

Amplifying Our Provincial Footprint

2022-2023 Annual Impact Report

April 1, 2022 to March 31, 2023



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Executive summary

2022-23

Annual Impact Report

At-a-glance

Alberta's Strategic Clinical Networks™ (SCNs™), Provincial Programs and their Scientific Offices work closely with patients, clinicians, researchers, universities, operational leaders, community partners and other stakeholders to improve health and care, apply new knowledge and get evidence into practice.

Their commitment to health research and innovation, knowledge generation and knowledge mobilization on a provincial scale is helping build a resilient, high-performing health system and positively impacting health outcomes, patient care, and patient, family and provider experiences.

Evidence into care

Advanced work on

36 clinical and patient pathways

21 provincial guidelines, protocols, decision tools, and order sets

44+ evidence reviews, jurisdictional scans, evaluations, reports and white papers on priority topics that support the needs and priorities of AHS clinical operations, provincial health policy and decision making

Provincial implementation of the **Venting Wisely pathway** was achieved in all adult critical care units in Alberta, improving patient care. Early results demonstrate a significant shift in the way we recognize and treat respiratory failure in Alberta ICUs.

Provincial implementation of **Alberta Family Integrated Care (FICare)** was completed in June 2022 and is now available at all 14 Alberta NICUs.

Other pathways and initiatives rolling out provincially:

Examples:

- Provincial Medicine Load Levelling Plan
- Provincial Capacity Escalation Protocol for Emergency Care
- Strategies to Recruit and Retain Pediatricians in Regional Practice
- Endoscopy Pandemic Recovery & Renewal Plan

- Heart Failure and COPD Care Paths
- Primary Care Supports - Gastrointestinal
- Long-COVID and Post-COVID screening, assessment and rehabilitation for patients in continuing care
- Enhanced Recovery After Surgery (pre-op/post-op)
- Diagnostic Pathways for specific cancers (lymphoma, colorectal cancer)
- Acute Care Bundle Improvement (ACBI)

Health impacts

Many improvements observed in patient experience, health status, modifiable risk factors and other outcome measures related to hospital stays, emergency visits, complications and readmissions. These impacts affect diverse patient populations and relate to initiatives that focus on disease and injury prevention, quality and access to care, and patient and provider safety.

Examples:

Alberta FICare

Improved outcomes for pre-term newborns

Improved experience for caregivers and providers

Alberta Cancer Diagnosis

Timely diagnosis, testing and referrals, improved patient and family experience
Earlier diagnosis, prior to disease progression, typically improves cancer outcomes

Fracture Liaison Service

Reduced risk of secondary fractures, improved osteoporosis screening & care
Reduced pain and disability

Incremental Dialysis

Improved patient experience and quality of life

Provincial PPE Coaching

Reduced risk of infection, improved safety for residents of continuing care facilities
Improved compliance with infection prevention & control protocols



Economic and social impacts

Alberta FICare

Reduced length of stay in neonatal intensive care unit

Fewer ED visits and hospital readmissions

Alberta Cancer Diagnosis

Cost avoidance through earlier diagnosis, positive return on investment

Fracture Liaison Service

Cost avoidance (estimated \$9,200 per quality-adjusted life-year), supports ongoing health and mobility

Incremental Dialysis

Expanded capacity for traditional dialysis

Primary Care Supports - GI

Improved access for patients with urgent or non-urgent conditions
Improved value through appropriate use of specialty care

Use of Tenecteplase for Acute Ischemic Stroke

High-quality care, efficient delivery of clot-busting medication
Reduced burden on staff in emergency departments

Acute Care Transfers for Long-Term Care Residents

Reduced hospital transfers and admissions
Improved utilization of telephone advice and community paramedic services




Generating new knowledge

345 peer-reviewed manuscripts & scholarly publications with SCN leaders as a named authors

More than 160 other knowledge products, decision tools and deliverables


16 Policy input & engagement


26 Data dashboards


32 Online resources


22 Education modules & resources

Building capacity for future innovation

Partnerships & Research Funding

Active partnerships and collaborations with

72
Alberta research institutes & provincial, national and international health organizations

\$84.6M
in grant funding received in FY 2022-2023 for health services research

2,500+
active research network partners

197
letters of support to Alberta researchers in support of funding proposals

\$67.4M (80%)
of the total grant funding received for research was from sources outside Alberta

87
successful grant applications

Knowledge Exchange / Outreach

639
virtual and in-person outreach events

171
scholarly presentations to local, national or international audiences

468
additional workshops & learning events

Grants & Funding to Trainees

\$1.20M
in grant funding disbursed to support local research & capacity building

73
studentships, seed grants & other grants awarded for research collaborations in priority areas

27
patients sponsored to receive PaCER training in 2022-2023

Recognizing our patients & partners

Extensive engagement of diverse stakeholders and co-design of many solutions, pathways and knowledge products. Notable contributions in FY 2022-23 to the:

Alberta Cancer Diagnosis Initiative, Acute Care Bundle Initiative, and Provincial Pathway Hub

750+
clinicians, operational leaders & community partners

152
Patient and family advisors

60
faculty from Alberta universities in SCN leadership roles



Leadership message

Dr. Francois Belanger, Vice President, Quality & Chief Medical Officer, Alberta Health Services

Natalie McMurtry, Interim Vice President, Provincial Clinical Excellence, Alberta Health Services

Dr. David Johnson, Interim Associate Chief Medical Officer, Strategic Clinical Networks

Tracy Wasylak, Chief Program Officer, Strategic Clinical Networks



Year in Review

As Canada's first provincially integrated health system, AHS is well positioned to address health challenges, standardize clinical practice, and advance innovation on a provincial scale. SCNs and Provincial Programs directly support and enable this work in partnership with clinical operations, and with reach across all parts of Alberta's health and social care system. These teams bring together patients, clinicians, researchers, and community partners to co-design solutions that address gaps and unwarranted variation and support practices that improve quality, outcomes, performance and value.

Together, we have made considerable progress. We've developed processes to rigorously evaluate health innovations, and spread, scale and sustain those that offer the greatest potential to impact care and improve outcomes. With experience, we've learned to effectively engage stakeholders, align priorities, and we've gotten better at listening and co-designing solutions with those who have lived experience as patients, caregivers, site leaders, and frontline healthcare providers, and those who understand the unique challenges of unserved populations or communities.

This summer, AHS once again stepped up to rapidly coordinate local and provincial resources to supporting the health and community needs of evacuees during the unprecedented wildfires affecting northern Alberta and our neighbours in BC and NWT. These efforts, as well as recent actions to address areas strained by capacity pressures demonstrate our capability and commitment to **support patient and operational needs and equip decision makers with evidence-informed guidance.**

Over the past year, AHS has concentrated on four priority areas: decreasing emergency department wait times, wait time times for surgeries and EMS response times, and improving patient flow throughout the healthcare continuum. **These challenges require provincial coordination and integrated solutions that involve health and community partners both within and beyond AHS.** Local connections and grassroots knowledge are essential to develop feasible and sustainable solutions that work in urban and rural contexts. The relationships SCNs, Provincial Programs and their Scientific Offices have developed with the clinical and research community, with Indigenous communities, and other stakeholders have helped support these efforts and maximize our capabilities as a high-performing health system.

Outlook for 2023-2024

The SCNs and Provincial Programs are proud to recognize the progress we and our partners have made over the past year to move evidence into practice and build capacity for continued improvement and innovation. This report highlights recent successes and initiatives that are currently underway. Across all areas of health, our teams are primed to continue working together to address gaps, find efficiencies, and implement solutions that amplify our provincial impact. **Collectively, we work with Operations and remain focused on looking beyond current practice and rapidly evaluating, iterating, implementing and sustaining practices that deliver the best value and outcomes for Albertans.**

Overview | About this report

This report highlights the collective achievements of Alberta's Strategic Clinical Networks™ (SCNs™), Provincial Programs and their Scientific Offices over the past fiscal year (April 1, 2022 to March 31, 2023) and the impact of this work. It acknowledges the essential collaborations and contributions of patients and families; clinicians and operational leaders, and community partners, including Alberta's universities, research community, and many others, and the mutual benefits of these partnerships.

In evaluating impact, the report uses a framework developed by the Canadian Academy of Health Sciences (CAHS) and performance indicators common to all SCNs. The CAHS framework is widely used by government, funding agencies, and research institutions to evaluate the impact of health research. For details on methods and indicators, see [Appendix A](#).

We welcome your feedback or suggestions for future impact reports. To share your ideas, please contact us at StrategicClinicalNetworks@ahs.ca.

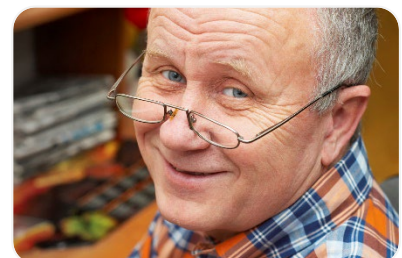
Creating the future of health and care together

Collaboration and engagement are essential to the work and success of Alberta's SCNs and Provincial Programs. Each network and program has a provincial structure and focus with membership that spans Alberta's five health Zones. This structure provides a mechanism to support rapid learning, evidence generation and mobilization, and uptake of practice changes on a provincial scale.

By bringing together diverse stakeholders, SCNs and provincial programs are able to access critical expertise, knowledge, and experience, and build capacity to spread and scale successful innovations, improve health, advance evidence-based health system improvements, and transform care. These structures provides a seat at the table for all stakeholders to channel their knowledge, experience and resources for maximum impact.

Over the past year, the configuration of these provincial structures has remained stable. SCNs, Provincial Programs and their Scientific Offices have leveraged relationships with Zone operations, patients, families and caregivers, and community, academic and provincial partners and worked to align their efforts to improve quality, outcomes and health system sustainability. Patients, families and caregivers with lived experience, clinician leaders and frontline care providers, leading researchers, programs and institutions, Indigenous and community partners have all actively contributed to the work of the SCNs and provincial programs.

For specific examples from the past fiscal year, see the linked materials, which include a [Patient Engagement Summary](#), [Research Collaboration Summary](#) and [Summary of University Faculty Involvement](#).



By the numbers

	4.4 million Albertans	
	11 Strategic Clinical Networks	5 Provincial Programs
	3,981 Core Committee and working group members ^a	152 Patient and family advisors ^{b,c}
	750+ clinicians, operational leaders & community partners	30 primary care physicians
	60 faculty from Alberta universities in SCN leadership roles	2,500+ active research network members ^d
	12 industry partners	70+ partnerships with local or national research institutes and health organizations

NOTES:

^a Members include stakeholders from all 5 Zones; AHS and Covenant Health; all major hospitals and care facilities; urban, rural and remote communities, First Nations communities and Indigenous Wellness Centres. Total includes 900 Core Committee (or Section committee) members and 3,081 working group members (across 219 working groups). No data for IWC and PPPH.

^b Total includes members of Patient and Family Advisory Councils (PFACs).

^c 15 Patient and Family Advisors also serve as project co-leads and 22 are actively engaged as patient researchers.

^d No data for CvHS SCN and PPPH.

Collective achievements, impact and value

Collective achievements and contributions of the SCNs, Provincial Programs and their Scientific Offices during the 2022-2023 fiscal year are described using the CAHS impact framework, which uses characterize areas of impact across five domains:

Advancing
knowledge

Building capacity
& capability

Informing
decisions &
policies

Improving health
outcomes

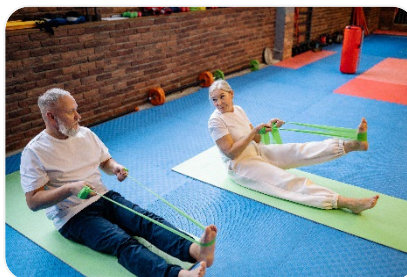
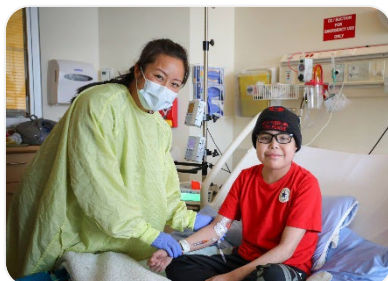
Supporting positive
economic & social
outcomes

These domains reflect a system view of health research and innovation. Activities in one domain fuel and impact the next by providing the knowledge resources, capacity, investment and momentum to advance health system improvements that benefit Albertans, keep pace with emerging evidence, and support AHS' mission, vision and values.

All SCNs, Provincial Programs and their Scientific Offices actively engage in work that supports each of these domains through activities such as systematic inquiry, measurement and evaluation; evidence and knowledge generation and mobilization; and implementation and sustainment of practice changes. This work is reflected in the AHS Innovation Pipeline ([Appendix B](#)) and helps drive practice change, outcome improvement, and health innovation and transformation provincially.

This section of the report highlights the results of these efforts; notable achievements, outcomes and deliverables over the past year; and the impact and value this work is having for the people of Alberta.

► Evidence into care



The Strategic Clinical Networks, Provincial Programs, and their Scientific Offices play an important role in moving evidence into practice. Our teams include scientists, clinicians and researchers who rigorously monitor data, evidence, emerging technologies and practices and bring leading practices and innovations to our province. From there, we evaluate them within a local context, and spread and scale those that provide the greatest benefit to the people of Alberta.

Zone operations, patients, families, government and community partners are essential in helping define priority needs, develop solutions, and implement practice changes that positively impact patient & provider safety, access and quality of care, and health outcomes.

The Innovation Pipeline is a key tool that enables this work and integrates health research with the needs of Alberta's health system. It allows solutions to be pilot tested and scaled provincially if supported by strong evidence of clinical effectiveness and potential to deliver significant impact and value.

Over the past year, the SCNs, Provincial Programs and their Scientific Offices have:

- ✓ Supported AHS Operations in their efforts to make improvements in four priority areas: improving EMS response times, decreasing emergency department (ED) wait times, reducing wait times for surgeries, and improving patient flow throughout the healthcare continuum. [Learn about progress in these areas](#)
- ✓ Reviewed and synthesized evidence, and worked with stakeholders both within and outside AHS to support capacity planning and coordination, front-line health service delivery, and local decision making. These actions have informed risk assessments, clinical guidelines and protocols for patients across many areas of health, and supported clinical excellence and consistent care across Zones and caregivers through clinical pathway development, development of data tools and online dashboards, audit and feedback mechanisms, and knowledge mobilization activities that address the needs of patients and healthcare providers.

Several examples are highlighted below. For a more fulsome list, see the linked materials, which include a [Summary of Other Output, Outcomes & Deliverables](#).

Highlights from 2022-2023

CLINICAL PATHWAYS AND GUIDELINES THAT SUPPORT HIGH-QUALITY, PATIENT-CENTRED CARE

Provincial pathways, guidelines and best practices reduce unwarranted variation, improve quality, safety and health outcomes, and can enhance the experience of patients, families, and healthcare providers. Clinical pathways support transitions along the patient journey, standardized care processes informed by evidence and research, improved access and value. Some pathways support early screening and assessment and increased appropriateness of referrals. They can also reduce unnecessary diagnostic testing and imaging, improving wait times and patient and provider satisfaction.

Advanced work on

36

clinical and patient pathways

In 2022-2023, SCNs worked with key stakeholders to:

- ✓ support the development of new pathways
- ✓ update existing pathways
- ✓ pilot and evaluate new clinical pathways
- ✓ support implementation of prioritized pathways across sites and zones
- ✓ spread and scale them provincially

A key partner in this work is the [Provincial Pathways Unit \(PPU\)](#), which launched in September 2022. The PPU is a shared priority between AHS Primary Health Care and the Strategic Clinical Networks that aims to promote collaboration between primary care providers, specialists, and patients in the development of

clinical and patient pathways. A key priority for the PPU was to develop and launch [Alberta's Pathway Hub](#), a centralized, online provincial repository for all clinical, patient and referral pathways, making them easier for frontline clinicians to find and use. The Hub was under development over the past year, and officially launch in September 2023. The coming months will provide an opportunity to test and optimize the site based on user feedback. [Learn more](#)

Led or supported the development of

21

provincial guidelines, protocols, decision tools, and order sets

In addition to pathways, SCNs and Provincial Programs also led or supported the development of new and updated provincial guidelines, protocols, decision tools, and order sets across many areas of health.

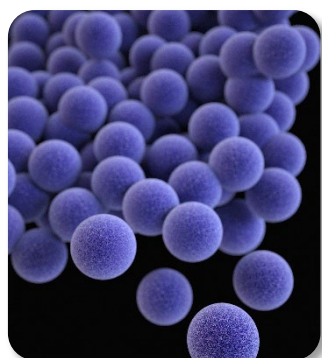
These guidelines and tools draw on best practices and best available evidence, with the input and experience of patients, families, clinicians, researchers and operational leaders across Alberta.

Examples from 2022-2023:

Clinical pathways at early stage of development

Medicine, Respiratory Health

Work began in January 2023 to create, implement and evaluate a **Provincial care pathway to aid decision-making regarding Tracheostomy and Long-Term Ventilation for Children with Medical Complexity**. The DECIDE-T pathway will reflect best practices and be used to guide pediatric care at the Stollery and Alberta's Children Hospitals.



Medicine, Hospital Medicine

Staphylococcus aureus bacteremia (SAB) is a common bloodstream infection associated with high morbidity and mortality. The infection is challenging to treat and requires a comprehensive approach that includes infectious disease consultation. In Alberta, the incidence of SAB based on laboratory data is estimated to be 100 patients/month, with limited or no infectious disease consultation available in some regions. The Medicine SCN has begun developing a patient care pathway to **Optimize, standardize, and ensure equitable, evidence-based care for all patients affected by SAB in Alberta**. The pathway will be integrated into Connect Care and tested at acute care facilities across Alberta. [Learn more](#)

Pathway testing and refinement underway at Alberta facilities

Critical Care

The Critical Care SCN has advanced work on two clinical pathways into the active expansion phase. Both pathways aim to reduce variability in practice, optimize care, and improve patient outcomes.

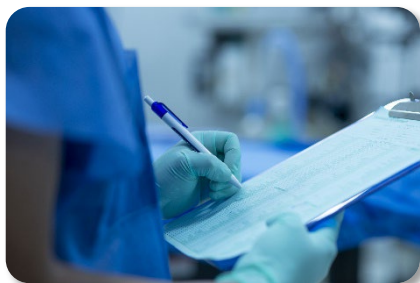
Across Edmonton Zone ICUs, there is high variability in practice in the use of sedation and analgesia for patients to treat pain and anxiety, and to increase tolerance to life saving therapies such as mechanical ventilation. [ROSA \(Reducing the Use of Sedation and Analgesic Infusions in Critical Care\)](#) aims to drive appropriate use of analgesic and sedation infusions through a standardized, evidence-based guideline that includes validated clinical tools to assess pain, agitation and delirium in critically ill patients, and emphasis on multiple pharmacologic and non-pharmacologic approaches. To date, the guideline has been tested at an initial pilot site and one expansion site.

Similarly, [Dialyzing Wisely](#) aims to reduce the number of patients requiring long-term chronic dialysis therapy, improving the quality of patient and family-member lives while substantially decreasing health system expenditures. Partners in this work are extensive, and include multiple SCNs, the AHS Alberta Kidney Care program (North and South), the University of Alberta, and several patient partners.

During the 2022-23 fiscal year, the **Dialyzing Wisely Initiation Pathway** was implemented at an initial pilot site and expanded to four other ICUs across the province. The pathway is an evidence-based, stakeholder-informed clinical tool to that supports care providers starting Renal Replacement Therapy in the ICU. The pathway includes Key Performance Indicators to measure quality of dialysis delivery.

Pathways in the implementation and sustainment phase

Critical Care



[Venting Wisely](#) involves implementation of a comprehensive, evidence-informed care pathway for mechanically ventilated ICU patients, emphasizing optimal and appropriate use of life saving therapies such as protective ventilation and prone positioning. Many ICU patients require mechanical ventilation, and pathway adherence can reduce hypoxemic respiratory failure (HRF) or acute respiratory distress syndrome (ARDS), conditions that are associated with high mortality rates and prolonged need for ICU care.

Provincial implementation of the Venting Wisely pathway has been achieved in all adult critical care units in Alberta. This work was funded by a Health Innovation Improvement Scale and Spread (HIIS) grant from Alberta Health and Alberta Health Services. Throughout the implementation, sites improved their overall adherence to the Venting Wisely pathway by up to 72%, which translated to improvements in patient care. These improvements have been maintained for up to 16 months, and many units share that the practice is sustainable as it's "now embedded in unit culture and workflow". Outcome data is currently being analyzed; however, the overall adherence results are encouraging as they demonstrate a significant shift in the way we recognize and treat respiratory failure in Alberta ICUs.

Cardiovascular Health and Stroke

[Heart Failure and Chronic Obstructive Pulmonary Disease \(COPD\) Care Paths](#) launched in July 2022 along with comprehensive reporting tools. The Provincial Clinical Pathways Support Unit (CPSU) has been instrumental in achieving this milestone and promoting integrated care for heart failure (HF) and COPD. HF and COPD are high volume, high cost conditions, and these pathways aim to improve quality of care, health outcomes and value by reducing variation; minimizing hospital stays, readmissions, and emergency room visits; and ensuring timely follow-up with primary and community care.

