



Maternal Newborn Child & Youth

Email

maternalnewbornchildyouth.scn@ahs.ca

Key Partners

[Alberta Children's Hospital Research Institute \(ACHRI\), University of Calgary](#)

[Women and Children's Health Research Institute \(WCHRI\), University of Alberta](#)

Major milestones and achievements, 2023-2024

Over the past year, the Maternal Newborn Child & Youth (MNCY) Strategic Clinical Network (SCN) has continued to collaborate to implement evidence-based improvements that benefit Alberta's maternal, newborn, child, and youth populations, and those who care for them.

Implementing rooming-in across Alberta to keep mothers and infants with NAS together

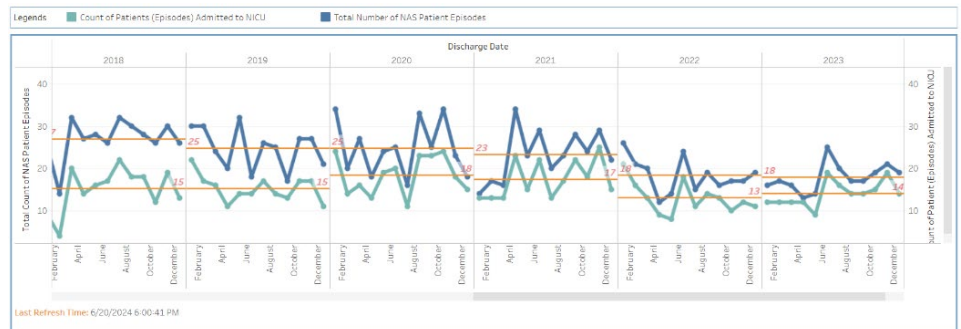


Neonatal Abstinence Syndrome (NAS), a common problem in newborns exposed to substances such as opioids in-utero, is an emerging health concern. Typical models of care routinely separate infants with NAS from their mothers and admit them to the Neonatal Intensive Care Unit (NICU) with lengthy and expensive stays. This separation has a negative effect on mother-infant bonding, reduces breastfeeding, and negatively affects maternal mental health, among other negative impacts. As well, this practice reduces opportunities to engage mothers in Opioid Dependency Programs (ODPs). Research shows a rooming-in approach that keeps mothers and infants together in hospital, with support, is a safe and effective model of care for managing NAS; provides an opportunity for maternal participation in an ODP; and facilitates a supportive transition home with linkages to community 'wraparound' programs/services.

Alberta's Neonatal Abstinence Syndrome Mother-Baby Care ImprovEmeNT ([NASCENT](#)) program is a hospital-level NAS rooming-in intervention led by Dr. Matthew Hicks (University of Alberta) and Dr. Deborah McNeil (Scientific Director, MNCY SCN; University of Calgary). The work aligns with the network's strategic priority to "identify and support adoption of models of care that keep mothers and babies (who require higher level of care) together."

With funding from a [PRIHS](#) grant and support from the MNCY SCN, the team has been working with clinicians to implement rooming-in care at 8 participating hospital sites across Alberta. Six sites have limited to no experience with the rooming-in model of care. Two sites – Grey Nuns Community Hospital (Covenant Health; Edmonton) and the Red Deer Regional Hospital Centre (AHS) – have existing rooming-in programs and will continue to refine and enhance their programs and support other sites.

Over the past year, the team created a dashboard with AHS Data & Analytics using health system data to monitor NAS rates and patterns across Alberta. To generate evidence of impact on NAS care, the team has been collecting baseline data from the 8 implementation sites and recruiting mothers and infants to be able to monitor health outcomes, including at 6-month follow-up.



A large part of NASCENT is engagement and raising awareness with key partners about Eat Sleep Console (ESC), the rooming-in model of care, and ODP in Alberta. In October 2023, the NASCENT team held a full-day kickoff and education event with experts from Alberta and other jurisdictions sharing their experiences. A training module on ESC will soon be ready to educate and support frontline healthcare providers, and the NASCENT team continues to facilitate connections and collaboration between sites and community services, and foster enthusiasm for rooming-in. Sites are supported in creating implementation teams, designing rooming-in programs, and

implementing or growing their program. NASCENT provides funding for site champions to dedicate time to implementation and education, and to be part of a community of practice via weekly meetings. These sessions, organized and led by NASCENT, provide an opportunity for healthcare providers to learn together and receive support.

The knowledge gained through the stepwise implementation process will be useful for future sites in Alberta and other jurisdictions. The support provided by NASCENT is expected to decrease NICU length of stay and related health system costs, and improve quality of care, health, and social outcomes for mothers and their infants.

Health Outcomes Improvement Fund targets research and quality improvement focused on Alberta's maternal-child population

In 2023, the MNCY SCN held the third [Health Outcomes Improvement Fund](#) (HOIF) competition. This funding opportunity targets research and quality improvement initiatives focused on Alberta's maternal-child populations and helps generate the evidence needed to establish a solution's effectiveness, safety, delivery, and even sustainment in the healthcare system prior to broad implementation. Three grant recipients were announced in [December 2023](#), including researchers from the University of Alberta and the University of Calgary who have partnered with AHS Operational Leaders from the Stollery Children's Hospital (Edmonton) and Alberta Children's Hospital (Calgary). HOIF funding supports priority areas of study that benefit maternal and child health in Alberta. Since 2017, 43 projects have been funded by the HOIF grant (amounts ranged from \$18,400 to \$398,000), leading to improvements in care and health outcomes.

Impact on health, care, quality or performance

The MNCY SCN has mobilized people, evidence, and data to achieve the best possible health outcomes for mothers, newborns, children, and families within a sustainable, publicly funded healthcare system. Over the past year, the SCN positively impacted maternal-child health outcomes, care, and health service delivery throughout Alberta; examples are listed here:

- ▶ Co-led projects with patient and family advisors that address identified gaps in pediatric and NICU care
- ▶ Developed a pediatric referral pathway to guide family physicians and pediatricians in clinical management options for children with symptoms of long Covid
- ▶ Developed and implemented a toolkit for postpartum hemorrhage (PPH) that provides nurses, midwives, and physicians with tools to measure and manage PPH and reduce adverse events in intrapartum care
- ▶ Collaborated with Neonatology, Midwifery, Obstetrics, and Family Medicine to create an evidence-informed revision of the provincial Cord Clamping Guidance
- ▶ Released the "Voices for Indigenous Maternal-Child Health and Wellness" report, highlighting ways in which AHS can support better access for Indigenous mothers and families to maternal-child health and wellness services
- ▶ Developed a Connect Care dashboard with AHS Data & Analytics for bronchiolitis quality improvement, supporting 16 participating hospital sites to increase the appropriateness of bronchiolitis care for infants under the age of one

MATERNAL NEWBORN CHILD & YOUTH SCN

Publications & Grants



34

Peer-reviewed Publications

Engagement



13

Presentations & Workshops

Outcomes and Impact

90+ participants

from across Alberta attended the NASCENT kickoff & education event, in-person or virtually



\$3.2M

Research Grants



102

Research Members

19% decrease

in inappropriate use of salbutamol (a bronchodilator) for bronchiolitis at participating hospital sites

www.ahs.ca/mncyscn