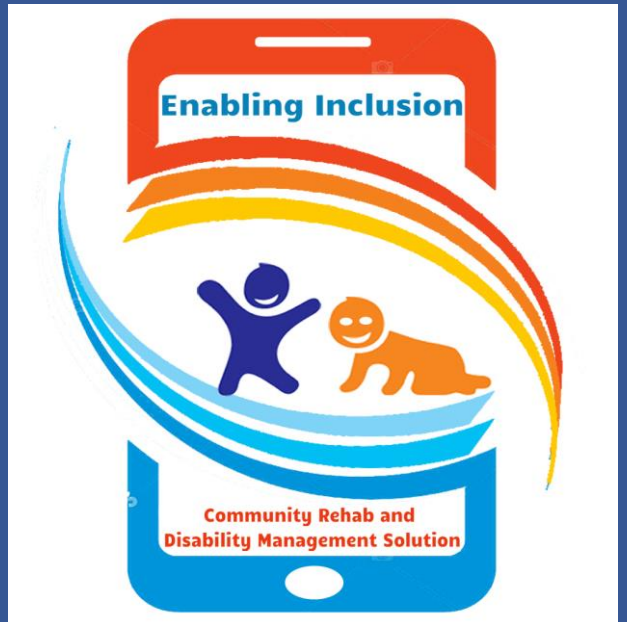




Integrating the ICF, family-centred care and community-based rehabilitation in rural South India: Enabling Inclusion model and app

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Background

- Low and middle-income countries such as India are home to 95% of the world's children with disabilities (CWDs) under the age of five years, and 80% live in rural areas with no access to early intervention services.
- Barriers to inclusion of CWDs are stigma, lack of professional training, and limited services due to lack of funding.
- In 2014, Amar Seva Sangam (ASSA), a disability NGO working in Tamil Nadu, India initiated the development of an innovative solution to support the rights of CWDs and their families.
- To the end, a long-term Indo-Canadian partnership was established with a Canadian charity, Handi-Care Intl, the University of Toronto, and McGill University.

Objectives

The program aimed to develop and implement an innovative evidence-based service delivery model to provide early intervention services in a rural low-resource setting.

ASSA sought to create a **service model** incorporating elements of:

- the International Classification of Function, Disability and Health (ICF) framework
- the Family-centred approach (FCA)
- the Community based-rehabilitation (CBR) strategy.

EI Program objectives included:

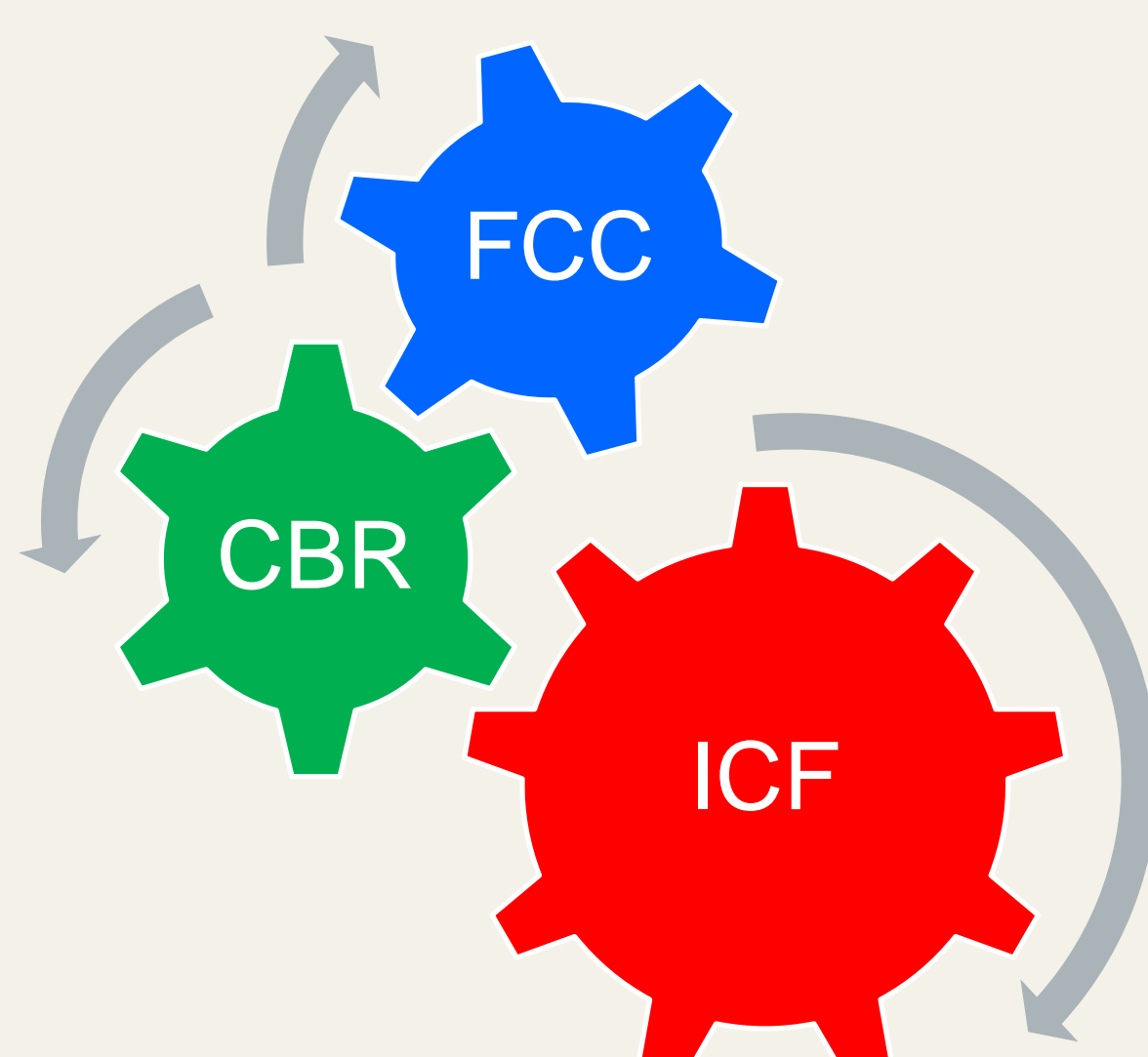
- Provide access to EI services, primarily home-based
- Improve child development
- Support family engagement and well-being
- Increase school enrollment
- Position the EI model and app for scale-up