The care paths have been integrated into Connect Care to improve care delivery, data capture and information continuity for patients and health care providers. Learning modules, tools and resources for physicians, prescribers, nurses, and allied health professionals are available through MyLearningLink.

Digestive Health

Primary Care Supports – GI is a HIIS-funded initiative that involved developing, implementing and evaluating a series of primary care pathways for low-risk, high-demand digestive conditions (e.g., IBS, constipation, dyspepsia, non-alcoholic fatty liver disease), companion patient care pathways, and specialist advice requests/telephone consultation to improve referral quality and appropriateness and support primary care providers. Among the key accomplishments were:

- ✓ Co-development of **nine provincial pathways for low-risk GI conditions**. These pathways were adapted, created and made available provincially.
- ✓ Development of the first-ever '**patient pathways**', innovative, patient-facing handouts that describe pathway-based care from a patient perspective. Patient pathways were created for all nine primary care pathways based on an identified need from patients and providers.

A tenth clinical pathway (for pediatric constipation) was developed in October 2022 and is available on the [Digestive Health SCN website](#) and [Alberta's Pathways Hub](#).

Surgery

The Surgery SCN has continued to work with surgical leaders, physicians and frontline healthcare teams across Alberta to advance pre-operative and post-operative pathways as part of provincial **Enhanced Recovery After Surgery (ERAS) implementation**. This work aligns with Strategy 4: Improve care coordination and pathway development of the Alberta Surgical Initiative and includes implementation of clinical pathways and resources that reduce clinical variation, enhance patient experience and support patient transitions in care.



In the past year, activities have included ERAS pathway implementation related to Spine, major Gynecological and Colorectal surgery, and C-section. These efforts aim to improve patient outcomes and experience, reduce unwarranted variation, and reduce length of stay and post-operative complications for patients following surgery. [Learn more](#)

Additional pathway development, refinement and implementation

Neurosciences, Rehabilitation and Vision

The Pathways & Resources Working Group is currently revising provincial [Long COVID pathways](#) to align with Provincial Pathways Unit recommendations. It also continues to identify, gather, update, and develop resources for patients and providers to support care of patients experiencing post-COVID conditions.

Seniors Health and Continuing Care

Provincial Seniors Health and Continuing Care, together with stakeholders across Alberta, has co-designed and refined pathways that support the health and care of older adults and Albertans receiving acute care or living in designated supportive living settings and long-term care. Examples include:

- ✓ Implementation of [Elder Friendly Care](#) as part of the [Acute Care Bundle Improvement](#) initiative in Alberta's 14 largest acute care facilities
- ✓ [Post COVID-19 Screening, Assessment and Rehabilitation for Patients in Continuing Care](#) and Post-Acute Care Pathways
- ✓ [Designated Living Option Suicide Risk Management Resource Guide](#) – Intended for all members of the health care team to understand evidence-informed best practices, and provincial recommendations for managing suicide risk.

EVIDENCE REVIEWS AND EVALUATIONS THAT INFORM DECISION MAKING, HEALTH POLICY AND PLANNING

Environmental scans of current practice in Alberta or other health jurisdictions, and evidence reviews focused on emerging technologies, innovations and leading practices contribute to the knowledge base, and practical application of health innovation in Alberta. They provide the evidence needed to inform decision making and support changes in clinical practice and health policy.

Co-authored or contributed to

44+

evidence reviews, jurisdictional scans, evaluations, reports and white papers on priority topics

These products directly support AHS priorities and information needs. Most are provincial in scope and involve stakeholder engagement, evidence review and synthesis.

These documents provide evidence-informed recommendations and decision support for provincial health leaders, policy, health service delivery and transformation.

Examples from 2022-2023 (by topic):

Cancer

Evidence reviews relating to Bladder cancer; Cancer of unknown primary; and cancer survivorship (differences in outcomes -- primary care vs. oncology/specialist care)

Jurisdictional scan of diagnostic pathways and guidelines for urological cancers

Provide evidence that will inform development of provincial cancer diagnosis pathways, as well as planning and action around cancer prevention, treatment, care coordination and supports as part of the [Future of Cancer Impact](#) in Alberta work.

Long COVID

Prevalence of Post COVID Condition following an acute COVID-19 infection not requiring hospitalization

Pragmatic evaluation and current state report of Long COVID care in Alberta and implementation of the Provincial Post COVID-19 Rehabilitation Framework

Provides evidence to assess rehabilitation needs for post-COVID condition and to inform health system planning for Long-COVID care in Alberta.

Specialty Care

Strategies to recruit and retain pediatricians in regional practice

Prevalence of chronic kidney disease and quality of care in Alberta

Building capacity for high quality GI endoscopy

Review of sleep diagnostic services in Alberta
Virtual stroke rehabilitation practices and their effectiveness

Supports understanding of current practice, challenges and strategies in Alberta. This information that can inform quality improvements, care delivery, planning and actions at a local, zone and provincial level.

Further examples and details on evidence reviews, reports and decision tools are provided in the [Other Outcomes & Deliverables Summary](#).

Impact of this work for patients and healthcare providers in Alberta

Addressing capacity and access pressures, improving patient flow

Evidence reviews, synthesis, and jurisdictional scans can sound dry and far removed from patient care. However, the information gathered in these reports is essential to inform actions, recommendations and decisions that directly impact health and care for the people of Alberta.

Over the past fiscal year, these reviews have informed practice advisories, protocols and action plans that address key priorities for Alberta's health system, including improving patient flow and wait times for emergency services, surgical care and diagnostic procedures. Examples include:



Emergency and Acute Care

Provincial Capacity Escalation Protocol for Emergency Care

Provincial Medicine Load Levelling Plan - *Outlines triggers and actions to optimize patient flow across zones during exceptional capacity challenges, such as emergency responses and seasonal fluctuation)*

In progress:

- The Emergency SCN is contributing to a national update of evidence and expert-informed considerations led by CADTH about the Causes of, Consequences of, and Potential Solutions to Emergency Department Overcrowding
- Optimizing Emergency Department Throughput to Resolve Delays in Care
- Effective Approaches to Reduce the Need for ED Utilization by Frequent Users

Surgery and Specialty Care

Provincial Hip & Knee Arthroplasty Day Surgery Package - *Includes an action plan to reduce length of stay in hospital, protocols, wait list management guidelines, and an updated measurement framework*

Provincial Hip & Knee Online Surgical Toolkit - *Includes care paths, order sets, and an updated measurement framework*

Endoscopy Pandemic Recovery and Renewal Plan – *Examines wait times for endoscopy in Alberta and strategies to improve access to endoscopic procedures*

Contrast shortage practice advisory

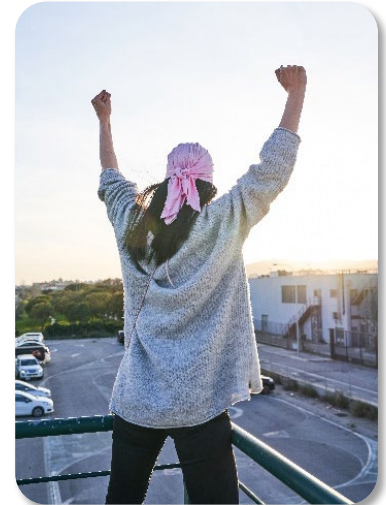
Technology and practice change aims to improve patient experience with early-stage breast cancer screening

Breast cancer is the #1 cancer in women. Knowing that 80% of breast cancers are diagnosed in early stages—even before a lesion (or lump) can be felt—AHS' Evidence Decision Support Program (EDSP) (sponsored by the Surgery SCN, the Calgary Department of Surgery and Edmonton Department of Surgery) investigated a novel care pathway that uses magnetic surgical markers. This technology provides the opportunity to remove the discrete breast lump and detect potential spread—all with one device.

The benefits to patients are many: the technology involves no radiation exposure, less discomfort for the patient, and requires no external wire to be placed in the breast. It also allows for more flexible scheduling of pre-operative procedures, benefiting patients and care providers. The detection system also reduces the number of procedures patients typically require, freeing up resources to improve access for others.

Program Leads in all five AHS Zones agreed to undertake a Health Technology Evaluation Trial of this technology. The trial was a joint effort between surgeons, patients and radiologists. Stage 1 examined clinical feasibility at two high-volume surgical centres in Edmonton and Calgary. Stage 2 considered potential to spread the technology provincially, and involved an evaluation at the Grande Prairie Regional Hospital.

To date, this new technology has shown equivalent or better clinical outcomes as well as patient and clinician experiences when compared to existing approaches. As a result of evidence generated from this trial, AHS is pursuing implementation at all early-stage breast cancer programs, enabling patients across Alberta have access to this technology. [Learn more](#)



OTHER IMPLEMENTATION MILESTONES

The SCNs, Provincial Programs and their Scientific Offices rigorously evaluate health innovations as they advance through the AHS innovation pipeline, gathering, synthesizing evidence and refining solutions based on evidence and feedback from patients, healthcare providers, and other stakeholders. This process directly supports getting evidence into practice to improve quality, outcomes, and value.

In 2022-2023, the networks worked with patients, families, front-line clinicians, and operational leaders in all zones to support provincial spread, scale and sustainment of innovations with demonstrated benefits for Alberta's health system. Several examples are highlighted on the next page, as well as a brief profile that illustrates how Alberta's stroke program works with clinicians, operations, and academic partners to move evidence into practice and ensure stroke care in Alberta reflects best practices.



Safer airway management during surgery or urgent care

Airway management is a high-risk procedure, and intubation is sometimes required to ensure a protected and reliable path for oxygenation. A new drug, **Sugammadex sodium**, can reverse the neuromuscular paralysis induced by rocuronium (a muscle relaxant commonly required during surgery or mechanical ventilation), allowing rapid return to spontaneous breathing.

Building on evidence from the Surgery Evidence Decision Support Program (EDSP), AHS and Covenant Health have begun phased implementation of Sugammadex sodium in operating rooms, emergency departments, ICUs and post-anesthesia care units across Alberta. Provincial implementation is expected to occur over the next two years.

High quality inpatient care, every patient, every time

The **Acute Care Bundle Improvement (ACBI)** is a provincially coordinated quality improvement initiative, led by operations and supported by SCNs and Provincial Programs. ACBI implementation is underway at Alberta's 14 largest acute care sites and is expected to improve patient flow, care transitions, patient outcomes and experience while standardizing care and reducing length of stay.

Over the past year, the ACBI team has developed a series of process and outcome measures that are included in provincial reporting. Many of these measures have been integrated into Connect Care to enable ongoing performance monitoring. [Learn more](#)

Central access and intake for surgery referrals

The **Facilitated Access to Specialized Treatment (FAST)** program has launched province wide as part of the Alberta Surgical Initiative (ASI). FAST is a HIIS-funded project that aims to reduce surgical wait times in Alberta by implementing an integrated central access and intake program where referring providers can send orthopedic surgery and urology referrals to be directed to the next-available surgeon with the shortest waitlist, a specific clinic/surgeon, or to out of zone services.

Since August 2022, more than 25,000 orthopedics and urology FAST referrals have been received. Plans are underway to expand FAST to all surgical specialties, with gynecology, vascular, thoracic and general surgery to be added next. [Learn more](#)

Alberta Family Integrated Care (FICare)

Provincial implementation of **Alberta Family Integrated Care (FICare)** was completed in June 2022, and the program is now available at all 14 neonatal intensive care units (NICUs) in Alberta. The work to scale and spread FICare was led by Dr. Karen Benzies (University of Calgary) and Dr. Deb McNeil (Scientific Director, MNCY SCN), supported by HIIS grant, and the result of extensive collaboration with operational leads from NICUs in every zone.

It an innovation that has advanced through all stages of the [AHS Innovation Pipeline](#), and was rapidly spread based on strong evidence of improved outcomes for preterm infants, improved patient and family experience, and improved value (system capacity and cost avoidance from reduced length of stay, ED visits & readmissions). [Learn more](#)

Alberta FICare received a 2023 Health Quality Council of Alberta (HQCA) Patient Experience Award. Watch this [short video](#) to hear parents, clinicians and members of the FICare team describe how FICare is positively impacting family experience.

Mary-Lou Halabi, is a member of the Cardiovascular Health & Stroke SCN (CvHS SCN) and shares her thoughts and experiences as Stroke Lead, Special Projects in working provincially to move evidence into care.



As Mary-Lou describes, her role is about “supporting the standardization of stroke care across the province so that we are aligned to best practice and rooted in evidence-based practice in all that we do across the stroke care continuum (at least the pieces that AHS has influence over).”

On working together to improve patient care and outcomes:

The people we work with are the essence of the SCN. They identify the gaps in services, ask the seminal clinical and operational questions, and help us track down the right data. They really set the pace and the agenda in many ways. I see the SCN’s function as gathering the right partners to the table, and pulling the pieces together.

For example, [stroke care] best practices recommend EVT [endovascular therapy] for eligible patients up to 24 hours from the onset of symptoms. The current window is 6 hours. Clinicians brought this best practice to our attention, and after reviewing the evidence, consensus was struck to adopt this practice provincially. As a first step, the SCN core team drafted a position statement, which was then validated by the Acute Stroke Expert Working Group and the EVT Working Group and Standing Committee. Then Operations wanted to know what impact a change in practice might have on patient flow at each site, but they don’t necessarily have the time or resources to answer this question. So, as lead, I have been working closely with our Data and Analytics team, EMS System Performance and Innovation, and key clinical leads to refine a methodology to estimate the impact on patient volumes. This information will help stroke centres plan and design local protocols that fit their site’s resources and processes to adopt the change in practice.

The other piece that SCNs do well is collaborating with provincial bodies such as EMS, so that when we are ready to make the switch provincially, the EMS algorithms are aligned to the new practice. We also leverage the connections of our Pan-SCN community. Stroke patients can present anywhere in the province, and that initial recognition of symptoms and consultation with stroke neurology teams at a comprehensive stroke centre are key to maximizing the odds of the best possible outcomes for our patients. So we work with other SCNs such as Medicine, Emergency and Critical Care to get the word out anytime there is a new process or a major change in practice.

On the coordination required to implement and sustain practice change:

Another example is the transition from using alteplase to using tenecteplase in the treatment of acute ischemic strokes. This is a phenomenal example of how the CvHS SCN was able to support practice change starting from initial conception of a study through to provincial implementation. Our scientific office was key in the early stages in helping researchers develop their protocol. Then the researcher reached out to me to help engage all stroke sites to see if there was willingness and capacity to participate in the study. By leveraging the relationships we’ve built with Alberta’s Primary Stroke Centres (PSCs) and Comprehensive Stroke Centres (CSCs), we recruited not only the larger academic centers but also rural sites into the study.*

Once the results were in, the CvHS SCN worked with Provincial Pharmacy to review the evidence and put a case forward to AHS Executive Leadership to support the transition in practice. A lot of coordination had to happen to ensure that alteplase stocks were not wasted. To ensure this happened, we implemented a phased transition plan whereby the PSCs went live first while diverting their stroke-allotted alteplase stocks to the CSCs. Once, alteplase stocks were depleted, the CSCs were transitioned, the second piece was ensuring that tenecteplase stock was distributed to the sites to support a seamless transition.

* [Learn more](#) about the AcT clinical trial changing stroke treatment around the world

How has your clinical experience helped you in this role?

My training as an occupational therapist has really helped. We are taught to break down tasks into their core elements, to understand our clients' needs, what the barriers are, and where they are in terms of their readiness for change. When people are motivated, it is much easier to make the change. The key is figure out what motivates them, what is important to them, and go from there. The health system can be viewed from the same lens. I work on many projects, and at the heart of all of them, it comes down to understanding the issue and the people being challenged by it.

For me, it is about relationship building, establishing a common understanding, and collaboratively working towards a goal. I find that if you take the time to develop rapport with partners, and if you have worked in a similar environment with similar challenges, it makes it easier to know what questions to ask. It's also important to never lose sight of the fact that the people you work with are the experts at what they do. My role is really to ask the right questions to support them in successfully implementing changes. They have the answers—I just need to ask the right questions.

What keeps you going? What are the best things about your role?

Working within our SCN and being able to learn, work, and play with such a diversely skilled group of energetic and competent individuals always makes showing up for work a pleasure...It is through our SCN that I have the privilege of working with the broader stroke community in Alberta. They are a passionate group with a can-do attitude. They always strive to be leaders in the field with the goal of always doing what is right for the patient. I really relate to that and appreciate the drive. To be around such an experienced, articulate, and knowledgeable group of individuals, I could not have asked for better training and learning opportunities to grow and develop my own skills.

Two things really stand out for me: the people I get to work with, and the work I get to do.

The second part is the work that I get to do. I thrive in environments where leadership has confidence in my abilities, and where it is safe to learn. I also enjoy getting to know people and what they do. I am naturally curious and appreciate details, so getting to understand how things work and how they can be made better is a great fit. And I love numbers! I know this is not for everyone, but it is a big part of what I do. Figuring out what to measure, how, and what to do with those numbers is a big part of my role and I enjoy it immensely. And of course, at their core, the SCNs are the ideal platform for strategist planning. I really appreciate the ability to help shape what future care will look like years down the road; to set our healthcare system up so that it is leading in the field in stroke care.

What are you most proud to have had a part in accomplishing?

Providing the data and the context to support frontline teams and zone stroke programs, informing their decisions and improving the care they provide. It took many iterations, but we have developed key reports that have helped to shape stroke programs at the frontlines and together, we've gotten leadership to ask critical questions. When we do this, patient care improves.

There have also been a few initiatives where we have been able to bring the broader stroke community together and network in a way that has facilitated provincial standardization of care. I am very proud of those connections and communities of practice.

HEALTH PROMOTION & CHRONIC DISEASE AND INJURY PREVENTION

The SCNs, Provincial Programs and their Scientific Offices continue to work upstream to prevent chronic disease, pain and injury, focusing on strategies, partnerships and community supports that support health and wellness. Increasingly, this work takes a ‘systems’ approach, recognizing the need to collaborate across sectors and identify community assets, resources and supports that can support health, wellness and well-being. Some examples include:

Enhanced Diabetes and Kidney Health screening and care for Indigenous communities

Rates of diabetes among Indigenous peoples (15%) in Alberta are considerably higher than for non-Indigenous people (7%)¹. Lower limb amputations and kidney dialysis rates are also three times higher among Indigenous people, and social determinants of health—such as poverty, barriers to healthcare, inferior food supply, and lack of clean running water—often result in earlier onset and a quicker progression to severe health outcomes¹.

The DON SCN has co-created a “Creating Harmony in Care” approach with Indigenous communities, health care providers, community champions, and Elders that aims to improve prevention and treatment of chronic diseases in Indigenous populations. The approach considers four intersecting elements: the **person** living with (or at risk of) a chronic condition; the **community** they belong to; the **care** required to prevent, treat, and manage their condition; and the **systems** that can help prevent disease and enable optimal health (e.g., healthcare system and environment). Some specific initiatives are:

- ▶ **Kidney Health Check** – This point-of-care screening program for diabetes, hypertension, kidney disease and obesity is currently offered in two Indigenous communities: the Piikani and Blood Tribe First Nations. This community-led, culturally relevant screening program aims to improve early identification, appropriate risk stratification, and timely access to therapies that can improve outcomes.
- ▶ **LINK (Linking Diabetes Care: An Integrated Digital Health Approach to Diabetes with First Nations in Alberta)** – This [PRIHS-funded](#) research project (led by Dr. Darren Lau, University of Alberta) aims to improve diabetes care among First Nations Peoples. The project involves a digital intervention that relies on the interaction between care coordinators and local community health workers, a care model that was successfully piloted and found to be effective at improving glucose, blood pressure, and cholesterol control. In this phase, LINK will be introduced in approximately 12 First Nations communities across Alberta over three years.

Connecting People and Community for Living Well (CPCLW)

This provincial initiative focuses on supporting individual and collective wellbeing at the community level, enabling Albertans to live well in the ways that matter to them. This may include maintaining one’s health and independence, a sense of safety and security, opportunities for connections with family and friends, leisure activities and much more.

CPCLW aims to transform how people are supported in their community by building on the strengths of the community and cross-sectoral collaboration among community partners. Its goal is to amplify the benefit by working in harmony and respond to the evolving needs of their local populations. The CPCLW provincial team works alongside rural, multi-sector community teams, supporting them in building and sustaining the wellbeing of their local populations.

Wellbeing is maintained or improved when there is a good ‘fit’ between the changing needs of individuals across their life course and available resources and supports to meet those needs. This work is helping



¹ Alberta Health Services. 2020. Creating Harmony in Diabetes Care with Indigenous Communities. [Video](#).

connect community partners and develop flexible approaches that address the needs of underserved populations in their community such as seniors impacted by dementia, and others who may benefit from enhanced support.

To date, five Alberta communities (Drumheller, Innisfail, Stony Plain, Three Hills, and Westlock) have participated in this work and developed a number of programs and activities to wellbeing in their communities. Work is continuing to spread, scale and sustain the CPCLW model to other Alberta communities and underserved populations. [Learn more](#)

► Health impacts

SCNs and Provincial Programs work collectively to improve health outcomes. Our work spans many areas of health and its impact can include short-term and long-term impacts for individuals, populations and public health as well as disease and injury prevention and patient experience.

