in anxiety and depressive symptoms, documented through internal program evaluations.

Design Principles & iF Scorecard Alignment



HOME FIRST demonstrates how Human-Centered Design can transform a complex clinical challenge into a scalable, equitable and sustainable model of care.

Design as the Project Itself

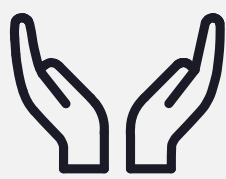
HOME FIRST was built through Human-Centered Design – from empathy research and journey mapping to service blueprinting and field prototyping. Design reshaped clinical protocols, physical environments and family-professional relationships, transforming families from passive recipients into co-authors of care.

Five Human-Centered Design Principles



Empathy Before Instruction

- Trust before technical competence.



Learning by Doing

- Supervised practice builds confidence.



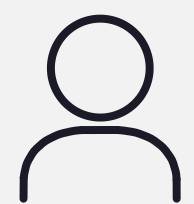
Safe Transition

- Readiness before discharge.



Continuous Care Beyond Walls

- Specialized care continues at home.



Family Empowerment

- Capability creates autonomy.

Contribution to UN Sustainable Development Goals

SDG 3 — Good Health & Well-Being

SDG 10 — Reduced Inequalities

SDG 1 — No Poverty

SDG 17 — Partnerships

The following maps HOME FIRST's documented outcomes directly to each of the five iF Social Impact Prize evaluation criteria, demonstrating systematic alignment with the jury's standards of excellence.



Problem-Solving — Innovation & Elaboration

- Transfers clinical skills to families while addressing medical and social barriers — enabling safe discharge without costly professional home care.



Moral-Ethical Standards — Dignity & Power

- Restores childhood, family life and dignity while providing equitable access through Brazil's public health system.



Design Relevance

- Empathy research, journey mapping, service blueprinting and prototyping redesigned the entire care experience — not just its communication.



Reasonable Effort

- Uses existing infrastructure and public funding, with trained families supported by continuous professional follow-up.



Beneficial Experiences

- Children return to their communities; families gain confidence and autonomy while remaining connected to a professional safety net.

"266 children returned home. Not to a hospital annex. To their homes, their siblings, their communities."

"Mothers who lived in ICUs for years recovered their lives. That is what good design can do."

"HOME FIRST is not a program about technology. It is a program about trust — between families and the systems that serve them."