Methods

• **The Enabling Inclusion (EI) model** was developed and implemented by Amar Seva Sangam, an NGO in rural South India, to provide access to community-based early intervention services for CWDs.

• **The EI app** has evolved as a global health digital solution, employing a Theory of Change and rapid cycle action,

• **The EI model** aimed to integrate the ICF conceptual framework, CBR strategy, and the FCA to best support the needs of CWDs and their families living in a LMIC setting.



• **Digital technology** was leveraged to improve connectivity between families, community rehabilitation workers (CRWs), and rehabilitation specialists to provide evidence-based services in a low-resource context.

Results

The Enabling Inclusion (EI) app, a comprehensive mobile application, was developed to support the EI Model.

The EI model's integrated modules include:

(1) Validated screening tools

- TDSC (Trivandrum Development Screening Chart)
- UNICEF/Washington Group CFM (Child Functioning Module)

(2) Assessment module

- **General Child and Family Assessment:** ICF-based assessment covering:
 - Body Structures and Function
 - Activities
 - Participation
 - Environmental factors
 - Personal Factors
- **Discipline-specific assessments:** physiotherapy, special education, speech, functional vision & hearing assessment
- **Environmental Assessment:** home and school environment, facilitators and barriers

(3) Standardized evaluations across developmental domains and ICF components;

- GMFM (Gross Motor Function measure)
- Wee-FIM (Pediatric Functional Independence Measure- Self-care, Mobility, Cognition)
- Com-DEALL (Communication Developmental Checklist)
- FACP (Functional Assessment Checklist for Programming)

(4) Family-centred goal setting tool and caregiver measures;

- COPM (Canadian Occupational Performance Measure)- family priority and goal identification
- FES (Family Empowerment Scale)
- MCSI (Modified Caregiver Strain Index)
- CI (Caregiver-child interaction measure)

(5) ICF-based intervention activities

Treatment based on child and family needs and goals.

(6) Training and awareness module

- Training for Child development / ICDS workers, Health Workers, teachers, parent groups.
- Awareness programs for community, women and student groups.



- **Individualized intervention plans** aim to maximize child potential for function, participation, and social inclusion.
- **Family empowerment** is emphasized through caregiver capacity building (coaching approach), parent support groups, and peer mentorship.
 - Using a **train-the-trainer approach**, rehabilitation specialists build CRWs' developmental knowledge and therapeutic skills.
- **Community-based disability awareness groups** educate, dispel stigma, change attitudes and practices to enable inclusion.



Conclusion

- The EI Model highlights the successful integration of family-centred ICF-based clinical service delivery with a CBR strategy to provide equitable home-based early intervention and rehabilitation for CWDs and families in rural India.
- The innovative EI model, with its globally-recognized clinical digital application, is being scaled-up in the state of Tamil Nadu and adopted across India in partnership with other NGOs.
- It has potential to generate large scale impacts to clinical practice in childhood disability in low-resource settings.



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