The CAHS impact framework does not define health impact measures that are common across all areas of health. Indicators typically relate to:

- **health status** (e.g., mortality, morbidity, mobility, disability, pain, recovery rate, advanced illness, disease or injury incidence or progression)
- **modifiable risk factors** (e.g., exercise, alcohol or tobacco use, access to nutritional foods)
- **other measureable outcomes** (e.g., reduced complications, emergency visits, hospital readmissions)
- **patient-reported outcome measures** (e.g., stress, confidence or satisfaction, quality of life)

These type of outcome measures are rigorously evaluated in randomized controlled trials (RCTs). In dynamic clinical settings, it becomes more difficult to attribute impact and causation, and health systems are sometimes limited in their ability to track outcome measures outside of research studies. The provincial implementation and optimization of Connect Care is expected to enhance data collection, integration and support future study.

Highlights from 2022-2023

The following pages highlight some examples of positive health impacts and outcome improvements over the past year. Evaluations are ongoing for many programs and research initiatives led by the SCNs, Provincial Programs and their Scientific Offices.



Fracture Liaison Service
Bone & Joint Health SCN

Reduced risk of secondary fractures

Reduced pain and disability

The Fracture Liaison Service (FLS), an initiative led by the Bone & Joint Health SCN and the Alberta Bone and Joint Health Institute, is helping proactively identify and manage osteoporosis in patients who have experienced a hip fracture. Osteoporosis is a chronic and progressive condition associated with low bone mineral density that can increase risk of fragility fractures. According to [Osteoporosis Canada](#) at least 1 in 3 women and 1 in 5 men will break a bone due to osteoporosis in their lifetime.

This work is helping reduce frailty and injury by improving care for hip fracture patients; assessing bone health and patient risk of osteoporosis, falls and secondary fracture; and improving health outcomes and quality of life for older Albertans who are vulnerable to bone fractures, falls and osteoporosis.

The FLS has expanded to 11 hospital sites and now operates in all five zones. In 2022, the team launched satellite or Tele-FLS for four small-volume hospitals, enabling FLS to capture every hip fracture patient in Alberta. As of 2021, more than 13,000 Albertans have been assessed by an FLS, and results show:

- ➔ **A 50% decrease in hip fracture risk for patients assessed by the FLS after two years** due to improved screening, prevention, restorative care, and referrals to specialty care, where appropriate. [Learn more](#)
- ➔ Substantial improvements in new osteoporosis medication starts following hip fracture (44% of enrolled patients post-FLS versus 19% pre-FLS). Ensuring patients are assessed and receive osteoporosis treatment if needed helps improve bone health over patients' life span.
- ➔ This type of prevention program is cost-effective (an estimated \$9,200 per quality-adjusted life-year compared with usual care), acceptable to patients, and provides high quality care and information that supports ongoing health and mobility. [See publication](#)

Incremental Dialysis Program

Medicine SCN, Kidney Health Section

Improved patient experience and quality of life

Expanded system capacity for traditional dialysis

For Albertans who live with chronic kidney disease, a typical dialysis schedule is three times a week for 3 to 4 hours per dialysis session. Actual time varies depending on patients' medical status and other factors, but generally the requirement for on-site dialysis can be a burden for patients and families.

Incremental dialysis (ID) is when the frequency of dialysis is adjusted based on patient need. Eligible patients can dialyze 2 days/week instead of the standard 3 days/week, and either increase the frequency as needed or switch to other treatment options. ID has been endorsed by Alberta Kidney Care as a priority program and patient-centred care model that can improve symptom management and preserve residual kidney function while decreasing the treatment burden for patients.

Between June 2021 and May 2022, 8 sites in Calgary and Edmonton launched incremental dialysis, and an ID plan, initial and monthly assessments, and nursing tasks have been built into Connect Care. Most rural sites in Alberta Kidney Care North have also implemented ID, and sustainability planning is underway with Alberta Kidney Care North and South.

Early results show ID is safe, creates additional capacity, and is positively viewed by patients and staff:

- ➔ **Incremental hemodialysis patients report improved quality of life, and this appears to be sustained over time.**
- ➔ 85% of staff were satisfied with the implementation to date
- ➔ Implementation is helping increase capacity to serve additional patients. On any given day, approximately 60+ patients are on incremental dialysis across Alberta, resulting in a **system-wide “savings” of about 250 dialysis runs per month.**

Provincial PPE Safety Coaching

Provincial Seniors Health & Continuing Care

Reduced risk of infection, improved safety for residents of continuing care facilities

Improved compliance with infection prevention & control protocols

Personal protective equipment (PPE) plays a vital role in preventing the spread of communicable diseases such as COVID-19 and other respiratory viruses and infections. AHS operates a voluntary program that supports frontline staff using a peer-to-peer approach. The program, which launched in November 2020 in response to the pandemic, aims to complement existing programs developed at a local level and provide resources to areas that do not have PPE support. [Learn more](#)

During the pandemic, many continuing care facilities across Alberta accessed the supports provided through this program. An evaluation conducted by Provincial Seniors Health and Continuing Care (PSHCC) found that the program was well received by designates, coaches and staff in participating continuing care facilities. A comparison of audit data, completed by the Provincial Continuing Care audit team, demonstrated:

- ➔ A 10% decrease in inappropriate use of PPE following the training
- ➔ Significant improvements in average Infection Prevention & Control (IPC) audit risk scores, indicating greater compliance with IPC requirements

To date, one third of continuing care facilities in Alberta have implemented the program.



Acute Care Bundle Improvement (ACBI)

Pan-SCN

Consistent high-quality care for every patient, every time

Reduced complications, ED visits, hospital readmissions

ACBI is a provincially coordinated quality improvement project that integrates several evidence-based programs: CoACT Collaborative Care, Elder-Friendly Care, Enhanced Recovery After Surgery, Home to Hospital to Home guidelines, Pressure Injury Prevention, as well as condition-specific order sets and care paths for Cirrhosis, Heart Failure and Chronic Obstructive Pulmonary Disease (COPD). [Learn more](#)

ACBI is about getting evidence into practice and applying practices efficiently and consistently to **improve quality of care and patient outcomes for every patient, every time**. It is a collaborative partnership driven by Zone operations and supported by SCNs and Provincial Programs that aims to optimize patient care while streamlining processes and workflows and standardizing admission processes, daily care routines, hospital discharge and transitions in care. The rollout includes key outcome and performance metrics that sites can use to track their progress with a focus on improving outcomes, uptake of condition-specific clinical pathways, and performance regarding hospital discharge, transitions in care, and readmissions.

Implementation of ACBI is underway in all zones, at Alberta's 14 largest acute care sites. This complex initiative is advancing in phases, in coordination with the provincial rollout of Connect Care, to best facilitate and support training and practice change by frontline providers. Nonetheless, some sites have already reported process and outcome improvements, including reductions in the:

- actual versus expected length of stay in hospital (ALOS:ELOS ratio)
- percentage of alternate level of care days
- number of patients readmitted to hospital within 30 days
- crude surgical site infection rate
- increased use of HF/COPD care paths and evidence-based guidelines, reduced variation in care

► Economic and social benefits

The SCNs, their Scientific Offices and Provincial Programs work with stakeholders across Alberta to advance health system improvements that improve access, value, clinical utilization, and accountability. Business cases and rigorous evaluation, including return on investment (ROI), are incorporated into decisions at various stages of the AHS Innovation Pipeline. SCNs rigorously evaluate cost savings resulting from practice changes as well as their impact on patient outcomes, experience, quality and health service utilization.

The CAHS impact framework outlines some indicators related to well-being, social benefits and commercialization; however, most are not recommended for institutions, nor are the indicators common across all areas of health. As with health impacts, it is also challenging to control variables in dynamic clinical settings and attribute impact and causation. As such, health systems are somewhat limited in their ability to track and quantify broad economic and social outcomes and link outcomes to research activities.

Given this, SCNs and Provincial Programs report on economic and social benefits using indicators that relate to:

- **access** (e.g., wait times, convenience, coordination of care, access to health services)
- **quality** (e.g., acceptability, accessibility, appropriateness, effectiveness, safety)
- **value and sustainability** (e.g., cost avoidance, savings, efficiency, waste reduction)
- **patient and provider experience** (e.g., satisfaction, flexibility, supports)
- **equity** (e.g., address systemic barriers, support equity, diversity and inclusion, responsive to user needs and expectations)

Highlights from 2022-2023

Over the past fiscal year, SCNs, Provincial Programs and their Scientific Offices have supported several major initiatives for health system improvement in Alberta, including the Alberta Surgical Initiative, Acute Care Bundle Improvement (ACBI) and Alberta Cancer Diagnosis Program. These provincial priorities involve clinicians and stakeholders in all zones and are expected to significantly benefit Albertans and improve health service utilization in surgical and acute care settings.

The following pages highlight some of the positive impacts of this work in terms of value and health system sustainability, access improvements, and benefits to the people of Alberta. Evaluations are ongoing for many programs and research initiatives led by the SCNs, Provincial Programs and their Scientific Offices.



Timely diagnosis, testing
and referrals

Cost avoidance, positive
return on investment

Alberta Cancer Diagnosis (ACD)

Cancer SCN

The Cancer SCN has co-designed and implemented cancer diagnosis pathways for many cancer types, including breast, lung and prostate cancer. These pathways have shown to expedite cancer diagnosis, improving wait times, appropriate use of diagnostic tests, access to supportive care and resources and improved care coordination for patients.

With the support of a Health Innovation Improvement Scale and Spread (HIIS) grant, recent work has included co-design and implementation of provincial cancer diagnosis pathways for lymphoma and colorectal cancer. For 30% of patients, these cancers go undiagnosed until hospital admission, which is associated with higher mortality and higher system costs. Early evaluations of these pathways show that:

- The Lymphoma Diagnostic Pathway (LDP) appears to improve patient health and system outcomes, as patients in the intervention group used fewer ED, inpatient, and outpatient services. These reductions were associated with a **cost avoidance of \$1851 per patient**.
- Following implementation of the LDP, a higher proportion of patients were diagnosed out of hospital (8.84% of cases, compared to 18% of matched controls), suggesting **earlier identification** (i.e. prior to disease progression requiring hospital admission).
- Both the Lymphoma and Colorectal Cancer Diagnosis Pathways were shown to deliver a **positive return on investment (ROI)**. The Colorectal Cancer Diagnosis Pathway delivered an ROI= 3.1* during the 12-month pilot, and **the LDP delivered an ROI= 5.3** (one year post-implementation). This means that for every \$1 invested, the LDP resulted in a \$5.30 return (lymphoma) for Alberta's health system. Note that these gains are not 'hard green dollars' that can be reinvested. Rather, they represent cost avoidance resulting from reduced health system utilization (i.e., ED, specialist, and inpatient services). [See publication](#)

*unpublished

Primary Care Supports for Gastroenterology Care

Digestive Health SCN

Improved access for patients with urgent or non-urgent conditions Improved value through appropriate use of specialty care

In Alberta, referral demand for gastroenterology care far exceeds service capacity. Development and implementation of clinical and patient pathways, and expansion of telephone and electronic advice services for non-urgent consults, are helping support care in the community for patients with low-risk gastrointestinal (GI) conditions while improving the quality and appropriateness of specialist referrals for those with more urgent conditions. This approach aims to ensure timely, high-value care for all patients with GI conditions.

Early evaluations show that:

- Collectively, these supports have resulted in **6,217 avoided GI referrals** over the three-year project term.
- Once a referral was closed, or an advice service recommended care in the patient's Medical Home (i.e., with their primary care provider), most patients did not access specialized services for a GI condition within one year of the original referral date.
- Of the 277 subsequent endoscopies, 212 (76.5%) were completely normal and 22 (7.9%) showed clinically significant findings. The remaining 43 (15.5%) revealed clinically benign findings.
- Overall, the **estimated cost avoidance** through avoided referrals for specialist gastroenterology and hepatology care **was \$2.42 million over three years**.

This initiative has reduced patient wait times by directing them to the most appropriate provider. Likewise, primary care providers have had more resources to support care in the community, and been able to access specialty advice as needed. It has also delivered value to all Albertans by ensuring timely, high-quality care by the right provider at the right time.

Use of Tenecteplase for Acute Ischaemic Stroke (AcT)

Cardiovascular Health & Stroke SCN

High-quality care, efficient delivery of clot-busting medication Reduced burden on staff in emergency departments

The Cardiovascular Health and Stroke (CvHS) SCN has worked closely with health partners across the province to transition to using tenecteplase (instead of alteplase) as an injectable, intravenous medication for the treatment of acute ischemic stroke province-wide. Two key benefits of tenecteplase are that can be administered more easily (i.e., as a single bolus, while a patient is being transported to hospital in an ambulance) and has a more favorable benefit-to-risk profile than alteplase.

Researchers conducted a pragmatic, randomized controlled clinical trial to compare tenecteplase to the usual standard of care. Results were favourable, and a change in practice was subsequently approved. For results of the AcT trial, see [The Lancet](#) (2022).

By February 2023—just one month into the province-wide transition—approximately 97% of all thrombolysis cases in Alberta used tenecteplase. This rapid rollout was possible thanks to strong collaboration and compelling benefits for patients and care providers, including:

- Ensuring the same standard of patient safety, with similar outcomes (function, quality of life, and safety)
- Reducing the burden on emergency department staff and facilitating inter-facility transport using Basic Life Support (BLS) crews
- Reducing equipment needs and treatment complexity given the ease of administration of tenecteplase compared with alteplase



Reduced hospital transfers and admissions

Improved utilization of telephone advice and community paramedic services

Improving Acute Care Transfers for Residents of Long-Term Care

Emergency SCN

More than 10,000 transfers occur annually from long-term care (LTC) facilities to an Alberta emergency department². Although many transfers are appropriate, research has shown that many LTC residents may benefit from on-site care with appropriate supports. This approach benefits patients since transfers to the ED can be associated with risk (e.g., exposure to infections, falls, delirium and functional decline), lengthy hospital stays, and reduced patient and family satisfaction.

The Emergency SCN has been working with Dr. Jayna Holroyd-Leduc (PI, University of Calgary) and with health and community partners to develop and evaluate a standardized LTC-to-ED care referral pathway and care model that aims to optimize care, better integrate health care resources and standardize care processes. The model includes three components:

1. Centralized telephone advice ([RAAPID](#)) that serves as a single point-of-contact for care providers;
2. Mobile integrated healthcare within LTC facilities; and
3. Use of early-warning tools (INTERACT STOP-AND-WATCH for healthcare aides, and INTERACT Change in Condition Cards for nursing) to readily identify and manage changes in the health status of LTC residents.

This is a three-year PRIHS project² funded by Alberta Innovates and Alberta Health Services and led by Dr. Holroyd-Leduc.

To date, the program has been implemented at 40 LTC sites in the Calgary Zone with positive early results reported, including:

- A reduction in LTC-to-ED transfers (rate decreased from 1.91 pre-intervention to 1.70 post-intervention per 1,000 resident days)
- A reduction in hospital admission rates (from 1.08 to 0.94)
- Increased utilization of the centralized telephone advice and transfer system
- Substantive decrease in community paramedic visits

Further analysis of costs and qualitative outcomes is pending.

[See published conference abstract](#)

² Alberta Innovates and Alberta Health Services. 2019. PRIHS: Partnership for Research and Innovation in the Health System Funding Award. [Profile](#). Improving acute care for long-term care residents: A better way to care for the frail elderly in times of medical emergency.

► Generating new knowledge

Alberta has a diverse and skilled research community that includes academic, clinical and community partners. SCNs, Provincial Programs and their Scientific Offices actively engage patients and families in setting priorities and co-designing solutions and bring a disciplined, rigorous approach that integrates academic effort with the needs of the health system.

Working together, we generate and synthesize new knowledge through pragmatic trials and research studies in priority areas of health. We evaluate outcomes, develop knowledge tools and products, and provide the evidence needed to advance change within the health system. We also share new evidence through publications, reports, databases and online tools for patient and clinical resources.

Highlights from 2022-2023

PEER-REVIEWED PUBLICATIONS

The SCN Scientific Offices continue to share research findings, new knowledge and evidence by co-authoring scholarly articles, evidence reviews and other peer-reviewed literature.

In 2022-23, SCNs and Provincial Programs contributed to 438 peer-reviewed manuscripts & scholarly publications, including:

345 with SCN leaders as a named author^a

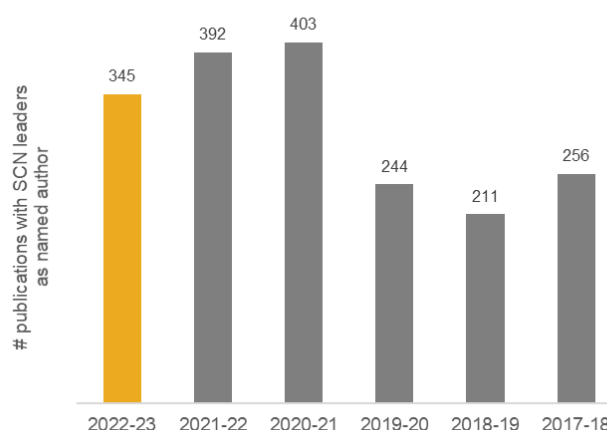
47 publications that received SCN in-kind and/or financial support^b

46 submitted or in-press manuscripts^c

More than half of these publications include faculty from the University of Alberta or the University of Calgary as co-authors.

For a full list of publications, see the [2022-2023 Publications Summary](#).

PUBLICATIONS BY YEAR



SCN ROLE



NOTES:

^a Co-authored manuscripts are counted only once in summary metrics. Totals include print and e-publications. Counts for 2022-23 do not include PPPH (no data).

^b Refers to published manuscripts where SCN leaders are not listed as co-authors, but SCNs provided in-kind and/or financial support.

^c Reflects publication status as of March 30, 2023. Submitted or in-press manuscripts are excluded from totals for the 2022-23 fiscal year.

For further details, see [Appendix A](#).

OTHER KNOWLEDGE PRODUCTS, DIGITAL TOOLS AND DASHBOARDS THAT SUPPORT QUALITY IMPROVEMENT, MONITORING AND EVALUATION

The SCNs, Provincial Programs and their Scientific Offices have co-designed a number of knowledge resources, products and tools for patients, families, and clinicians that support care delivery, training, decision making, health policy and quality improvement.

Products such as clinical databases, dashboards, training modules, and audit and feedback support health service delivery ongoing evaluation of system performance and outcomes. These products support a learning health system and local decision making using timely, best available evidence at a zone, site or provider level. Other public-facing information, websites, brochures and other resources support patient self-management, communication and learning that supports the health and well-being of Albertans.

In 2022-23, SCNs and Provincial Programs contributed to

more than 160

knowledge products, decision tools and other deliverables beyond peer-reviewed publications.

Examples from the 2022-23 fiscal year are listed in the [Other Outcomes & Deliverables Summary](#) or by clicking the icons below.



Policy input & engagement

16



Evidence reviews & decision tools

65



Data dashboards

26



Online resources

32



Education modules & resources

22

► Building capacity for future innovation

In addition to serving as principal investigators and co-investigators, the Scientific Offices support health research and innovation through collaborations, letters of support, data sharing agreements, access to personnel and funding, training and outreach activities, and by brokering support with operational areas, provincial programs, and local service units. The provincial reach of the networks facilitates coordination and enables access to data, patients and diverse clinical settings within Alberta's provincially integrated health system.

SCNs and the wider research community benefit from knowledge generated through national research networks and initiatives others are leading, and they provide reciprocal value through leadership, research and funding opportunities for Alberta researchers in health sciences as well as business, operational management, computing and data science, and biomedical engineering. Together, they amplify the impact of health research in Alberta.

Highlights from 2022-2023

RESEARCH ENDORSEMENT, FACILITATION AND SUPPORT

Supporting the work of Alberta's research community creates opportunities to align our efforts, advance knowledge and apply it in a health setting. The scope and type of SCN involvement varies and may include:

- endorsing projects and funding proposals through letters of support (e.g., CIHR, PRIHS)
- providing opportunities for patient and clinician engagement
- facilitating access to clinical environments for pragmatic clinical trials
- collaborating as co-investigators
- brokering access to health system data, clinical participation and interdisciplinary learning
- providing other funding or in-kind support

Over the past year, SCNs provided 197 letters of support to Alberta researchers and have benefited from the expertise and involvement of more than 2,300 research network members.

Examples of research partners and specific collaborations are included in the [Research Collaboration Summary](#).

Active partnerships and collaborations with

72

Alberta research institutes & provincial, national and international health organizations

197

letters of support to Alberta researchers in support of funding proposals*



A 1% increase over 2021-2022

2,352

active research network partners

Note:

*Letters of support are counted separately from other funding applications.

LEARNING AND TRAINING OPPORTUNITIES

SCN leaders supervise students as part of formal academic programs and mentor and engage trainees and early-career researchers on projects in priority areas of health. They also provide funding through seed grants, studentships as well as opportunities for patient-led research and other research collaborations with academic partners, research institutes, communities and organizations. These include opportunities for CIHR and MITACS* Health Systems Impact Postdoctoral Fellows, graduate and undergraduate students, frontline clinicians and community partners.

