Implementation Science Research Program
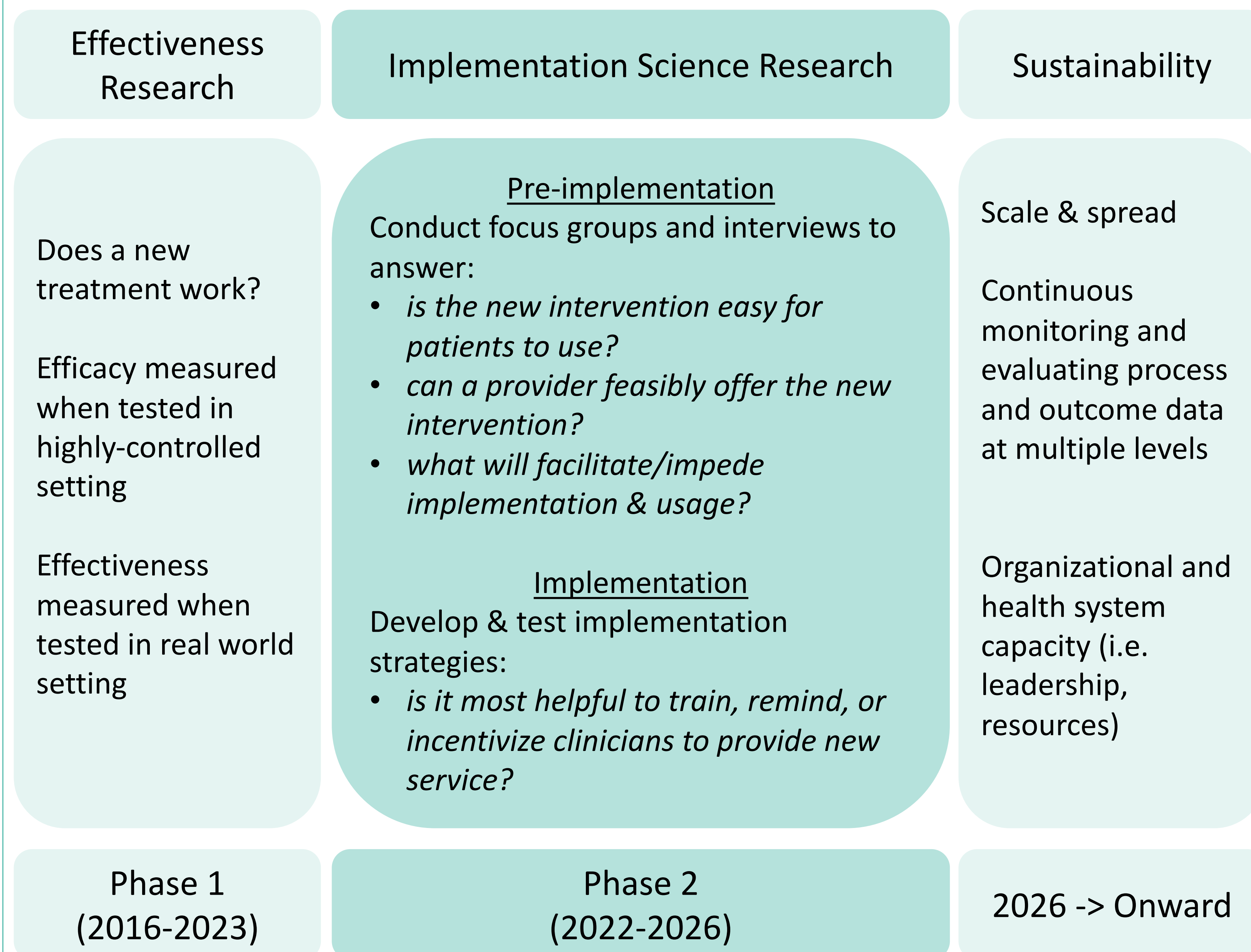
Transitioning from Phase 1 to Phase 2

During Phase 1, CHILD-BRIGHT's 13 pan-Canadian research projects, developed and studied new diagnostic tests, therapies, service models, and technologies to optimize the physical and mental health of Canadian children born with brain-based developmental disabilities (BDD) and well-being of caregivers & families.

In Phase 2 (2022-2026), we study *how* to bring evidence-based interventions tested in controlled settings in Phase 1 into the real world.

