

MICYRN - Streamlining Maternal/Child Health Research

Paediatric Grand Rounds
June 22, 2022



A national maternal/child health research network

- Established in 2006
- Linking all of the 18 child and the three of the largest maternal health research organizations in Canada
- Incorporated non-profit, registered charity 2011
- BOD, executive team, with coordinating centre in BC
- Funded by RIs, Foundations and Departments (also supplemented by CIHR and Genome Canada via Rare Diseases Network, Canadian Childhood Cannabinoid Clinical Trials Network, some fee-for-service support agreements with other organizations).





Clinical Trials Platform

- Pediatric Clinical Research Units at 18 Academic Child Health Centers: The "consortium"
- ARO services Delegated tasks of sponsorship

National Coordinating Centre

Logistical Support
Communication and KT
Finances and Project Management
Maintaining Partnerships

Engagement Associate

Administrative Assistant



Advocacy and National Partnerships

- Maternal/Child and Youth Health Research Director Council national voice and direction, collaborative opportunities, COVID-19 challenges/approaches, large funding opportunities
- Paediatric Chairs of Canada (PCC) Clinician Scientist Training Program resident research annual meeting
- Children's Healthcare Canada (CHC) clinical investigation unit partnerships with hospitals, research embedded in hospitals
- Health Canada: OPPI— coordinated advocacy (CPS, PCC, CHC, C17) and consultation
 - Agile Regulation Modernizing Pediatric Clinical Trials Regulations
 - Pediatric Drug Action Plan (CMAJ Open, 2022, 194:E678)
 - National Strategy on High-Cost drugs for Rare Diseases a pledge for a national infrastructure





- Cross-province streamlined ethics review process for multi-site studies
- ► Goal: Achieve a single ethics review for child health studies in Canada

Deliverable 1

Web-Based Collaborative Research Ethics Review Platform

- Electronic ethics system
- Pediatric-specific assent/consent templates
- Template agreements for delegating to an REB of Record

Deliverable 2

REB Assessment Program

- Phase I: Based on CTO qualification program
- Phase II: Revised based on needs of CHEER collaborative and external stakeholders

Deliverable 3

Research Ethics Education Program

- Child health ethics educational modules
- Supports for patients/family members on REBs
- Common issues and challenges

Deliverable 4

Final Report & Recommendations



National Collaborations

- Canadian National Perinatal Research Meeting (CNPRM) 2022 and 2023
- Health Research Training Platform (ENRICH, Dr. Susan Samuel)
- The Canadian Collaborative for Childhood Cannabinoid Therapeutics Network
- MICYRN and Child Bright partnering for renewal (CIHR SPOR network chronic diseases): Lessons learned from Child Bright #1
- Rare Diseases (Institute of Genetics, IHDCYH, HC, and CORD):
 - Rare Diseases: Models & Mechanisms Network (RDMM)
 - National Infrastructure to support CT in the rare disease space
 - Establishing a network of centres of excellence following models in other jurisdictions



National Pediatric Clinical Trials Infrastructure

Tactics to improve Canadian child health through increased access to high-quality clinical trials supported by an efficient, safe, and family-centered national infrastructure.

- 1. Support the development of **clinical trials unit (CTU) capability** across the research organizations (e.g. national CTU capability database, delegated sponsorship tasks)
- 2. Develop multicentre **trial guidance tools and resources** (e.g. trials checklists, contracts lawyer network, support for trials submissions to Health Canada)
- 3. Build expertise as the "single-point" of contact for clinical trials to for the investigator community and industry (expertise pool of investigators, specialty research networks and industry centres of excellence)



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- 4. Work with **Health Canada** on key guidance issues to better support sponsors of clinical trials
- Support development of research ethics harmonization for multijurisdictional studies
- 6. Global collaborations: pan-European (c4c) and US (i-ACT) clinical trial networks







Removing Barriers

- Through partnerships with academia, MICYRN is assisting international and national investigators in the planning, development, and execution of non-oncology, multi-centre, maternal/child health clinical trials
- Centralized national infrastructure
- Academic Research Organization (ARO)-like function



ARO Service Goals

- Improve access, quality, efficiency, timelines, and cost effectiveness for maternal/child health clinical trials
- Streamlining processes to bring better medicines and therapies to mothers and children in Canada









Pre-Award Services (In-kind)

Consultation (Regulatory and Budget)

Scientific Depth and Protocol Optimization

Project Planning

Letters of Support





Post-Award Services (Cost Recovery)

Protocol Transition

Health Canada Regulatory Submissions

Harmonized Ethics Support

Monitoring

Contracts Facilitation

Safety and Adverse Event Reporting

Data Management

Project Management

Placebo Development and Drug Procurement





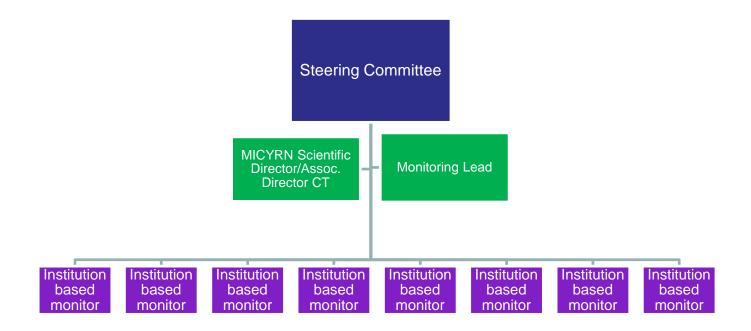
Health Canada Regulatory Submissions

- Expertise with over 15 years of experience
- Clinical Trial Applications (Drugs)
- Investigational Testing Authorizations (Devices)
- Single Patient Studies
- Average time for completion: 10-15 hours
- MICYRN subsidized service (50%)





- Monitoring and Quality Assurance
 - Cross-institutional monitoring program





ARO Services: Accomplishments 2021

Regulatory **Applications**

- 7 CTAs
- 3 ITAs
- 2 SPS
- 2 training sessions

Project Support/ Management

- C4T Cannabis Trials (2 Multi-Centre studies)
- 15 site PERC COVID Study

Consults

17





Pediatric Outcome ImProvemet through COordination of Research Networks

Plateforme d'améliOration des résultats Pédiatriques par la CoORdiNation des réseaux de recherche



- To unite existing national networks in pediatric research under one coordinating umbrella to enhance responsiveness to emerging COVID-19-related issues, including unintended consequences of preventive measures.
- To establish a common national infrastructure for agile pediatric research to inform decision-making on any child health-related issue.
- To increase capacity at 16 pediatric research institution member sites and their regional partners.
- MICYRN serving as the collaboration/coordinating centre



Clinical Trial Sponsorship

- Increase the number of CTs that Canadian children can participate in
- Acquired clinical trial insurance
- Serve as the Canadian Regulatory Sponsor for investigator initiated clinical trials





Questions?