In FY 2022-2023

65

trainees supervised or mentored
by SCN leaders

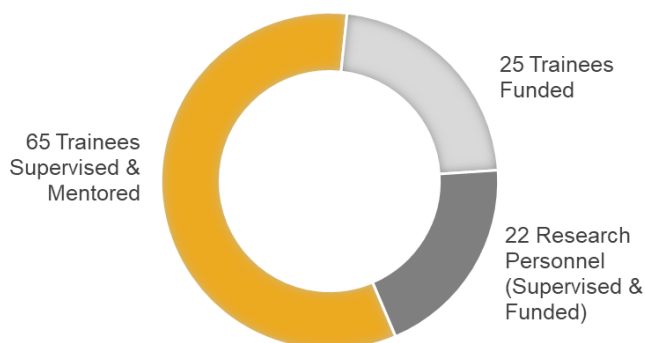
27

funded through seed grants and
research funding

22

research personnel collaborated with
SCNs in priority areas

TRAINEES SUPPORTED



Betalihem Lemma
University of Calgary

"One of my biggest takeaways from this research experience is the importance of advocating for a more diverse representation of the groups affected by emergency medicine research. The procedures and protocols we aim to develop with these studies are ultimately for populations comprised of individuals that come from different cultural, racial, religious, and sexual orientation groups. Therefore, the participants that take part in the studies we conduct should also reflect the diverse population we hope to serve."

Recipient of ESCN summer studentship
Supervised by Dr. Stephanie Vandenberg
with support from the Emergency SCN

For information on specific projects, including outcomes, see the [Training & Capacity-Building Summary](#). Details on funding support provided by the SCNs and Provincial Programs are included with the [Financial Highlights](#).

*CIHR = Canadian Institutes of Health Research | MITACS = Mathematics of Information Technology & Complex Systems

PATIENT-LED RESEARCH AND PACER TRAINING

The SCNs, Provincial Programs and their Scientific Offices support patient-led research and Patient and Community Engagement Researchers (PaCERs). The PaCER program is a partnership between

- Alberta Health Services (through the SCNs)
- The Alberta Strategy for Patient-Oriented Research Support Unit (AbSPORU), Patient Engagement Team
- The University of Calgary, Continuing Education Program

Individuals enrolled in the PaCER program have lived experience in healthcare as patients, caregivers or family members. It focuses on transforming the role of patients in health care and health culture through engagement and active involvement in health research that addresses patient-identified needs and priorities.

The certificate program involves three courses in which students learn basic skills, methods and processes of patient-led qualitative research. During their training, students have the opportunity to work collaboratively as part of a research team, and upon graduation, they have opportunities to contribute to patient engagement research, producing evidence that can inform current practice, policy decisions and further research. For details, see pacerinnovates.ca.

In 2022-2023, SCNs supported five PaCER cohorts and seven patient-led or co-led research projects. Studies focused on quality improvements, patient and family experiences and patient-reported outcome measures in the areas of emergency medicine, digestive health, neuroscience, rehabilitation and vision, and Indigenous health.

For details on specific studies, see the [Patient Engagement Summary](#).



27

patients sponsored to receive
PaCER training in 2022-2023

7

patient-led or co-led research
projects supported

KNOWLEDGE EXCHANGE AND OUTREACH ACTIVITIES

SCN Scientific Offices engage the research, patient and clinical community through a variety of workshops and outreach activities on a local, provincial and national level. Scientific directors, assistant scientific directors and trainees participate in research and quality improvement forums, conferences and related knowledge-sharing and capacity-building activities. These efforts build awareness, expand participants' capabilities, and create opportunities for further research collaboration and alignment.

In 2022-2023, these activities included:

639

virtual and in-person outreach events

171

scholarly presentations to local, national or international audiences

468

additional workshops and learning events

For details by SCN or Provincial Program, see the [Outreach Summary](#).

Additional information on the events included in these counts is provided in [Appendix A](#).

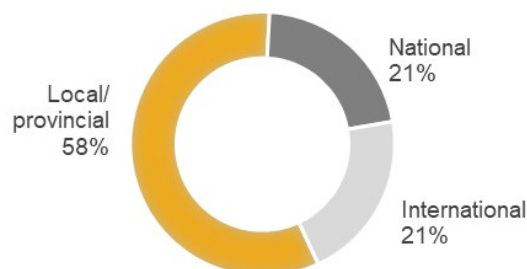


492 (77%)
IN-PERSON

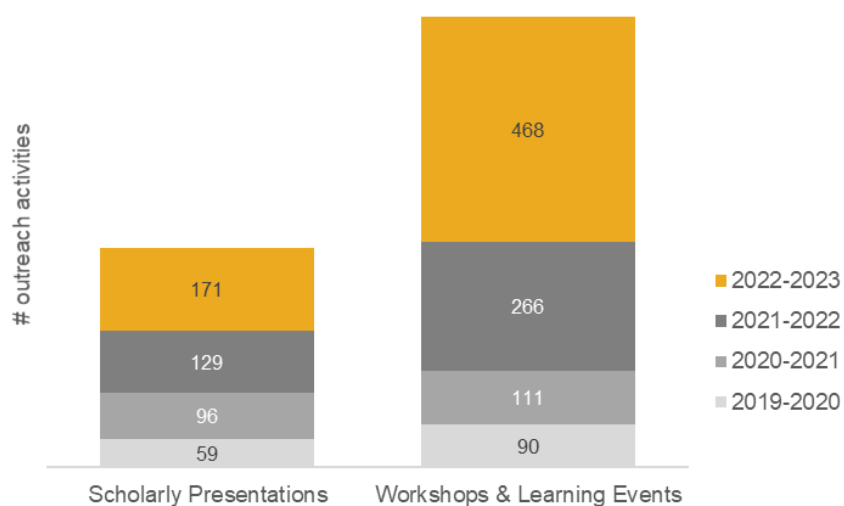


147 (23%)
VIRTUAL / ONLINE

SCHOLARLY PRESENTATIONS



YEAR-OVER-YEAR OUTREACH



Financial highlights

The SCN Scientific Offices access grant funding from a variety of sources, bringing in new dollars that directly support health innovation, research and outcomes improvement in Alberta. **Last year, 80% of the funds awarded were from sources outside the province.**

The Scientific Offices also administer and award grants, providing funds that support local research and capacity building through seed grants, studentships and research collaborations with Alberta's universities and with health organizations, leading research institutes and clinician researchers.

All of these funding opportunities support the AHS Innovation Pipeline, helping to evaluate good ideas, adapt them for a local context, and advance successful innovations from a pilot stage to provincial implementation and sustainment.

Note: The information that follows is specific to grant funding for health services research. It does not include operational funding Alberta Health Services, SCNs or Provincial Programs receives or funding associated with commercialization of specific products or technologies.

Highlights from 2022-2023

GRANT FUNDING RECEIVED - FOR HEALTH RESEARCH IN ALBERTA

\$84.6M

in total grant funding awarded
(successful applications)

87

successful funding applications

68%

of grants awarded in 2022-23
were from sources outside Alberta,
accounting for

80%

of the total dollar value

TOTAL FUNDING BY SOURCE

59 grants from
outside Alberta

\$67.4M value
(80% of total)



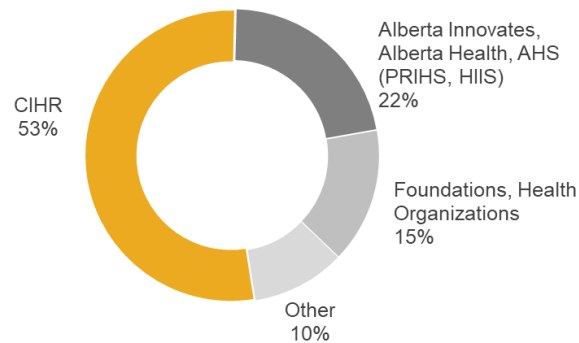
28 grants from
within Alberta

\$17.2M value
(20% of total)

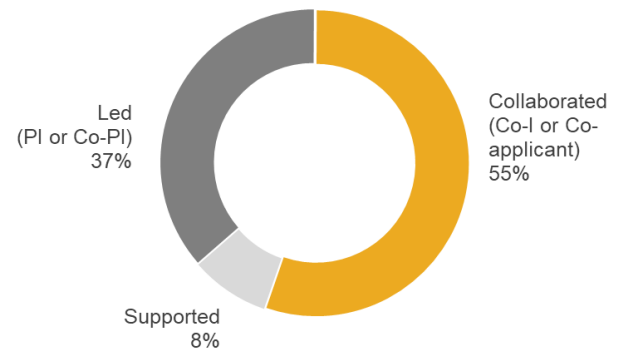
NOTES:

These metrics include work SCNs are leading, collaborating on, or supporting. They do not include funding for work done part of members' other roles, responsibilities or affiliations, nor do they include the 36 additional competitions pending as of March 31, 2023. All grants that are part of multi-SCN collaborations are counted only once.

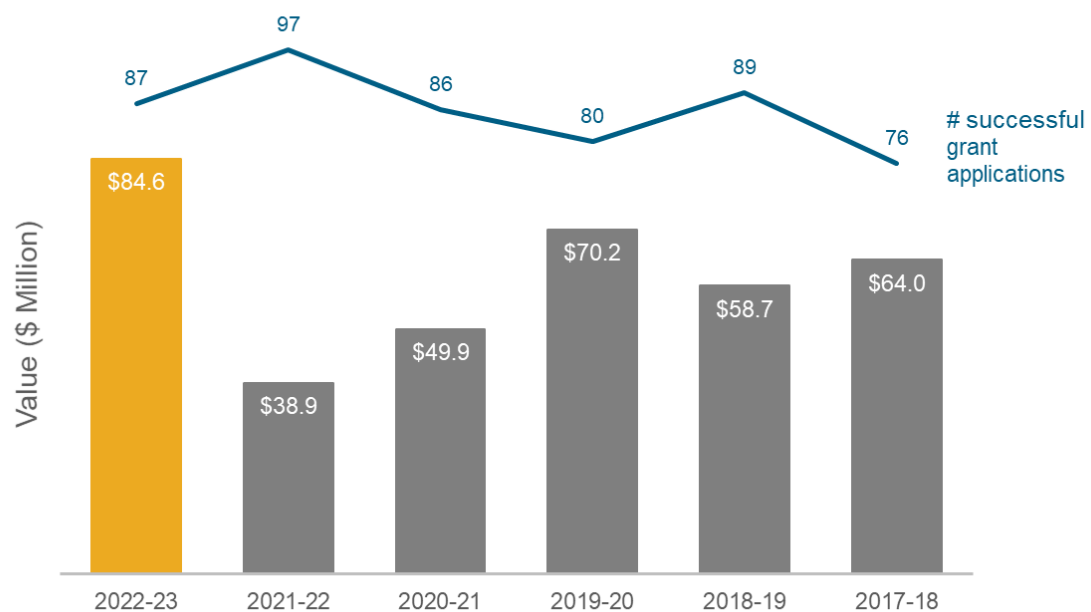
GRANT SOURCES



SCN ROLE



GRANT FUNDING, YEAR OVER YEAR



64%

Success rate for grant applications (2022-2023)

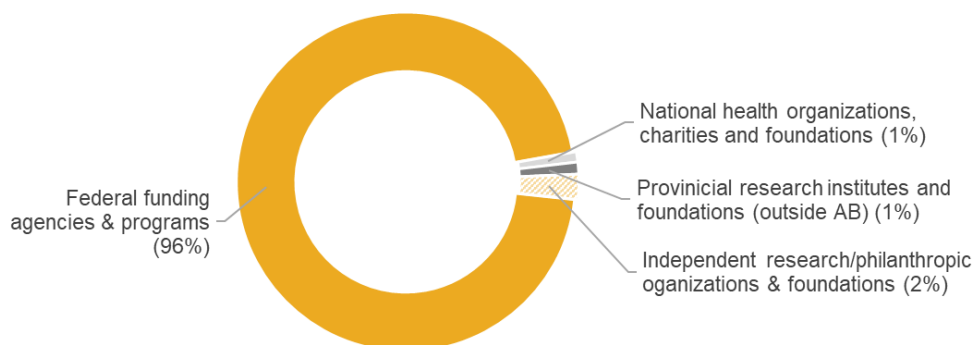
Grant application success rate has been in the

64% to 69%

range over the past four years

Further detail on these grants, including specific areas of research and principal investigators, are provided in the [Grant Summary](#).

OUT-OF-PROVINCE GRANTS BASED ON VALUE



SOURCES OF GRANTS FROM OUTSIDE ALBERTA, 2022-23

	# grants	Total \$
Federal research funding agencies		
Canadian Institutes for Health Research (CIHR)	46	\$60.2M
Federal health agencies and programs		
Canadian Agency for Drugs and Technologies in Health (CADTH)	2	\$4.3M
Health Canada Substance Use and Addiction Program (SUAP)		
National health organizations, charities and foundations		
Brain Canada Foundation	5	\$0.6M
Canadian Frailty Network		
Diabetes Canada		
Heart and Stroke Foundation of Canada		
The Arthritis Society		
Research institutes and foundations (outside Alberta)		
Dalhousie University	3	\$0.7M
Hamilton Academic Health Sciences Organization (HAHSO)		
Ontario Bioscience Innovation Organization		
Independent research or philanthropic organizations and foundations		
Terry Fox Research Institute	2	\$1.5M
Mitacs		
Industry		
[None]		

Detail on these grants, including recipients, specific areas of research and principal investigators, are provided in the [Grant Summary](#).

GRANT FUNDING DISBURSED BY THE SCIENTIFIC OFFICES

\$1.20M

in grant funding awarded in FY 2022-2023 to support local research and capacity building

↑ A 46% increase over 2021-2022

This includes:

47

studentships & seed grants awarded to support health research at Alberta's major research universities

↑ A 34% increase over 2021-2022

26

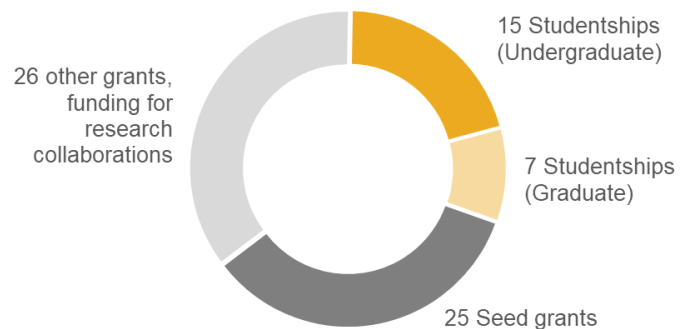
additional grants for research collaborations in priority areas

↑ A 30% increase over 2021-2022

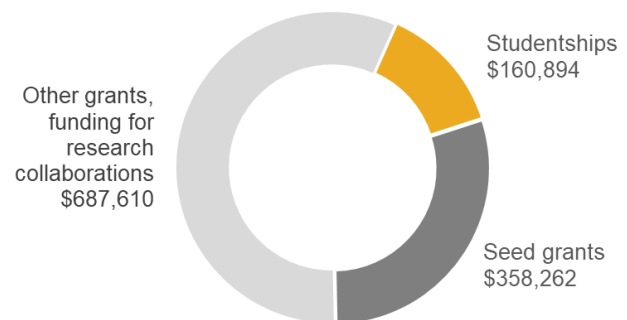
The funding allocation includes:

- students and post-doctoral researchers at four Alberta universities
- other recipients (e.g., First Nations members, clinical partners, and CIHR Health System Impact Fellows) participating in health services research in Alberta

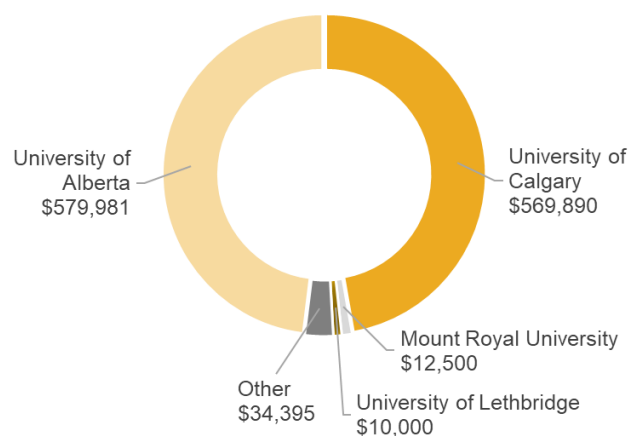
OF GRANTS AWARDED, BY TYPE



FUNDING AWARDED, BY TYPE



FUNDING BY RECIPIENT AFFILIATION



Studentships

	<i>N</i>	<i>Funds Awarded</i>
University of Alberta ¹	5	\$32,569
University of Calgary ²	15	\$112,900
University of Lethbridge	1	\$10,000
Mount Royal University	0	--
Other	1	\$5,425
TOTAL	22	\$160,894

Seed Grants

	<i>N</i>	<i>Funds Awarded</i>
	18	\$196,442
	7	\$161,820
	0	—
	0	—
	0	—
TOTAL	25	\$358,262

Other Grants

	<i>N</i>	<i>Funds Awarded</i>
	9	\$350,970
	11	\$295,170
	0	—
	1	\$12,500
	5	\$28,970
TOTAL	26	\$615,473

Notes:










¹ Includes students in the Faculty of Medicine & Dentistry; Critical Care Medicine; Physical Medicine & Rehabilitation; and School of Public Health.

² Includes students in the Cumming School of Medicine; Community Health Sciences; School of Public Policy; Critical Care; and the Faculty of Nursing

For examples on work these funds have supported, including outcomes, see the [Training & Capacity-Building Summary](#).

Linked materials

Additional detail for the 2022-2023 fiscal year is provided in supplemental files, linked from this report:

 Key Contacts - SCNs and Provincial Programs	 Faculty Involvement by University	 Patient Engagement
 Publications Summary	 Other Outcomes / Deliverables	 Research Collaborations
 Grants Summary	 Outreach Summary	 Training & Capacity Building

- [Appendix A – Methods and metrics](#)
- [Appendix B – The CAHS Framework and AHS Innovation Pipeline](#)
- [Appendix C – Role of the Scientific Offices](#)
- [Appendix D -- 2022-2023 Highlights by Area of Health / SCN or Provincial Program](#)

Get involved

Alberta's SCNs, Scientific Offices and Provincial Programs invite ongoing collaboration, input and participation from individuals who are passionate about improving health and care. Visit our [web site](#) to learn more about opportunities to get involved, or contact us at StrategicClinicalNetworks@ahs.ca.

Appendix A Methods and metrics

Measuring our performance

The SCN Scientific Offices and Provincial Programs use a research performance measurement framework to assess the impact of their work. There are many approaches for measuring research outcomes, their benefits and direct and indirect impacts, and all methods have strengths and limitations.

SCNs and Provincial Programs have chosen to use a framework that builds on the Canadian Academy of Health Sciences (CAHS) impact framework. The CAHS framework is widely used by government, policymakers, funding agencies, academic and research institutions across Canada. It uses a 'systems approach' to assess how research activities inform decision making, advance in understanding, and contribute to changes in health, economic and social prosperity. The [CAHS framework](#) considers health research impacts in five categories: 1) advancing knowledge, 2) capacity-building, 3) informing decision-making, 4) health impacts, and 5) broad economic and social impacts.

This report summarizes the contributions of SCNs and Provincial Programs in each of these domains. Where possible, common indicators are used to ensure consistent measurement across all networks, programs and time. Health impacts are characterized for the appropriate population and scale (local, provincial) and vary depending on the nature of the project and population focus. Impacts on health policy, and broad economic and social benefits can be challenging to quantify and attribute specific contributions. The report also highlights collective achievements and describes the broad impact of this work.



Note: Data and summary metrics for 2022-2023 do not include information for Provincial Population and Public Health. A separate, program-specific impact report is being compiled.

Reporting period

Data in this report is for the 2022-2023 AHS fiscal year (April 1, 2022 to March 31, 2023).

NOTE: Metrics reflect the status of grants, publications, and funding awards at the end of the fiscal year. Those listed as 'pending' or 'submitted' as of March 31, 2023 are not counted in summary metrics (even if their status is now known) to avoid double-counting and ensure consistent year-to-year reporting. Grants, awards, publications and other achievements since March 2023 will be captured in next year's report.

Data sources

Information provided in this report was compiled by the SCN Assistant Scientific Directors, with support from other SCN leaders, staff and the pan-SCN team. All submissions were reviewed for accuracy and completeness prior to publication.

Data used to assess health and broad economic and social impacts was obtained from Alberta Health Services administrative databases, provincial costing information, project reports and published studies.

Performance indicators

Performance indicators SCN Scientific Offices use to report on impact are listed in the tables below for each CAHS domain. These indicators include quantitative and qualitative measures that reflect the broad health context SCNs operate within and their contributions on a local and provincial scale.

Advancing
knowledge

Building capacity
& capability

Informing
decisions &
policies

Improving health
outcomes

Supporting
positive economic
& social outcomes

Advancing knowledge

Indicator	Definition
Grants ^{1,2,3,4,5}	# of grant proposals led, collaborated or supported by the SCN/Provincial Program and submitted to a single competition, and value (CAN\$) of grant award
Letters of support ^{5,6}	# of letters of support provided by SCN/Provincial Program Leaders
Research network members ⁷	# of researchers who self-identify as members of the SCN/Provincial Program research community
Peer-reviewed publications ^{5,8}	# of peer-reviewed publications aligned with SCN/Provincial Programs subject matter, projects, and/or priorities
COVID-related publications ^{5,9}	# of peer-reviewed publications or deliverables developed in support of the AHS COVID-19 Scientific Advisory Group and its mandate

Notes: These indicators include measures of research activity, quality and scholarly output.