Bringing evidence-based interventions from research into real world practice is a challenge. **Implementation science** studies how interventions interact with "real-world" settings. **Our goal** is identifying what needs to be in place for interventions to succeed in practice at scale.

What is Implementation Science Research?

Implementation science bridges the gap between developing and evaluating effective interventions and implementation in routine practice or policy to improve patient and population health.

Effectiveness Research	Implementation Science Research	Sustainability
Does a new treatment work? Efficacy measured when tested in highly-controlled setting Effectiveness measured when tested in real world setting	**Pre-implementation** Conduct focus groups and interviews to answer: • *is the new intervention easy for patients to use?* • *can a provider feasibly offer the new intervention?* • *what will facilitate/impede implementation & usage?* **Implementation** Develop & test implementation strategies: • *is it most helpful to train, remind, or incentivize clinicians to provide new service?*	Scale & spread Continuous monitoring and evaluating process and outcome data at multiple levels Organizational and health system capacity (i.e. leadership, resources)
Phase 1 (2016-2023)	Phase 2 (2022-2026)	2026 -> Onward

Meet our Team

Program Co-Leads

Steven Miller — Janet Curran
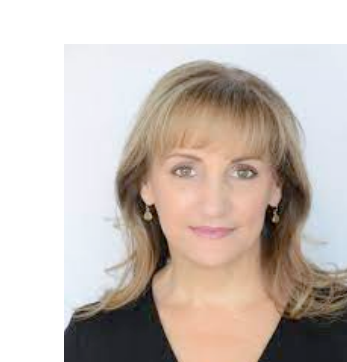
Program Manager

Alan Cooper

Implementation Science Experts

Andrea Patey — Christine Cassidy — Melanie Barwick

Stephanie Glegg — Sydney Breneol — Andre Bussieres

Our Project Development Pipeline: a collaborative & multi-programmatic approach

CHILD-BRIGHT Programs and Services → **Consultations** → **Peer Review**

Project Team →

CHILD-BRIGHT Programs and Services	Consultations	Peer Review
Implementation Science (IS)	IS Expert provides methodological support	Implementation Scientists
Knowledge Mobilization (KM)	KM Plan / KM Hubs	KM Experts (researcher and patient-partner)
EDI-DI	EDI-DI Logic Model	EDI-DI Experts (researcher and patient-partner)
Citizen Engagement	CE Plan / POR Toolkit	CE Experts (adult and youth partners)
Training & Capacity Building	Support Trainees / Train Network Members	
Communications	Project Branding / Visibility	

→ **Approved Project**

12 weeks → 4 weeks

Phase 2 Project List

1) Improving developmental follow-up for children with congenital heart disease; Mike Seed *et al.*
2) *CHILD-BRIGHT Parent Voices*: improving follow-up for children born preterm; Thuy Mai Luu *et al.*
3) *CHILD-BRIGHT Interplay*: improving access to early manual therapy for children with cerebral palsy; Adam Kirton *et al.*
4) *CHILD-BRIGHT GRIP:* improving access to genome sequencing for children with BDD; Robin Hayeems *et al.*
5) *PIUO*: implementing a diagnostic pain pathway in community clinics; Hal Siden *et al.*
6) Understanding factors that lead to funding of psychosocial interventions; Patrick McGrath *et al.*
7) *CHILD-BRIGHT Jooay*: increasing participation in leisure activities for children with BDD; Keiko Shikako
8) Implementing treatments to improve emotional and behavioural self-regulation; Jennifer Crosbie
9) *CHILD-BRIGHT CCENT*: supporting parents transitioning from the NICU to home; Julia Orkin *et al.*
10) *CHILD-BRIGHT Coaching:* coaching parents of children with suspected developmental delays; Annette Majnemer *et al.*
11) *POE-NAS:* addressing prenatal opioid exposure in First Nation communities; Astrid Guttmann *et al.*
12) *MICYRN:* infrastructure for efficient pediatric patient-oriented research; Thierry Lacaze-Masmonteil *et al.*

Our Commitment

Our projects will:
• use IS theories and frameworks
• track imp. and effectiveness metrics
• be grounded in POR methodology
• advance health equity
• build capacity for IS research in BDD

Legend
BDD: brain-based developmental disability; IS: Implementation Science; KM: Knowledge Mobilization; EDI-DI: Equity, Diversity, Inclusion, Decolonization & Indigenization
POR: Patient-Oriented Research