1. Includes any grant proposals supported by the SCN/Provincial Program and submitted to a single competition. Funding calls that have a letter of interest (LOI) stage and full application stage are only counted once. If an LOI comes with funding, this is considered a separate grant (i.e., LOI is rated as unsuccessful, pending or successful AND full application is rated as unsuccessful, pending or successful).
2. Includes a final count of grants (successful and pending) as well as sub-counts for those in which a) the SD/ASD/Leadership have been named role on the grant application, and b) any grants for which the SD/ASD/Leadership is not a named team member but has provided support (funds or in-kind support such as data liberation, content expertise, methods support). Letters of Support (LOS) are not included as in-kind support. "Led" refers to grants in which SCN leaders are the primary investigator (PI) or Co-PI, and "Collaborated" refers to grants in which SCN leaders are named as a co-investigator (Co-I) or co-applicant.
3. Grant amounts are reported in Canadian dollars. The full value of the grant is included in the summary metrics in the year the grant is awarded. Where grant allocations are dispersed by province, only the Alberta amount is counted in summary metrics. In the case of multi-SCN collaborations, shared grants are listed under each SCN but counted only once in summary metrics.
4. Grant applications submitted are listed as 'pending' if the outcome was not known by the end of the fiscal year. These applications are not counted in the summary metrics (even if their status is now known) to avoid double-counting and ensure consistent year-to-year reporting.
5. SCN/Provincial Program Leadership includes the Scientific Director and Assistant Scientific Director(s) well as Senior Medical Director, Senior Program Director or Senior Program Officer, Executive Director, Manager and Research Scientist.
6. Includes letters of support written by any member of the SCN/Provincial Program Leadership team. Letters of support are mutually exclusive from in-kind support in Grant Application Indicators (i.e., letters of support are not counted as in-kind support in Grant indicators).
7. Research network members can include researchers on working groups, SCN projects, or part of the core committee; co-investigators of external competitions; and those who self-identify as members of the SCN research community. Knowledge users on research grants are not included as the focus is on researchers and not the broader network community. Unless researchers request to be removed from the database, they continue to be counted as members of the research network even if the grant, project or working group is over.
8. Publication status (published, in-press/accepted, and submitted) is assigned based on status at the end of the fiscal year. Counts includes totals as well as sub-counts of publications a) with the SD, ASD, or Leadership on the author line, b) those generated with financial support from SCN (e.g. seed grants, commissioned work, workshops), and c) with significant in-kind contributions from SCN (e.g. data pull, data analysis).
9. In FY 2020-2021, a separate count of COVID-related deliverables was provided. For FY 2022-2023, a summary of [Other Outcomes & Deliverables](#) is provided, which identifies research outputs, knowledge products and deliverables not counted as peer-reviewed publications. This includes provincial frameworks, grey literature, evidence reviews, taskforce reports, clinical practice guidelines, honors and awards, and training, data and decisions tools that supported the work of AHS Executive, the Scientific Advisory Group, and policy makers.

Building capacity	
Indicator	Definition
Trainees – supervised / mentored ^{1,2}	# of trainees supervised or mentored by SCN/Provincial Program Leader(s) and related to an SCN/Provincial Program priority project. Supervision refers to trainees that are supervised as part of a formal academic program. Mentoring refers to trainees that are <u>not supervised</u> as part of a formal academic program.
Trainees – funded ^{1,2}	# of trainees funded by the SCN/Provincial Program but <u>not supervised</u> by SCN/Provincial Program Leadership (e.g., Studentship competitions, SD budget, PRIHS, other SCN-related funding mechanisms) and related to an SCN/Provincial Program priority project.
Research personnel – supervised and funded	# of research personnel funded by the SCN/Provincial Program, by grant dollars or other SCN funding mechanisms <u>and</u> supervised by the SD, ASD or SCN/Provincial Program Leadership
Additional funding	
<ul style="list-style-type: none"> • Summer studentships³ 	# summer studentships awarded (not launched) and total dollar amount in fiscal year
<ul style="list-style-type: none"> • Seed grants³ 	# of seed grants awarded (not launched) and total dollar amount in fiscal year
<ul style="list-style-type: none"> • Other grants³ 	# of other grants (such as commissioned research) awarded (not launched) and total dollar amount in fiscal year
Patient-led research and PaCER training	# of patient volunteers sponsored by SCNs/Provincial Programs in fiscal year to receive PaCER training and # of SCN-supported patient-led or co-led research projects
Outreach activities ⁴	<p># of scholarly presentations (lectures, abstracts, posters, conference panelist and moderator) to local, national or international audiences in fiscal year by SCN/Provincial Program Leadership.</p> <p># of presentations, workshops, research or quality improvement forums, webinars, learning collaboratives, grand rounds, and similar learning events by SCN/Provincial Program Leaders that support knowledge-sharing and capacity-building.</p>
<p>Notes:</p> <ol style="list-style-type: none"> 1. SCN/Provincial Program Leadership includes the Scientific Director and Assistant Scientific Director(s) well as Senior Medical Director, Senior Program Director or Senior Program Officer, Executive Director, Manager and Research Scientist. 2. Includes total count as well as a sub-count for trainees at each level: a) Undergraduate – Summer Student Project Only, b) Undergraduate, c) Master's, d) PhD, e) Resident Research Project, f) Post-Doctoral (PhD) Fellowship, g) Post-Doctoral (MD) Fellowship, and h) Clinicians. 3. Includes total count as well as a sub-count (# and dollars) by university affiliation to which funds were awarded (University of Alberta, University of Calgary, University of Lethbridge, Mount Royal University, Other). 4. Includes sub-count of scholarly presentations and total count of other outreach activities (workshops, meetings and learning events). Totals include both in-person and virtual events. Regular meetings (e.g., core committees), social media posts, interviews/appearances are excluded from total count. 	

Informing decisions

Indicator ¹	Definition
Health policy contributions	List of significant contributions to health policy harmonization, practice standardization, access and quality improvement, with release and/or implementation on a provincial scale.
Provincial initiatives	Includes SCN- and Provincial Program-led activities, collaboration with other health, community and industry partners, and support for other organizations on work that supports clinical operations, pathway development, administration, and decision making on a provincial scale. The work involves mobilizing research evidence and translating knowledge into action to improve quality of care (clinical effectiveness, safety, acceptability, access, appropriateness, and efficiency), equity, health outcomes, and patient/provider experiences.

Note:

1. No specific indicators defined but significant contributions are highlighted over past fiscal year. The report considers how SCN and Provincial Program contributions are helping advance care (prevention, diagnosis, treatment), facilitate knowledge transfer and evidence-informed change, and inform health policy, operational and administrative decisions on a provincial scale.

Work relates to all areas of health-related decision making (e.g., health care, public health, prevention, health-related education/training, etc.). Because decision making inputs, roles of various contributors, and the way research informs decisions are difficult to measure, impacts are described qualitatively. The report highlights major milestones and collective achievements over the past fiscal year.

Health impacts

Indicator ¹	Definition
Health outcome measures	Include impacts on patient and population health, wellness, disease and injury prevention, patient experience. These may include short-term or long-term impacts on individuals or patient populations.

Note:

1. No specific indicators defined as outcome measures are network or project-dependent. Indicators may include changes in health status (mortality, morbidity, mobility, disability, well-being) and other outcomes (e.g., reduced complications, emergency department visits or hospital readmissions). They may include quantitative or qualitative measures, patient and population-level impacts, patient-reported experiences or outcome measures. Impact is considered for specific patient populations and on a local, community and provincial scale.

Economic and social benefits

Indicator ¹	Definition
Economic and social benefits	Includes impacts on health system capacity, value and sustainability. Measures include return on investment, cost savings, cost avoidance, improvements in health system utilization, access and patient, provider and community supports.

Note:

1. No specific indicators defined but significant contributions are highlighted over past fiscal year. Benefits can be broad and are considered on a patient-, system and provincial level (e.g., LOS, wait times, care in the community, health equity). The report considers monetary and non-monetary benefits.

Appendix B The CAHS Framework and AHS Innovation Pipeline

The five domains of the CAHS Framework reflect a ‘system view’ of health research and innovation. Activities in one domain fuel and impact the next by providing knowledge resources, capacity, investment and momentum to advance health system improvements that benefit Albertans, keep pace with emerging evidence and support AHS’ 10-year vision.



The activities associated with each domain (i.e., systematic inquiry, measurement and evaluation; knowledge generation, management and mobilization; and implementation and sustainment of practice changes) are also reflected in the AHS Innovation Pipeline, shown below.

The AHS Innovation Pipeline is fueled by priority health system challenges and provides a progressive, integrated and system-level approach to health research and innovation. The model identifies the type of evidence needed to inform value-based decision making. Among these are evidence of improved outcomes, quality, and health equity; health and operational impacts; and economic value. The model illustrates how clinicians and researchers support this process and provide the inputs needed to drive quality improvement, health system innovation and transformation.



At each stage of the Innovation Pipeline, research and academic partners provide expertise and capacity to support scientific inquiry, knowledge generation, rigorous data collection and analysis. SCNs and Provincial Programs connect researchers with patients and clinical partners and support pragmatic trials within operational settings. Trials are initially piloted on a small scale to test, gather feedback and refine strategies. As work moves along the pipeline, evidence and knowledge is gathered that is directly applicable to Alberta’s health system. If evidence supports provincial implementation (i.e., positive health, economic or social impacts), initiatives are prioritized for further action and operationalization.

Appendix C Role of the Scientific Offices

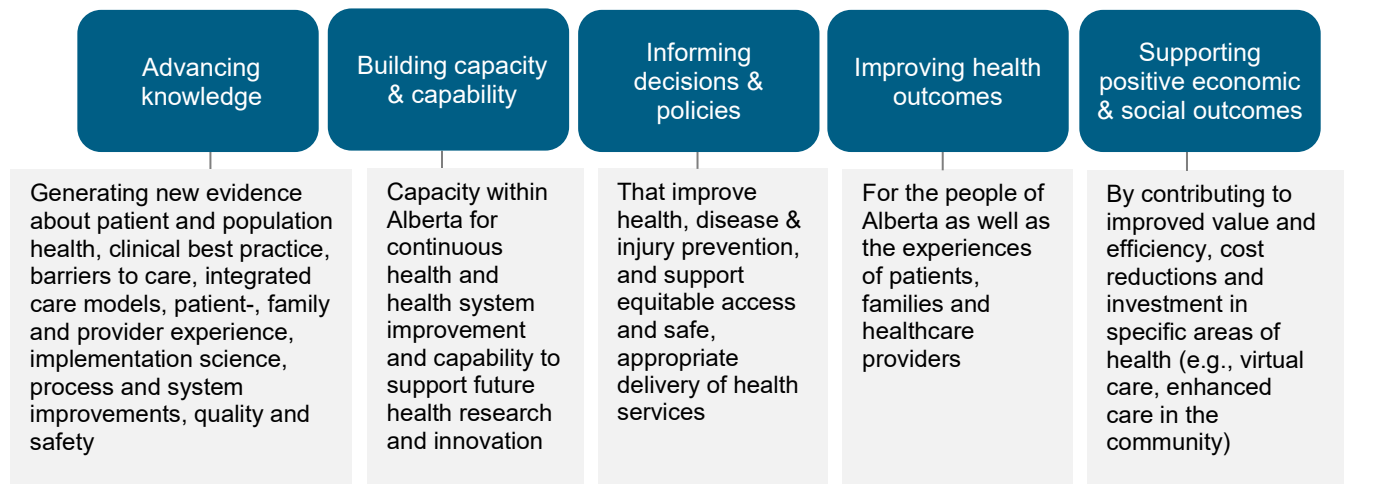
Scientific resources are embedded into Alberta's Strategic Clinical Networks and Provincial Programs, providing essential expertise to improve health and care in our province. These teams rigorously monitor data, evidence and emerging research from Alberta and health systems around the world and bring leading practices, tools, technologies and innovations to our province; evaluate them within a local context; and spread and scale those proven to improve health, quality and value.

The Scientific Offices work with zone operations, researchers, patients, families and community partners, and frontline clinicians to identify areas of high priority, mobilize and translate knowledge into practice, and implement practices that improve health outcomes and health service delivery.

They play an important role in brokering partnerships and collaborations with research institutes, provincial programs, health agencies and organizations and community partners. These partnerships provide reciprocal value through shared access to data, knowledge and evidence, support for grant applications and capacity to mobilize knowledge into action. Likewise, research collaborations with Alberta Innovates, Alberta Health, and Alberta's Strategy for Patient-Oriented Research Support Units (AbSPORU) support provincial spread and scale, health policy harmonization, and evidence-informed decision making.

Scientific teams embedded within integrated Provincial Programs bring these capabilities to newly formed Provincial Knowledge, Evidence and Innovation Divisions as part of clinical centres of excellence and work closely with program directors, health informatics teams and others to support program evaluation, quality improvement, innovation and health system transformation on a provincial scale.

This work benefits the people of Alberta by:



Strategic Clinical Networks

Bone & Joint Health
Cancer
Cardiovascular Health & Stroke
Critical Care
Diabetes, Obesity & Nutrition
Digestive Health
Emergency
Maternal, Newborn, Child & Youth Medicine*
Neurosciences, Rehabilitation & Vision
Surgery

**includes Hospital Medicine, Kidney Health and Respiratory Health*

Provincial Programs

Indigenous Wellness Core
Primary Health Care Integration Network
Provincial Addiction & Mental Health
Provincial Population & Public Health
Provincial Seniors Health & Continuing Care

Appendix D 2022-2023 Highlights by Area of Health

Strategic Clinical Networks

- [Bone and Joint Health](#)
- [Cancer](#)
- [Cardiovascular Health and Stroke](#)
- [Critical Care](#)
- [Diabetes, Obesity and Nutrition](#)
- [Digestive Health](#)
- [Emergency](#)
- [Maternal, Newborn, Child and Youth](#)
- [Medicine](#) (includes Hospital Medicine, Kidney Health and Respiratory Health)
- [Neurosciences, Rehabilitation and Vision](#)
- [Surgery](#)

Provincial Programs

- [Indigenous Wellness Core](#)
- [Primary Health Care Integration Network](#)
- [Provincial Addiction and Mental Health](#)
- [Provincial Seniors Health and Continuing Care](#)

Notes:

- Summary indicators at the end of each profile link to further detail specific to each team.
- No profile is available for Provincial Population and Public Health. Information on this program is being compiled in a separate, program-specific impact report.



BONE AND JOINT HEALTH

Contact

[Leadership team](#)

bonejoint.scn@ahs.ca

Key Partners

[Alberta Bone and Joint Health Institute \(ABJHI\)](#)

[McCaig Institute for Bone and Joint Health](#)

Major initiatives and achievements, 2022-2023

The Bone and Joint Health (BJH) SCN continues to drive forward several fronts to enable the transformation of the MSK health care system of Alberta, for the benefit of patients and providers working in the system. The BJH SCN Scientific Office (SO), an integral part of the BJH SCN and leadership team, has undergone some changes and shifted directions over the past year to continue supporting an evidence-informed approach to addressing BJH SCN priority areas.

Movement forward – Rapid Access Clinics aim to improve access to and quality of MSK care

Musculoskeletal (MSK) health issues are common in Alberta, especially those impacting the low back, soft tissue knee and shoulder joints. MSK conditions require early and accurate assessment to be effectively treated and managed. However, many Albertans experience significant health system challenges (e.g., long wait times, variation in care, and uncertainty in the patient journey) that can affect outcomes and quality of life. The [MSK Transformation \(MSK-T\)](#) Program aims to significantly improve access to timely assessment and improve the quality of MSK care across the province.

Rapid Access Clinics (RACs) are a key component of the MSK Transformation Program in Alberta. RACs are specialized clinics that employ multidisciplinary teams, enabling expert assessment of MSK problems and appropriate referrals and recommendations for needed care. RACs are expected to enable a more centralized and standardized approach to MSK care and align with Strategy 2 of the Alberta Surgical Initiative: *Improve the provision of surgical consultation and recovery*. Benefits include: faster access for patients to receive their initial consult; efficient, high-quality referrals to surgeons, as appropriate; earlier initiation of conservative management interventions; and better communication among clinicians and across clinics.



Implementation of RACs will begin in 2023/2024 and evaluation of their impacts is ongoing. As part of this work, the BJH SCN has engaged MSK clinics, Primary Care Networks and others and co-developed a set of provincial clinical pathways for MSK assessment ([shoulder](#), [soft tissue knee](#), [spine/low back](#)). These tools provide evidence-based guidance to support patient assessment, screening, diagnosis, and treatment.

Translational Impact Grants target research and improvements in musculoskeletal care

A new Translational Impact Funding Competition, established in partnership with the McCaig Institute for Bone and Joint Health, aims to support rapid uptake of pre-clinical research within health system operations. Specifically, this funding opportunity targets research at Step 2 of the [AHS innovation pipeline](#) – i.e., generate the evidence needed to establish proof concept (efficacy, effectiveness) in the healthcare system prior to broader implementation.

This competition is strategically aligned with the annual Cy Frank Legacy Lecture Series, inspired by Dr. Frank's vision for clinical research and the application of innovative solutions to improve clinical care. The inaugural competition was announced in Sept 2022 with two grant recipients announced in [April 2023](#).

Supporting wellness, disease prevention and digital health innovation

Through the BJH SCN Facilitation Funding opportunity, the Scientific Office supported initial pilot testing for **My Viva®**, an innovative digital health platform that aims to support healthy behaviours and choices related to nutrition and exercise. This tool provides a way to monitor and self-manage one's health and wellness, and encourage healthy, long-term lifestyle habits that can help prevent chronic diseases such as obesity, diabetes and high blood pressure.

Impact on health and care

The BJH SCN is focused on '**Keeping Albertans Moving**' through focused areas of work that aim to mitigate, maximize and mend problems associated with bones, joints and the MSK system. The BJH SCN is committed to providing access to high quality MSK care to all Albertans. It also aims to empower Albertans to self-manage chronic MSK conditions to optimize quality of life.

Over the past fiscal year, the work of the SCN has positively impacted MSK health and care delivery of MSK services in Alberta by:

- ▶ Developing evidence-informed, consensus-based clinical guidelines for shoulder, low back and soft tissue knee conditions
- ▶ Co-sponsoring a Health Evidence Review regarding low back pain interventions
- ▶ Improving measurement, evaluation and reporting of key performance indicators for MSK conditions
- ▶ Facilitating adoption of digital health solutions and developing patient education materials with evidence-informed information on how to self-manage chronic MSK conditions
- ▶ Actively supporting the Alberta Surgical Initiative to reduce surgical demand and improve surgical wait times
- ▶ Championing and supporting implementation of Rapid Access Clinics to improve access to orthopedic consultation for Albertans with select MSK conditions
- ▶ Improving osteoporosis treatment for patients who experience a hip fracture through provincial implementation of the Fracture Liaison Service (FLS)

Other highlights

Welcome to our new Scientific Director – Dr. Claire Barber

The Scientific Office came under new leadership at the beginning of this fiscal year (April 2022). Dr. Claire Barber, the new Scientific Director for the BJH SCN, is a rheumatologist in Calgary and an Associate Professor at the University of Calgary in the Departments of Medicine (Division of Rheumatology) and Community Health Sciences. Dr. Barber's research program is focused on quality of care, specifically in inflammatory arthritis, and development of effective care models for patients living with rheumatoid arthritis.



With Dr. Barber assuming the role of the new Scientific Director, we would also like to recognize the significant contributions made by Dr. David A. Hart (SD from 2015-2022) through his research, expertise, extensive network of academic partners, and leadership in re-orienting the role of Scientific Office within the BJH SCN.



Supporting innovation in health care

"It is clear that the health care system is in need of extensive change to meet the needs of all Albertans. The Strategic Clinical Networks, and specifically the Bone & Joint Health SCN is an essential vehicle to affect change in this area of musculoskeletal diseases and conditions that impact the lives of so many Albertans. The BJH SCN is the effective interface between the strength in this area in academia, the community of affected Albertans and Alberta Health. The BJH SCN is uniquely positioned to facilitate effective changes in the system via implementation of validated and significant modifications that benefit both the Health Care System and Albertans."

Dr. David A Hart, former Scientific Director of the BJH SCN, Professor, and Fellow of the Canadian Academy of Health Sciences

BONE AND JOINT HEALTH

Grants and Publications		Engagement		Outcomes and Impact
	19		10	>13,000
Peer-reviewed Publications		Workshops & Presentations		Hip fracture patients assessed by the FLS
	\$3.6M		147	50% decrease
Research Grants		Research Members		in hip fracture risk for patients assessed by the FLS after 2 years due to improved screening prevention, and restorative care

www.ahs.ca/bjhscn



CANCER

Contact

[Leadership team](#)

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Key Partners

[Alberta Cancer Foundation](#)

[Arnie Charbonneau Cancer Research Institute \(University of Calgary\)](#)

[Canadian Cancer Society](#)

[Canadian Partnership Against Cancer](#)

[Cancer Care Alberta \(CCA\)](#)

[Cancer Research Institute of Northern Alberta \(University of Alberta\)](#)

"The Cancer Care Strategic Clinical Network is commended for the extensive work and collaboration carried out in developing the Future of Care Impact in Alberta (FOCI) Report. With a focus on the year 2040, the report positions AHS to look at future challenges and opportunities for models of care, health equity, infrastructure, and research."

Accreditation Canada, 2022
Cancer Care Program Report

Major initiatives and achievements, 2022-2023

The Cancer SCN (CSCN) advanced a number of initiatives over the past year that are aligned with our [Transformational Roadmap 2020-2024](#). Our work focuses on improving care across the cancer continuum in Alberta through data, evidence and collaboration.

Future of Cancer Impact (FOCI) in Alberta

[The Future of Cancer Impact \(FOCI\) in Alberta Report](#), released in spring 2022, identifies key challenges based on cancer data and trends in Alberta and outlines 44 recommendations and actions to enhance cancer prevention, screening, diagnosis, treatment and care and address known gaps. These [recommendations](#) include knowledge generation activities, planning, implementation and evaluation of targeted strategies, therapies, infrastructure, quality improvements, and are a call to action to enhance Alberta's cancer care system.



The report and its recommendations span the full cancer continuum, focusing on: cancer incidence, prevalence, mortality, mortality, prevention and screening, diagnosis, treatment, management costs, supportive care, palliative and end-of-life care, models of care, health equity and childhood cancer. Currently, these recommendations are being used as the basis for discussion and action planning with cancer leaders and strategic partners, including patients and families, philanthropy, CCA, and other key stakeholders. Publications are also underway as a key part of an overall communication and engagement strategy. Ultimately, the goal of this work is to identify opportunities and challenges and to work together, through continued collaboration, integration and innovation, to reduce the impact of cancer in Alberta. [Read more about patient and family engagement in support of this work](#)

Alberta Cancer Diagnosis Initiative

The CSCN has partnered with people living in Alberta, primary care providers, health system leaders, and community organizations to design a first-of-its-kind provincial cancer diagnosis program. Funded by Alberta Health and the Alberta Cancer Foundation, the [Alberta Cancer Diagnosis \(ACD\) Program](#) closely aligns with provincial and national priorities. It will expedite and streamline diagnostic processes, optimize support for people facing cancer diagnosis and those close to them, provide resources and guidance for primary care providers, and ensure ongoing quality improvement to strengthen system efficiencies under a learning health system approach.

Over the past year, the CSCN engaged with more than 250 people representing diverse populations and a wide range of stakeholder groups. Together, we have co-designed the ACD Program, which will soon be presented to AHS leaders in 2023. An evaluation of the engagement and co-design processes has been conducted, and a manuscript about the use of pathways for cancer diagnosis in primary care has been recently accepted for publication in the Canadian Medical Association Journal. [Learn more](#)

Community assets supporting cancer diagnosis

Newcomers and people living in rural/remote areas have specific challenges when accessing healthcare, and cancer care in particular. With support from Alberta Health, and in partnership with Alberta's Physician Learning Program, the CSCN is engaging with newcomers and people from rural or remote communities to understand community assets and/or strengths that could impact timely access to cancer diagnosis and positive patient experience. As part of this work, we are also exploring the mental models of primary care providers regarding cancer diagnosis for newcomers and people living in rural/remote communities, and are co-developing educational materials and clinical decision tools to support cancer diagnosis.

This work aims to identify ways we can better support newcomers and people living in rural and remote areas and improve cancer diagnosis and care in the community. By acting on what we learn from this study, we will contribute to a more equitable Alberta, ensuring improved cancer outcomes and care experiences for all. [Learn more](#)

Impact on health and care

The Cancer SCN is leading transformation to improve care across the cancer continuum in Alberta by developing strong relationships with patients, families, research institutes, clinicians and operational partners to leverage available resources and expertise. We work together with these stakeholders to:

- ▶ Improve care experiences for patients with cancer and their families
- ▶ Enhance health outcomes for patients with cancer
- ▶ Improve efficiencies in the delivery of cancer care
- ▶ Ensure patient voices and experiences remain at the centre of all our efforts
- ▶ Build capacity to analyze and interpret cancer-related data and build a thriving data ecosystem to improve cancer care in Alberta

Other highlights

Cancer diagnostic pathways

The CSCN continues to support symptomatic patients suspected of having colorectal cancer and lymphoma by creating clinical pathways. These pathways ([lymph node assessment](#), [high-risk rectal bleeding](#), and [iron deficiency anemia](#)) have been implemented throughout the province with important impacts in clinical outcomes. Additional pathways are currently under development, including: cancer of unknown primary, head and neck cancer, and metastatic cancer diagnosis pathways.

Aligning community and cancer care with the needs of older adults

The CSCN has been privileged to have a health system researcher embedded in our work. Dr. Fay Strohschein, postdoctoral CIHR, Health Systems Impact fellow, Faculty of Nursing, University of Calgary, has been collaborating with us to address age-related concerns to optimize care of older adults with cancer and their families, filling a critical need in Alberta. [Learn more](#)

Advancing knowledge for improved diagnosis of colorectal cancer in Alberta

For this study funded by the [Alberta Registered Nurses Educational Trust \(ARNET\)](#), the CSCN partnered with nursing staff at the Rockyview General Hospital (Unit 83) in Calgary to explore why such a high number of patients diagnosed with colorectal cancer is diagnosed in hospital. Findings will inform the development of a pathway to streamline the diagnosis of colorectal cancer in Alberta and a provincial strategy that supports facilitated cancer diagnosis. This study will also provide insights into approaches to increase awareness about colorectal cancer among Albertans and enhance nursing professional practice related to diagnosis and care of patients diagnosed with this type of cancer. The success of this partnership demonstrates the value of collaborating with frontline nurses in conducting research and improving cancer care in Alberta, which will be further explored in future initiatives. [Learn more](#)

"When I was first approached about this research project, I felt an overwhelming sense of inadequacy, despite my 14 years of bedside nursing... I had a lot of inaccurate assumptions about nursing research...it had never occurred to me, that this was something that I could be a part of."

Working in collaboration with [the CSCN] has given me the knowledge and confidence to get involved. I have learned that frontline nurses actually do bring a lot to a research project like this. The partnership between a frontline nurse who has the clinical knowledge and a researcher who has the academic knowledge is invaluable. There is so much potential to continuing to foster this style of research and I truly hope that other nurses can take those scary first steps to get involved. It is empowering to feel that your hard work can help to support change that can save lives and improve our healthcare system and I feel a renewed sense of purpose."

Ashley Watson, frontline nurse collaborating with the CSCN on the ARNET project

CANCER

Grants and Publications



16

Peer-reviewed
Publications



21

Workshops & Presentations



\$2.4M

Research Grants



182

Research Members

Outcomes and Impact

A survey of community partners, working group and committee members revealed a high level of engagement with average ratings of:

4.4 out of 5 for participation

4.1 out of 5 for impact

Participants mentioned they "highly value working together as a team, open dialogue, sharing their insights, and the opportunity to listen to and learn from others" as what was most meaningful about their experience.



CARDIOVASCULAR HEALTH & STROKE

Contact

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Key Partners

[Campus Alberta Neuroscience](#)

[Cardiovascular Research Institute \(CVRI\) \[University of Alberta\]](#)

[Heart and Stroke Foundation](#)

[Hotchkiss Brain Institute \[University of Calgary\]](#)

[Libin Cardiovascular Institute \[University of Calgary\]](#)

Major initiatives and achievements, 2022-2023

The Cardiovascular Health and Stroke (CvHS) SCN continues to advance care for stroke patients and individuals with cardiovascular conditions by forging strategic partnerships, prioritizing research, and effectively translating knowledge from clinical trials into practice.

Over the past year, the CvHS SCN actively engaged in various community outreach and capacity-building initiatives. We extend our gratitude to the front-line clinicians, operational leaders, and patient and family partners who have tirelessly served the cardiovascular and stroke communities and supported progress on several initiatives and programs related to stroke and cardiovascular care.

Provincial Clinical Pathways Support Unit supports integrated care for HF/COPD

The Provincial Clinical Pathways Support Unit (CPSU) has been instrumental in promoting integrated care for heart failure (HF) and chronic obstructive pulmonary disease (COPD). Recognizing the high cost of clinical variation in these populations, these pathways aim to enhance quality of care by reducing variation, minimizing hospital stays, readmissions, and emergency room visits, and ensuring timely follow-up with primary and community care.

Significant strides have been made in implementing the HF and COPD Care Paths and associated reporting tools with the successful launch of Connect Care in May 2023. The launch extends the number of facilities able to access and use the HF/COPD Care Paths. Within six months of going live, more than 50% of HF/COPD patients at Connect Care sites had been enrolled in the Care Path, demonstrating better access to evidence-based care.

Educational resources aligned with best practice recommendations and guidelines were developed for prescribers, nurses, physicians, and allied health professionals to support uptake. The Scientific Planning Committee also hosts regular learning sessions to facilitate practice reflection and foster Q&A opportunities.



Implementation phase underway for the Acute Care Bundle Improvement and Enhanced Lipid Reporting initiatives

ACBI is a collaborative partnership driven by operations and supported by Provincial teams and SCNs. Its goal is to enhance patient outcomes and acute care efficiencies while streamlining the operational burden associated with multiple projects, programs, and clinical pathways. Its implementation is being coordinated with Connect Care launch cycles at Alberta's 14 highest-volume acute care sites. The Royal Alexandra Hospital and Peter Lougheed Centre served as initial pilot sites, followed by the Foothills Medical Centre and Red Deer Regional Hospital Centre. HF/COPD Care Paths are components of the ACBI framework and aim to deliver high-quality care, improving patient outcomes, enhancing experiences for patients, families, and providers, and adding value to the health system. To date, 12 AHS and Covenant Health sites have begun using the HF/COPD Care Paths and order sets, with uptake expected to increase over the coming year with the remaining Connect Care launch cycles.

Another noteworthy achievement involves implementation of Enhanced Lipid Reporting (ELR), which enables increased screening and treatment of patients at risk of cardiovascular disease (CVD). Primary care providers receive a lab-based screening tool that uses an algorithm to calculate the patient's risk of heart attack or stroke within the next 10 years. Reports are sent to the referring provider, clinical team (via Netcare), and the patient (via MyHealth Record). ELR provides a clear explanation of the patient's risk score and up-to-date treatment guidelines. The CvHS SCN secured a Health Innovation, Implementation, and Spread (HIIS) grant to support provincial rollout of this tool, including strategies to assist primary care physicians and patients. Extensive engagement efforts are underway with provincial primary care associations and networks to promote ELR, and a comprehensive array of provider and patient resources has been developed and disseminated throughout the province to support its spread in all parts of the province.

Other highlights

Moving evidence into practice: The ACT Trial

The CvHS SCN has been closely collaborating with researchers on the Alberta-led ACT trial. This randomized-controlled clinical trial has demonstrated the non-inferiority of tenecteplase to alteplase as an injectable medication for the treatment of acute ischemic stroke. Results of the trial were published in [The Lancet](#) in June 2022. Two key benefits of tenecteplase are that it can be administered as a single bolus (e.g., during transport in ambulance to hospital) and has a more favorable benefit-to-risk profile than alteplase.

Following the trial, the SCN and Provincial Pharmacy sought AHS approval to transition to tenecteplase province-wide. This practice shift has reduced burden on emergency department staff, facilitated inter-facility transport using Basic Life Support (BLS) crews, and reduced equipment needs given the simpler administration of the medication. Once the practice change was approved, the CvHS SCN and Provincial Pharmacy developed a transition plan, which involved rural stroke centers transitioning to tenecteplase by November 1, 2022, while diverting the previously purchased alteplase stock for stroke treatment to urban centers. Within three months, back stock of alteplase had been used, and urban zones were able to complete the transition to tenecteplase as well.

Effective communication and collaboration with Provincial Pharmacy, EMS, Medicine SCN, Emergency SCN, Critical Care SCN, and zone stroke programs played a crucial role in executing the transition plan provincially. Zone stroke programs worked closely with the CvHS SCN to update order sets, develop protocols, and create educational materials to support the shift in practice. In May 2022, approximately 95% of all thrombolysis cases used alteplase. By February 2023—just one month into the province-wide transition—approximately 97% of thrombolysis cases utilized tenecteplase.

Enhanced data sharing and reporting of provincial stroke data and key performance indicators

Recognizing the highly effective nature of Endovascular Therapy (EVT) in treating stroke and its potential to reduce death, disability, and long-term care costs, the CvHS SCN co-developed a [position statement](#) that advocates for extending the EVT window from 6 hours to 24 hours from the time of onset. To support the 17 stroke sites across Alberta in understanding the implications of the expanded time window on patient flow and volumes, the team collaborated with EMS System Performance & Innovation and AHS Data & Analytics to generate reports analyzing six years of provincial data. These reports provide valuable evidence and insights into the changes and have been shared with zone stroke leads to support the transition to the 24-hour treatment window.

Previously, provincial stroke reporting has relied heavily on manual data entry at the site level. With the launch of EPIC, there is an opportunity to automate data collection for most key performance indicators (KPIs) and enhance reporting processes. To standardize reporting and facilitate coordination across all stroke sites, the CvHS SCN has been collaborating with zone stroke programs and EPIC teams to develop reports using Connect Care data. Provincial cardiac teams are also working on similar reporting mechanisms for cardiovascular KPIs.

Impacts on health and care

Over the past year, the CvHS SCN has supported a variety of provincial initiatives that have:

- ▶ Advanced knowledge in the area of cardiovascular and stroke care
- ▶ Resulted in provincial implementation of tenecteplase across Alberta
- ▶ Improved access to EVT, particularly for rural Albertans, by expanding the EVT treatment window to 24 hours
- ▶ Supported screening and care enhancements, practice change, and improved outcomes for Albertans who experience or are at risk of cardiovascular disease or stroke.
- ▶ Contributed to the implementation of care paths and clinical pathways for COPD and HF, as part of ACBI. This work is expected to improve quality of care by reducing clinical variation; hospital stays, readmissions, and emergency visits; and improving patient transitions in care and value across the system.

CARDIOVASCULAR HEALTH AND STROKE

Grants and Publications		Engagement		Outcomes and Impact
	76 Peer-reviewed Publications		84 Workshops & Presentations	97% of Alberta thrombolysis cases treated with tenecteplase instead of alteplase
	\$7.3M Research Grants		185 Research Members	12 Alberta acute care sites using HF/COPD Care Paths & order sets



CRITICAL CARE

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Key Partners

[Alberta Precision Laboratories](#)

[Department of Critical Care Medicine, University of Alberta](#)

[Department of Critical Care Medicine, University of Calgary](#)

[Faculty of Nursing, University of Alberta](#)

[Physician Learning Program](#)

Major initiatives and achievements, 2022-2023

Critical illness and use of critical care services among Indigenous Peoples in Alberta: partnerships to improve the care experience and enhance culturally safe care.



A collaboration between the Critical Care SCN (CC SCN), Indigenous Wellness Core (IWC) and Indigenous Peoples of Alberta

The CC SCN and IWC continued their journey of health system transformation in 2022-2023, jointly completing a systematic review and meta-analysis that was submitted for publication. The review describes the use of critical care services by Indigenous Peoples in Alberta, and the incidence of critical illness and critical care outcomes among Indigenous Peoples. The [review protocol](#) was published in April 2022. The evidence synthesis strongly implies there is a narrow and incomplete understanding of Indigenous Peoples' risk of critical illness and their experiences with critical care. The scope and magnitude of health inequities regarding (i) access to ICU support and (ii) outcomes following critical illness remain poorly described and represent a barrier to action.

These findings are informing a larger program of work with Indigenous Peoples. The goal of this partnership is to co-design this program to better understand Indigenous Peoples' experiences and outcomes with critical care, to identify knowledge and care gaps, and to work towards ensuring a culturally appropriate and safe space. An immediate objective, completed this fiscal year, was to establish an **Indigenous Peoples and Critical Care Advisory Group (IPCCAC)**. The newly-formed IPCCAC includes four Indigenous members representing Cree, Anishinaabe, and Métis First Nations alongside the IWC and CC SCN Scientific Offices.

This program of work is expected to positively impact the health and care of Indigenous Peoples in Alberta by strengthening relationships, advancing knowledge on culturally appropriate and safe care, and improving healthcare providers' understanding of Indigenous Peoples' experiences with ICU settings in Alberta. Indigenous Peoples will benefit from improved knowledge of ICU services and opportunities to directly voice their needs to improve lived experience.

Supporting critical care healthcare workers across Alberta

Developing supports and retaining critical care healthcare professionals (HCPs) is a priority area for AHS. The COVID-19 pandemic has negatively impacted the mental health and psychological wellbeing of critical care HCPs. Many HCPs are experiencing unprecedented levels of exhaustion, burnout, anxiety, depression, stress and moral distress, which has contributed to workforce turnover.

This program of research aims to support health system transformation and HCPs by (i) identifying existing resources to support HCPs' mental health and psychological wellbeing; (ii) identifying factors and barriers that affect the mental health and psychological wellbeing of critical care workers; and (iii) developing comprehensive supports to retain critical care HCPs in Alberta.

Over the past year, the CC SCN began an environmental scan that will identify and synthesize existing resources that support the psychological wellbeing for HCPs working in adult ICUs across Alberta. This work will continue through 2023 with the goal of improving supports for HCPs and positively impacting the work environment and ultimately patient care.

Implementing clinical best practices that improve patient safety, outcomes, quality and value

The CC SCN has continued to advance several quality improvement efforts through various stages of evaluation and implementation with the goal of spreading and sustaining practices that deliver better outcomes, quality and value. Examples include:

DIALYZING WISELY: This PRIHS-funded study led by Dr. Oleksa Rewa (University of Alberta) aims to improve the performance of acute Renal Replacement Therapy (RRT) in ICUs by aligning care with evidence-based best practices. The objective is to reduce the number of patients requiring long-term chronic dialysis, and therefore, improving the quality of life for patients and families, while enhancing health system efficiency and substantially decreasing health care expenditures.

The innovative clinical pathway is a tool to aid prescribers starting RRT in the ICU setting. The pathway includes key performance indicators to measure the quality of dialysis delivery. Implementation of the initiation pathway occurred at the initial pilot site as well as in four other ICUs across the province. Rollout will continue at the remaining sites in 2023-2024.

DON'T MISUSE MY BLOOD – This PRIHS-funded study led by Dr. Daniel Niven (University of Calgary) aims to reduce avoidable blood tests and optimize blood component transfusions, and align practice with current, evidence-based guidelines. The initial phase of this project involves implementing evidence-informed transfusion recommendations (red blood cells, platelets, plasma and fibrinogen) in adult and pediatric ICUs, adult Coronary Care Units (CCUs), and high-risk (cardiac, trauma and vascular) surgical units. Transfusion Guidelines were developed in 2022-2023 through extensive literature and stakeholder review, with implementation beginning in June 2023.

VENTING WISELY– This HHS-funded study led by Dr. Ken Parhar (University of Calgary) involves implementation of a comprehensive, evidence-informed care pathway for mechanically ventilated ICU patients, emphasizing optimal and appropriate use of life saving therapies such as protective ventilation and prone positioning. **In 2022-2023, implementation of the pathway was completed in all adult ICUs in Alberta.** Throughout the implementation, sites improved their overall adherence to the Venting Wisely pathway by up to 72%, translating into improved patient outcomes and enhanced health system sustainability.

REDUCING THE USE OF SEDATION AND ANALGESIC INFUSIONS IN CRITICAL CARE (ROSA) – This work aims to drive appropriate use of sedation and analgesic infusions for adult ICU patients in the Edmonton Zone through a standardized, evidence-based, stakeholder-informed guideline. Patient outcomes include reduced duration of mechanical ventilation, reduced prevalence of delirium, and fewer complications, including deconditioning and weakness. Implementation of the Edmonton Zone guideline occurred in the pilot site as well as one expansion site, with work continuing in 2023-2024.

Impacts on health and care



System transformation, clinical best practices, and supporting our staff aim to positively impact patient and family care in Alberta ICUs and areas upstream and downstream from critical care. Achieved and anticipated impacts focus on:

- ▶ Building relationships with Indigenous Peoples and helping close knowledge gaps in the ICU care needs of Indigenous Peoples
- ▶ Mitigating HCP burnout in the ICU to improve patient, family, and healthcare provider experience and satisfaction
- ▶ Implementing clinical care pathways that improve patient outcomes and enhance health system sustainability
- ▶ Improved accountability and quality of care through use of key performance indicators and audit and feedback

CRITICAL CARE

Grants and Publications



45

Peer-reviewed
Publications



51

Workshops &
Presentations



\$14.4M

Research Grants



118

Research Members

Outcomes and Impact

Full-scale implementation of clinical best practices for mechanical ventilation (**VENTING WISELY**) completed at **all adult critical care sites in Alberta.** Frontline clinicians indicate the practice is sustainable and has been **“embedded in unit culture and workflow.”**



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Key Partners

10 Diabetes Clinics

AHS, Nutrition and Food Services

Alberta Blue Cross

Alberta Health Living
Program

Medicine SCN, Kidney
Section

Primary Care

University of Alberta

University of Calgary

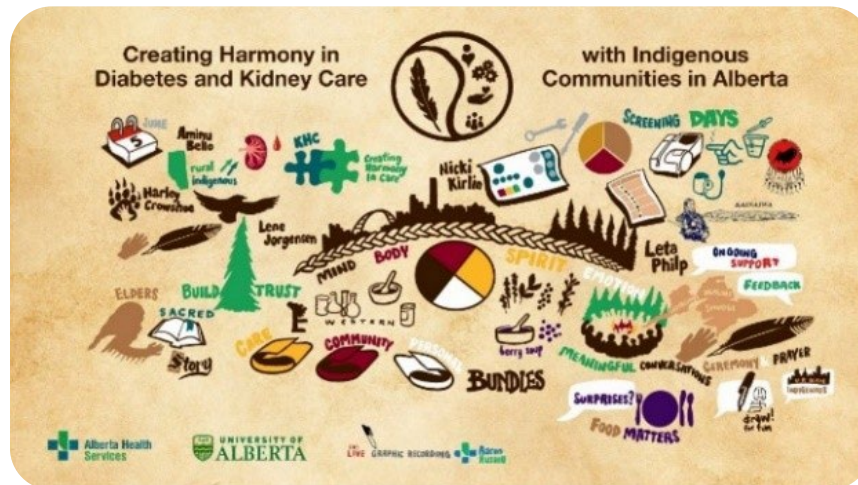
Major initiatives and achievements, 2022-2023

The Diabetes, Obesity & Nutrition (DON) SCN continues to advance projects that improve access to provincial diabetes data, diabetes prevention, and interventions in the community for people living with, or at risk of, diabetes, obesity and malnutrition.

Creating Harmony in Diabetes & Kidney Care with Indigenous communities

The DON SCN Creating Harmony in Care approach has been co-created with Indigenous communities, health care providers, community champions, and Elders. This approach considers:

- ▶ The **person** living with (or at risk of) a chronic condition
- ▶ The **community** they belong to
- ▶ The **care** required to prevent, treat, and manage the condition
- ▶ The **systems** that help prevent disease and enable optimal health (e.g., healthcare system and environment)



Kidney Health Check (KHC) is a point-of-care screening program for diabetes, hypertension, kidney disease and obesity currently offered in two Indigenous communities in Alberta, the Piikani and Blood Tribe First Nations. Its focus is to support these communities in implementing a sustainable and coordinated screening program that is community-led and culturally relevant.

Eleven Elders from the Blood Tribe and Piikani First Nations, urban areas and Métis communities have been engaged and involved in this work. Over the past year, 16 community healthcare providers have been trained, 19 graphic recordings have been produced, and numerous presentations & education support for screening teams provided. Since launching KHC in these communities (January 2023), monthly screening events have been held in both communities.

This work is an important step in improving health care experience and preventing chronic disease and complications associated with diabetes and chronic kidney conditions. In co-designing screening programs with Indigenous communities, the DON SCN is helping build trust, enhance culturally safe chronic disease screening, and support population health for Indigenous populations.

Improving access to Alberta's Insulin Pump Therapy Program

The Insulin Pump Therapy Program (IPTP) helps Albertans living with Type 1 or Type 3c diabetes manage their diabetes by providing funding support for an insulin pump and pump supplies. The IPTP is administered by Alberta Health, with support from the DON SCN and IPTP clinics across the province.

There are currently 14 IPTP clinics in Alberta. The DON SCN helps ensure standardized, evidence-based care and supports process and ongoing quality improvement. The IPTP Clinical Advisory Committee (CAC), which includes endocrinologists, clinicians and operational leaders, advises the

I feel like Creating Harmony in Care is about two worlds that are trying to come together. *Elder*

Ministry of Health on insulin pump-related matters, including policy changes. The CAC also makes recommendations (e.g., to onboard additional clinics, or evaluate new devices/technology) to improve access, outcomes and value.

Over the past year, three **C-endo clinics** (one in Calgary, Airdrie and Edmonton) were added to list of authorized IPTP clinics. The expansion aimed to improve access for patients to insulin pump therapy and decrease wait times for a pump-start assessment, while ensuring adequate diabetes education and support. CAC co-chairs have met with the clinics to ensure they meet all requirements to initiate and follow-up with patients and comply with safe, patient-centered care principles.

The DON SCN facilitated the connection between C-endo and the Central Zone IPTP clinic to increase capacity for patients in the Central Zone. These patients now have the option to see an endocrinologist in person or virtually to begin insulin pump therapy.

Other highlights

RESEARCH: To improve diabetes care among First Nations Peoples, the DON SCN collaborated with Dr. Darren Lau (University of Alberta) on a PRIHS-funded project titled **Linking Diabetes Care: An Integrated Digital Health Approach to Diabetes with First Nations in Alberta (LINK)**. The project involves a digital intervention that relies on the interaction between care coordinators and local community health workers, a care model that was successfully piloted and found to be effective at improving glucose, blood pressure, and cholesterol control. In this phase, LINK will be introduced in approximately 12 First Nations communities over three years.

In Canada, about 1 in 3 seniors living in the community is malnourished or at risk of malnutrition. In 2020, **COMRISK, a community-based screening program for nutrition risk in older adults** was piloted in the Central Zone. The program focused on preventing malnutrition by identifying those at risk and connecting them with the right resources. The DON SCN partnered with two Primary Care Networks (Red Deer PCN and Peaks to Prairies PCN) and the Golden Circle Seniors Centre in Red Deer to develop screening tools and supports, and evaluate the program. In February 2023, the work culminated with the release of [Nutrition Screening: Community Guide to Success](#). Results have been submitted for publication and several presentations have been delivered. To facilitate provincial spread and scale, the team developed a toolkit was developed, with plans to integrate it into Connect Care. In the next phase of work, the DON SCN will explore malnutrition screening with Indigenous communities.

PARTNERSHIPS: DON SCN launched a 12-month pilot study in partnership with Alberta Blue Cross and Primary Care Networks (PCNs) aimed at preventing Type 2 diabetes in adults who have prediabetes (A1C 6.0 – 6.4%). The study used a virtual diabetes prevention program provided by Yes Health from February 2022 to February 2023 and involved 182 participants, 43 primary care clinics (13 PCNs), and 179 primary care physicians. An evaluation and benefits realization are underway. A key strength of this initiative is the partnerships that have been established, and those that continue to be built.

ENGAGEMENT: Over the past year, the DON SCN Scientific Office has focused on fostering engagement across our communities. Building upon data and evidence-based care, we seek to inform and develop system-wide approaches to advance diabetes, obesity, and nutrition care in AHS. Diabetes Day and Obesity Day are being planned for 2023.

Impacts on health and care

The DON SCN aims to empower patients, families, and care providers to manage diabetes, obesity, and malnutrition; and enhance care for Albertans with these conditions through targeted actions that align with priority areas of focus. These include:

- ▶ Developing and implementing standardized care guidelines and resources
- ▶ Supporting primary and secondary prevention
- ▶ Improving the patient experience by eliminating stigma and bias
- ▶ Co-creating local approaches to chronic disease prevention and management with Indigenous communities
- ▶ Optimizing access to data for Albertans and the research community

DIABETES, OBESITY & NUTRITION

Grants and Publications		Engagement		Outcomes and Impact
	12		43	182
Peer-reviewed Publications		Workshops and Presentations		
	\$2.2M		202	Albertans with prediabetes participated in the virtual diabetes prevention program in 2022-2023
Research Grants		Research Members		



DIGESTIVE HEALTH

Contact

[Leadership team](#)

digestivehealth.scn@ahs.ca

Key Partners

[Alberta Colorectal Cancer Screening Program](#)

50 Endoscopy teams from across Alberta

Academic Departments of Gastroenterology and Hepatology

AHS Operational Leaders for gastroenterology, hepatology and endoscopy services

Primary care providers and leaders

Major initiatives and achievements, 2022-2023

Expanded Primary Care Supports for gastroenterology care

Referral demands for gastroenterology care far exceed service capacity; consequently, wait times are lengthy and beyond the clinically acceptable window. Many patients waiting for specialty care have conditions that can be optimally addressed within their Medical Home, allowing more expeditious access for urgent referrals with established morbidity risks.

To address referral appropriateness and support primary care providers, the Digestive Health SCN (DHSCN) developed, implemented and evaluated the Primary Care Supports project between July 2019 and March 2022. Key outcomes and deliverables included:



- **Nine primary care co-designed pathways** for low-risk, high-demand indications (e.g., IBS, constipation, dyspepsia, non-alcoholic fatty liver disease). These built on existing resources in the Calgary Zone and were adapted or created and made available provincially.



- **Nine companion patient pathways** – Innovative, patient-facing information handouts that describe pathway-based care from a patient perspective.
- **Telephone advice** (Specialist Link) – Same-day telephone consultation now available in four out five Zones.



- **Electronic advice** (Advice Request) – Non-urgent consultation available through Netcare.

Outcomes and impact

Collectively, these supports have resulted in 6,217 avoided GI referrals over the project term. Patients with non-urgent conditions have received high-quality care in the community, enabling those with more urgent conditions to access specialist care more quickly. Primary care providers have had more resources to support them, and been able to access speciality advice as needed.

Once a referral was closed, or an advice service recommended continuing care in the Medical Home, most patients did not access specialized services for a GI condition within one year of the avoided referral date. Of the 277 subsequent endoscopies, 212 (76.5%) were completely normal and 22 (7.9%) showed clinically significant findings. The remaining 43 (15.5%) revealed clinically benign findings. Overall, the estimated cost avoidance through avoided referrals for specialist gastroenterology and hepatology care was \$2,422,210 over the three-year project duration.

A qualitative evaluation of provider experience revealed primary care providers and specialists were aware of the pathways and used them to improve referrals in Calgary and Edmonton. The SCN is currently working to increase awareness of the pathways among primary care providers in the South and Central zones, and supporting efforts to implement a centralized model for specialist referrals and triage provincially, which is expected to further reduce the number of low-risk referrals and low-yield endoscopies.

Pandemic recovery: Measuring endoscopy wait times with ACATs-E

Endoscopy services in Alberta were interrupted or delayed during the pandemic. The presumed backlog has meant that many Albertans may be experiencing longer-than-usual wait times for an endoscopic procedure. Post-pandemic, a province-wide list of patients waiting for endoscopic procedures did not exist. Development, measurement, management and reporting of indication-driven endoscopy access targets are key to appropriately prioritizing cases based on urgency, accelerating the pandemic recovery, and establishing a sustainable endoscopy service delivery model for the future.

To this end, the DHSCN and the Provincial Endoscopy Operations Committee (PEOC) secured funding to extend the **Alberta Coding Access Targets for Endoscopy (ACATs-E)** project to March 31, 2024. To expand awareness and build support for ACATs-E wait-list management and reporting strategies, the DHSCN and PEOC led a series of education sessions to support practitioners. These sessions focused on practical tasks such as how to enter required data to capture service wait time, and access information on how long patients have been waiting for an endoscopic procedure after a referral has been accepted. In total, 94 information sessions were held between July and November 2022, reaching over 363 participants. Additional sessions were paired with Connect Care Appointment Conversion learning sessions, reaching an additional 36 participants in 2023. There are now 23 endoscopy sites in Alberta that have the ability to enter ACATs-E codes. This includes 4 sites in the North Zone, 7 in the Edmonton Zone, 5 in the Calgary Zone, and 7 in the Central Zone. Performance data shows that 13 of these sites are consistently entering ACATs-E data, with the remaining sites entering data less consistently or have not yet operationalized ACATs-E data entry.

ACATs-E leads will continue to audit launched sites and reach out to help understand challenges or re-educate sites as needed. An additional 10 sites will be able to enter ACATs-E Codes with Connect Care Launch 6. By the end of Launch 6, Central Zone sites that were on Meditech will be converted to ACATs-E codes in Connect Care.

Our Year 2 focus is to continue information sessions and begin implementing ACATs-E Scheduling Heat Map and Data Compliance dashboards with all sites that have launched with Connect Care.

Impacts on health and care

The DH SCN has developed strong relationships with clinicians, operational partners and others and is using data to:

- ▶ Improve outcomes and patient experiences for people with digestive health conditions
- ▶ Improve patient safety and reduce unwarranted variation in care
- ▶ Inform and implement practice changes that improve efficiency, clinical utilization and deliver cost savings
- ▶ Monitor pandemic recovery and develop strategies for sustainable endoscopic services



Remembering Leanne Reeb, 1970-2023

In May 2023, the DH SCN lost a dear friend and colleague, Leanne Reeb. Leanne was Executive Director of the Digestive Health SCN from 2016-2023 and was a highly valued and respected member of the SCN team, having built an impressive network of partners, including clinician and operational leaders, patient advisors, and collaborators across the health system. Her greatest legacy is her leadership of the Primary Care Supports initiative, which included the development of provincial clinical pathways and corresponding patient pathways. This laid the foundation for an entire body of work focused on improving access to digestive health services for Albertans.

Leanne freely shared her learnings to support the scale and spread of Primary Care Supports to other high-demand specialty areas, such as surgery and cancer care. Leanne contributed to our improved understanding of how to implement, develop, and evaluate strategies to improve specialty access and support the care of patients in their Medical Home.

To honor her exceptional contributions and the indelible mark she leaves behind, the Digestive Health SCN has established the **Leanne Reeb Commemorative Award for Excellence in Collaboration**. This award will recognize an individual or team who has shown an outstanding commitment to excellence and collaboration to achieve improved care and outcomes for Albertans.

DIGESTIVE HEALTH

Grants and Publications		Engagement		Outcomes and Impact
	15		120	400+
Peer-reviewed Publications		Workshops & Presentations		clinicians trained in ACATs-E code entry and reporting
	\$2.1M		50	\$2.42 million
Research Grants		Research Members		estimated cost avoidance over 3 years through avoided referrals



EMERGENCY

Contact

[Leadership team](#)

emergency.scn@ahs.ca

Key Partners

Academic Departments of
Emergency Medicine

[Alberta First Nations
Information Governance
Centre](#)

[Alberta Medical Association](#)

[Emergency Medical
Services \(EMS\)](#)

Plus many AHS teams,
community programs &
services

Major initiatives and achievements, 2022-2023

Responding to ED pressures and long wait times

Over the past year, the Emergency SCN (ESCN) has been part of the implementation and evaluation of an initiative to add 127 FTE allied health (social workers, physiotherapists, and occupational therapists) and pharmacy resources to support patient flow in the 16 busiest emergency departments (EDs) across the province. Working alongside Clinical Operations, Health Professions Strategy & Practice, and Provincial Pharmacy, the ESCN led the creation and rollout of standardized workflows, resources, and an “ED 101” education package. Additional contributions include collaborating on change management, communications, and evaluation plans to support the successful transition and integration of these staff into the ED environment.



Sherri Kashuba, Senior Provincial Director for the ESCN, co-chaired a working group that included members of the ESCN leadership team and operational leaders, and contributed to identification of ED thresholds and development of a **Provincial Capacity Escalation Plan**, which outlines strategies to optimize emergency care delivery across sites or Zones if local EDs are over capacity.

These actions are part of AHS’ efforts to reduce ED wait times, one of four priority areas. Data from November 2022 to March 2023 indicate that ED wait times in Alberta are coming down, with the total time spent in the ED to see a doctor decreasing by 17%, from 7.1 hours to 5.9 hours (includes time required for diagnostic investigations).³

Anti-racist and equity-oriented care in Alberta EDs: Research and strategic initiatives

The Emergency SCN has completed its **Transformational Roadmap Refresh** and added a fifth strategic direction related to equity, diversity and inclusion. In keeping with efforts to better reflect the patient population emergency care serves in Alberta, the ESCN Core Committee now includes three newly recruited Indigenous members.

The ESCN continues to partner with First Nations organizations to co-lead and co-present research on First Nations members’ emergency care in Alberta. Analysis of provider interviews about deficits in First Nations emergency care has been [published](#) in BMC Health Services Research (June 2022). New funding has been received through a \$1.75M Canadian Institutes of Health Research (CIHR) grant for an [intervention research project with First Nations partners](#) to implement anti-racist and equity-oriented care in three Alberta EDs (one per Treaty area) over the next four years. Project co-leads are Lea Bill, Executive Director of the Alberta First Nations Information Governance Centre; Esther Tailfeathers, Family Physician and Member of the Blood Tribe, and Patrick McLane, Assistant Scientific Director of the ESCN (through Adjunct attachment to the University of Alberta).

Advancing knowledge and building capacity: Review of scientific funding and impact

The SCN completed a review of 2016-2021 results of its scientific funding competitions. Thirty-three [summer students](#) have been funded and have published 22 peer-reviewed articles. Nineteen [systematic and scoping review](#) teams were funded during this period, 15 of which have led to publications (18 publications total). This work is helping advance knowledge and generate evidence that can be used to inform decision-making in emergency medicine.

Improving information systems and access to physician-level data

The ESCN Senior Medical Director is facilitating the development of a Connect Care-based, confidential, self-reflection dashboard for individual emergency physicians to review their practice relative to their peers working in similar ED contexts. This dashboard leverages foundational work of the Calgary Zone Department of Emergency Medicine and similar work previously undertaken by Edmonton Zone emergency physician leaders. The project is a collaboration between AHS Emergency Medicine leaders, the ESCN, AHS Data and Analytics, and the Physician Learning Program.

³ Alberta Health Services. [Background: AHS seeing measurable improvements in priority areas](#). Action on Our Priorities. April 26, 2023.



Dr. Eddy Lang, Scientific Director, ESCN

Achievements of Dr. Eddy Lang recognized on a national level

Dr. Eddy Lang, long-time Scientific Director of the Emergency SCN, has been initiated into the **Canadian Academy of Health Sciences**. He was recognized for his over 340 career publications, promotion of implementation science in emergency medicine, and for leading the production of practice-changing clinical guidelines. Dr. Lang was also credentialed as a Canadian Certified Physician Executive.

"Eddy's commitment to advancing research and innovation, capacity building and bringing evidence to practice coupled with his passion and enthusiasm make a valued leader in the ESCN and Alberta's emergency care community."

Sherri Kashuba, Senior Provincial Director for the ESCN

Impacts on health and care

Through its partnerships with key stakeholders and commitment to embed research into clinical practice, the ESCN is improving emergency care in Alberta. Over the past year, its work has included:

- ▶ Supporting AHS' response to the COVID-19 pandemic, including provincial work on Post-COVID Conditions ('Long COVID')
- ▶ Addressing gaps in knowledge around health equity and emergency care
- ▶ Supporting patient and provider safety in emergency settings
- ▶ Supporting PaCER projects

Quality Improvement and Innovation Forum

The annual ESCN Quality Improvement and Innovation Forum fills a gap between local and national events. It is devoted to sharing methods and results of ED projects in Alberta among those working in emergency care. The event provides an opportunity for those pursuing quality improvement initiatives in emergency medicine to network with one another, share innovative work and experiences, and translate promising works to new settings. After providing an online forum throughout the pandemic, this year's event was held in-person in Red Deer, Alberta, and live-streamed for those who wished to attend virtually. Nineteen oral presentations were delivered including a keynote address by Dr. Leigh Chapman, Chief Nursing Officer of Canada.

EMERGENCY

Grants and Publications



36

Peer-reviewed Publications



29

Workshops & Presentations

Outcomes and Impact

Reduced

Long-term Care to ED transfer rate associated with PRIHS IV project



\$2.26M

Research Grants



3

new Core Committee members recruited, bringing Indigenous perspectives

~160

clinicians, ED managers, operations leaders, nurse educators, and others attended the 2022 ESCN Quality Improvement and Innovation Forum

www.ahs.ca/escn



MATERNAL, NEWBORN, CHILD & YOUTH

Contact

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Key Partners

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

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

Major initiatives and achievements, 2022-2023

Over the past year, the Maternal Newborn Child & Youth (MNCY) SCN and its Scientific Office have advanced work on several important initiatives focused on measuring patient- and family-experience, and improving health outcomes, and health service delivery for mothers and children. Collaboration with patients, families, researchers, health care providers, and other partners across Alberta has been an essential part of this work.

The Neonatal Intensive Care Experience Reporting (NICER) instrument: Enhancing patient- and family-centred care through co-design and partnership

Although AHS routinely collects patient and family experience data using a standard instrument, it is not used in the neonatal intensive care unit (NICU). To address this gap, NICUs across Alberta have created site-specific surveys to collect unit-level data that is used internally. This context led the MNCY SCN's Patient and Family Advisory Council (PFAC) to identify and prioritize the need for a validated provincial survey to measure patient- and family-centred care (PFCC) experience in NICUs across Alberta.

Patient and family advisors on the PFAC have partnered with the MNCY SCN Scientific Office, the SCN Manager—a PhD candidate from the University of Calgary, Faculty of Nursing—and healthcare providers from the NICU Standing Committee to create this validated instrument. The team meets biweekly and collaborates with three hospital-based parent advisory groups to broaden patient and family input into the work. NICU-specific principles of PFCC, developed by the research team, provide a foundation for this work and were informed by the IPFCC's [core concepts of PFCC](#) as well as [AHS' definition](#) and commitment to PFCC.

Throughout this process, research training opportunities occur to ensure that team members, regardless of previous research experience, are equal contributors to the project. As well, team members who have research and clinical training respect and integrate the expertise of the PFAC members who are co-leading this work.

The final instrument will not only measure PFCC, but will help identify inequity in family experience in the NICU and ultimately inform strategies to improve family experience in the NICU. This work has been presented at several conferences, including the 2022 NorthWest SPOR Collaborative Forum, where it won the [award](#) for best highlighted presentation ([poster](#) and [video](#)).

This work is an example of the strength of partnerships between Strategic Clinical Networks and Patient and Family Advisors, and the importance of advisor-generated ideas being developed through co-design. SCN advisors are leaders and co-leading projects with them is a privilege.

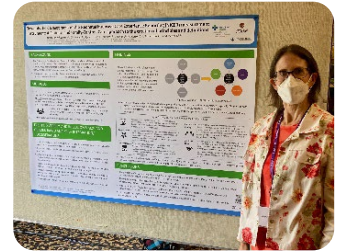
Evidence-based strategies to enhance Alberta's Regional Pediatrician Workforce

Alberta's five regional hospitals, located in Fort McMurray, Grande Prairie, Red Deer, Medicine Hat, and Lethbridge, experience great challenges with recruitment and retention of pediatricians. The scope of the regional pediatrician is extremely broad and includes both community and inpatient practice, consultation in the emergency department, and neonatology. Regional sites frequently cycle through periods of significant shortages of pediatricians, which further impact physician burnout and retention as well as access to pediatric care for Albertan children and youth in rural and regional areas.

Recognizing this critical need and addressing the SCN's [Child & Youth priority](#) to identify and support strategies to optimize pediatric capacity across the province, the MNCY SCN convened a Regional Pediatrician Workforce Steering Committee. The committee developed a comprehensive methodology



Jacqueline Wilson (SCN Manager) and Christine Johns (PFAC co-lead)



Michelle Neraasen (PFAC co-lead)



relying on a literature review, surveys, interviews, stakeholder expertise, and service use data and drafted recommendations to address the challenges of ensuring a sustainable pediatric workforce in regional sites in Alberta.

From this robust, evidence-based foundation, a consensus process was followed to create a shortlist of recommended priorities and potential strategies, including:

- developing innovative, multidisciplinary pediatric service delivery models
- ensuring Alberta-based pediatric trainees have ample opportunity to develop the diverse skills considered essential to success in regional practice
- addressing barriers to appropriate remuneration, reflective of the broad scope of the role

This year, the Steering Committee's recommendations were wholly endorsed by medical leadership from all AHS zones. Growing partnerships with stakeholders, including Provincial Medical Affairs and Pediatric Residency Programs, are already leading to implementation of key recommendations, such as targeted recruitment strategies and increased pediatric resident quotas.

Other quality and outcome improvements

Alberta Post-Partum Hemorrhage Initiative

The Alberta Perinatal Health Program (APHP), part of the MNCY SCN, supported development of the Alberta Post-Partum Hemorrhage Initiative. Post-Partum Hemorrhage (PPH) is defined as excessive bleeding that occurs within the first 24 hours after delivery. It occurs in 5% of all deliveries, and is the leading cause of maternal death world-wide. PPH that is not fatal can result in further interventions, exposure to blood products, shock and other complications. Preventing PPH through active management of patients during the third stage of labour, identifying patients with risk factors, and promptly recognizing, assessing and treating blood loss can improve patient outcomes.

Alberta's PPH Initiative involved a shift practice from estimated blood loss (EBL) to quantitative blood loss (QBL) in labour & delivery and postpartum units across the province. A PPH Toolkit was developed to help guide clinical care. It includes a risk assessment, classification of PPH by stage, stage-based checklists, a medication table, amniotic fluid graph, and other resources. Clinicians can access this information on Insite, under [MNCY SCN Resources, Postpartum Hemorrhage Toolkit](#) (requires an AHS login).

Impacts on health and care

The MNCY SCN continues to develop partnerships and build research capacity that positively impacts patient care for infants, children, youth, and mothers in Alberta. Over the past year, this work has contributed to:

- ▶ Recommendations to address challenges in and improve Alberta's regional pediatrician workforce.
- ▶ Continued work with parents to co-develop a NICU-specific patient- and family-experience measurement instrument (the NICER instrument), including collaboration with healthcare providers and researchers.
- ▶ Continued focus on improving practice across the province by developing clinical guidelines, policies, and tools to support evidence-based care.

MATERNAL, NEWBORN, CHILD & YOUTH

Grants and Publications



10

Peer-reviewed Publications

Engagement



5

Workshops & Presentations

Outcomes and Impact

Continued work with Patient and Family Partners to develop the NICER Instrument, a validated patient- and family-experience tool.



\$3.6M

Research Grants



248

Research Members

Prioritized recommended actions to increase regional pediatrician capacity through continued partnerships and targeted strategies.

www.ahs.ca/mncyscn



MEDICINE

Hospital Medicine, Kidney Health, Respiratory Health

Contact

[Leadership Team](#)

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Key Partners

Academic Institutions

Hospital Medicine, Kidney Health, and Respiratory Health Care Providers and Clinical Operations

Primary Care Providers

Provincial, National and Community Organizations

Regulatory and Accreditation Organizations

"The Medicine Strategic Clinical Network embodies a safe environment where we, as patient partners, feel valued and respected for our insights and direction regarding patient centered care".

Patient & Family Advisory Council co-Chairs on behalf of PFAC members, Medicine SCN

Major initiatives and achievements, 2022-2023

The Medicine SCN (MSCN), which launched in April 2020, builds on past achievements in kidney and respiratory health, while extending its scope and relationships to hospital medicine. Bringing these communities together as one network enables us to advance common priorities, undertake cross-cutting projects, tackle complex, multidisciplinary challenges, and accelerate innovation and health system improvements on a provincial scale.



Medicine SCN Cross-Cutting Projects

Acute Care Bundle Improvement (ACBI)

ACBI is a provincially coordinated quality improvement (QI) project that integrates eight provincial, evidence-based QI initiatives: CoACT Collaborative Care, Elder-Friendly Care, Enhanced Recovery After Surgery, Home to Hospital to Home, Pressure Injury Prevention, as well as condition-specific tools in Connect Care, including the Cirrhosis order set and Heart Failure and Chronic Obstructive Pulmonary Disease (COPD) care paths. [Learn more](#)

Implementation of ACBI is underway at Alberta's 14 largest acute care sites, with a focus on optimizing expected discharge date, patient mobility, transitions in care, and uptake of condition-specific clinical pathways and care paths. Along with other key partners, the Medicine SCN is supporting AHS operations with site implementation, facilitating physician engagement—including identification of site champions and understanding and addressing physicians' barriers and facilitators to implementation—integration of clinical elements to support a single implementation approach, and developing the provincial evaluation framework and plan.

ACBI is about getting evidence into practice and applying practices efficiently and consistently to **improve quality of care and patient outcomes**. It streamlines processes and workflows, simplifies and standardizes admissions, daily care routines, discharge and transition steps care providers perform with every patient, while standardizing and optimizing patient care. The rollout includes key outcome and performance metrics that sites can use to track their progress.

Provincial Medicine Load Levelling Plan

Prepared by the Provincial Medicine Load Levelling Advisory Group, with leadership and support from the Medicine SCN

At times, Medicine services can encounter unpredictable spikes in demand. Often this is related to an emergency response (e.g., wildfire, flood, outbreak of illness) or seasonal fluctuations. Response to the demand for inpatient services is normally managed on a site or zone basis. However, occasionally it may be necessary to request support outside of zone-based operational processes through Provincial Load Levelling. When enacted, Provincial Load Levelling involves patients being transferred across zonal boundaries to level demand across multiple locations. This avoids sites operating over-capacity, and enables clinicians to provide the best possible care to the greatest number of patients.

The Provincial Medicine Load Levelling Plan outlines specific triggers and actions that would be required to manage patient flow safely during times of exceptional capacity challenges that go beyond zonal boundaries. Having a single provincial health system in Alberta helps enable rapid response and deployment of this plan should the need arrive.



Hospital Medicine

Know Your Data pilot successfully completed

Know Your Data aims to improve outcomes and data literacy by providing individualized physician and team level data, along with feedback discussions. A pilot project was completed at four sites to assess the feasibility of this approach. Dashboards were circulated to 100 hospitalists and internal medicine physicians during the pilot. 39% of physicians engaged with their dashboards, and 49% of physicians participated in Reflective Practice Review follow-up discussions.

Providers reported high levels of satisfaction with the dashboards and felt safe discussing individual and team key performance indicators to make improvements in practice. The pilot demonstrated the feasibility of Know Your Data in engaging physicians in data relevant to their practice and driving quality improvement efforts. [Read summary report](#)



Kidney Health

Successfully implementing a patient-centered approach to hemodialysis care

The successful implementation of the Incremental Dialysis Program was a collaborative effort between Alberta Kidney Care and the Medicine SCN to improve patient outcomes and quality of life while safely increasing system capacity. Eligible patients were new chronic outpatient hemodialysis starts, who began with a dialysis prescription of two times a week and titrated up to three times a week as indicated. The intervention consisted of assessment criteria, processes and supporting education. Preliminary outcomes to date:

- 60+ patients are on incremental dialysis on any given day across Alberta (~250 runs “saved” per month)
- 64% of new chronic outpatient starts were assessed for incremental hemodialysis; 53% of those were deemed eligible
- 85% of staff were satisfied with the implementation
- Incremental hemodialysis patients report higher quality of life, and this appears to be sustained over time



Respiratory Health

Partnerships for Research and Innovation in the Health System (PRIHS) 7

The PRIHS 7 (Digital Health) competition was designed to support the spread and scale of effective, digital and data-enabled technologies that can transform models of care and improve patient outcomes, quality of care, and value. The Respiratory Health Section was fortunate to support two successful PRIHS 7 proposals:

- Adoption and enhancement of a care pathway for children with medical complexity: an implementation evaluation project for tracheostomy in pediatrics. Principal Investigators: Drs. Maria Castro Codesal (University of Alberta), Michael van Manen (University of Alberta), Karen Kam (University of Calgary)
- Use of telemonitoring to reduce adverse events for hospitalized patients on high flow oxygen in Alberta. Principal Investigator: Dr. Alim Hirji (University of Alberta)

The Respiratory Health section will continue to support and partner on the implementation and evaluation of these projects throughout their 3-year funding period (2023-2026).

Other quality and outcome improvements

The Medicine SCN is committed to using high-quality evidence and leveraging Alberta’s rich health data assets to support a learning health system. Examples of this include:

- ▶ Compiling and disseminating audit and feedback reports to all provincial nephrologists
- ▶ Building and maintaining Tableau dashboards on quality indicators for Hospital Medicine Services as well as dashboards on provincial surveillance and quality indicators for those with COPD and Asthma

Work has also begun on two other PRIHS 7 projects the Medicine SCN is supporting:

- ▶ OPTIMUS-SAB: This project aims to optimize the management of *Staphylococcus aureus* Bacteremia across Alberta
- ▶ UPTAKE: Using Personalized risk and digital tools to guide Transitions following Acute Kidney Events. This project involves using computer decision support and remote monitoring to reduce acute care hospitalization

MEDICINE

Grants and Publications



39

Peer-reviewed Publications



85

Presentations

Outcomes and Impact

\$70K

in Seed Grants Awarded for Hospital Medicine and Respiratory Health Research



\$14.1M

Research Grants



261

Research Members

100+

Audit & Feedback reports disseminated to physicians



NEUROSCIENCES, REHABILITATION & VISION

Contact

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Key Partners

[Alberta Multiple Sclerosis Network](#)

[Campus Alberta Neuroscience](#)

[Eye Institute of Alberta \(University of Alberta\)](#)

[Faculty of Rehabilitation Sciences \(University of Alberta\)](#)

[Hotchkiss Brain Institute \(University of Calgary\)](#)

[Neuroscience & Mental Health Institute \(University of Alberta\)](#)

[Parkinson's Association of Alberta](#)

[Praxis Spinal Cord Injury Institute](#)

[Spinal Cord Injury Alberta](#)

[Vision Loss Rehabilitation Canada](#)

"With the KQI work, for myself and for Audrey, it is very important to have our voices heard along with the professionals, whether it is optometrists or ophthalmologists. When everything comes down to it, we have the lived experience. Everybody's voice is heard, and everybody's opinion is respected."

Henry Tonkin,
Patient Advisor

Major initiatives and achievements, 2022-2023

This year, the Neurosciences, Rehabilitation & Vision (NRV) SCN and its Scientific Office supported collaborative, provincial research to advance system-level quality improvement, evaluation, planning, and change implementation in NRV settings.

Understanding the current state of Long COVID care in Alberta

In October 2022, Drs. Jacqueline Krysa, Kiran Pohar Manhas, Elisavet Papathanassoglou, Chester Ho, and myriad collaborators shared the final report of a 1.5-year evaluation that sought to explore and better understand (a) the experience of COVID-19 recovery in Alberta; (b) factors affecting Long COVID care provision; and (c) factors influencing awareness and adoption of a provincial Long COVID rehabilitation response framework. This pragmatic evaluation used mixed methods to capture patient experiences (n=390 telephone surveys; n=56 patient interviews); provider perceptions (n=31 early-adopter provider interviews); and provincial health service utilization. Perspectives were gathered from across AHS' five Zones.



Self-reported patient experience indicates that 49% of hospitalized COVID-19 patients experienced Long COVID symptoms as well as 25% of non-hospitalized COVID-19 patients. Also, 31% of hospitalized patients were unable to return to full-time work up to 11 months after acute infection. Convergent analysis identified three key learnings:

1. The experience of COVID-19 recovery was marred by challenges in managing chronic symptoms, returning to work, and finding appropriate resources.
2. Factors affecting Long COVID care provision related to provider education, patient and provider awareness, as well as the location and accessibility of Long COVID services.
3. Barriers to framework adoption related to managing a novel condition, competing clinical priorities, and adaptability of provincial long COVID rehabilitation pathways.

This research is part of seminal learning to equip Alberta Health Services with knowledge to recognize and respond to the evolving needs of persons with Long COVID. This work has been shared with local and provincial stakeholders through presentations, a final report and infographic. Five manuscripts are in preparation (or submitted) for peer-review. Two of these have since been published, in [Spring 2023](#) and [Summer 2023](#). [Note: Links are provided here for convenience; however, these publications are excluded from metrics for this fiscal year as they were published since March 31, 2023.]

Co-designing provincial core sets of key quality indicators (KQI) for neurosurgery, vision, and inpatient rehabilitation

"You can only manage what you measure." It's a familiar tenet in business and other sectors, and identifying and measuring KQIs is also an important part of improving health outcomes and health service delivery. For the NRV SCN, developing an evaluation system for each clinical stream is a fundamental strategic priority identified in its 2023-2027 Transformational Roadmap.

To this end, the Scientific Office has convened and supported three stream-focused provincial steering committees to co-design a modified e-Delphi, consensus-building process to identify priority KQIs. These multidisciplinary steering committees included patient and family advisors, physicians, nurses, allied health professionals, community representatives, operational leaders, and division leads from across the province, with clinical co-chairs and the NRV SCN Scientific Office providing tactical and research support. Between March 2022 and April 2023, stakeholders co-designed:

Neurosurgery: 42 potential KQIs for adult, inpatient neurosurgical care. The process prioritized **12 KQIs** related to four key measures: **infections; surgical complications; safe, effective & efficient care; and high-quality communication.**

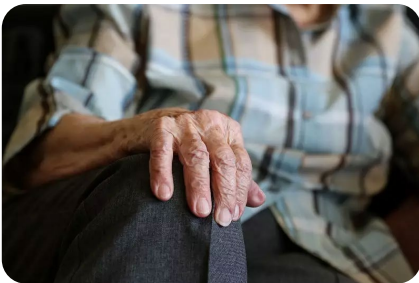
Vision: 27 potential KQIs for the care of patients with cataract or glaucoma in Alberta. The process prioritized **13 KQIs** by 33 e-Delphi participants, related to the measurement of three quality dimensions: **acceptability, accessibility, and safety.**

Inpatient Rehabilitation: 56 potential KQIs for inpatient rehabilitation units in Alberta (as well as 25 supplemental KQIs for Older Adult or Pediatric populations). Current recruitment identified 100+ provincial stakeholders interested in participating in the modified e-Delphi process.

This evidence-based process has advanced stakeholder engagement in the identification, evaluation, development, and implementation of appropriate KQIs provincially. Next steps include co-development of technical definitions; planning operationalization and implementation; and enacting a multi-modal communication strategy to disseminate results.

Advancing research & building capacity in Alberta

Multiple Sclerosis, Parkinson's Disease and quality of care in Alberta



In June 2022, the Scientific Office hosted the 2022 NRV SCN Research Planning Summit, where patients, community partners, researchers, and clinicians (n=29) from across the province convened to identify challenges to multiple sclerosis (MS) and Parkinson's Disease (PD) care provision in Alberta. Identified gaps related to access, human resources, and system navigation. Current care challenges related to equity, access, long-term management, and preservation of function in MS and PD.

This summit led to a focused funding call: the 2023 Research Grant Competition on MS or PD. This funding call aims to support health services or policy research that creates momentum and advances quality of care for persons with MS, PD (or both) in Alberta. The successful applicants, Dr. Davide Martino and his team, will use this funding to leverage Connect Care and a co-designed educational curriculum to improve the quality of inpatient PD care for people in Alberta.

Impacts on health and care

The NRV SCN continues to build relationships with patients, families, research institutes, academics, clinicians, and operational partners to leverage available resources and expertise. Together, they actively collaborate to:

- ▶ Co-design care transformation through evidence
- ▶ Harness innovation to drive care excellence across the continuum
- ▶ Enhance equitable access to quality care for all in Alberta

What's next: Actions and areas of focus

- ▶ Address gaps and variations in care, and barriers to equitable access
- ▶ Develop an evaluation system for neurosciences, rehabilitation and vision care
- ▶ Build clinical pathways and service delivery
- ▶ Identify and integrate virtual health into service delivery

NEUROSCIENCES, REHABILITATION AND VISION

Grants and Publications		Engagement		Outcomes and Impact
	22 Peer-reviewed Publications		29 Workshops & Presentations	Facilitated Alberta's involvement in a national Long COVID research network that received \$19.99M in CIHR funding
	\$21.5M Research Grants		191 Research Members	Started translating the KQI results into tangible data dashboards & outputs to promote a Learning Health System approach to neurosurgery, vision, and inpatient rehabilitation



SURGERY

Contact

[Leadership team](#)

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[ERAS Leadership](#)

[Evidence Decision Support Program](#)

Key Partners

[Enhanced Recovery After Surgery \(ERAS\) International](#)

[National Surgery Quality Improvement Program \(NSQIP\)](#)

"The Surgery SCN is proud to be inclusive to the Advisor community at all levels of functions of the SCN... Involving Advisors is an integral component in ensuring our services are in alignment with our community needs."

David Chakravorty,
Provincial Lead, National
Surgical Quality Improvement
Program

Major initiatives and achievements, 2022-2023

Recognizing the need to strengthen our health care system in the post-COVID era, the Surgery SCN (SSCN) has been challenged to find innovative ways to improve access to and quality of surgical care to Albertans. This has required that we foster new partnerships to implement, evaluate and sustain novel pathways, care delivery models and quality improvement frameworks. Our work continues to be guided by the [SSCN Transformational Roadmap](#), which was updated this year, and includes four strategic objectives.

Improving access to integrated surgical care

Reducing wait times & improving data capture, including patient and provider experience

Reducing surgical wait times remains the top priority for the provincial government and AHS leadership and on which the Surgery SCN is expected to deliver in an efficient and timely manner. While the Government of Alberta has expanded funding to increase the volume of surgeries in chartered surgical facilities, our team is focused on improving the overall efficiency of referral from primary care to specialist care through a several interventions, referred to as the Specialty Access Bundle (SAB).



The five elements of the SAB are: (1) Facilitated Access to Specialist Care (FAST); (2) provincial pathways; (3) telephone advice; (4) electronic referral solutions; (5) pre-/post-community support. All bundle components are progressing; the most impactful initiative to date has been the staggered implementation of FAST in multiple surgical specialties across the province. FAST is a central intake and distribution program for referrals to surgeons that aims to simplify and standardized the referral experience and find the shortest wait lists for patients. As part of the FAST program, a robust system has been implemented to capture and aggregate relevant data and report on the impact of these initiatives on wait times. [Learn more](#)

Alongside quantitative evaluation of the FAST program on wait times, using dashboards created in partnership with the Surgical Analytics team, the SSCN has gathered data on patient and provider experience with FAST using an innovative online platform, Sensemaker®. Preliminary results of the patient and provider experience on the FAST model of patient referral from primary care to surgeons have been published and distributed to AHS leadership.

Supporting equitable access through the Rural Surgical & Obstetrical Networks of Alberta

The Rural Surgical and Obstetrical Networks of Alberta (RSONA) is an important initiative to improve access to surgical care in rural Alberta. In the past year, the SSCN worked alongside a number of stakeholders to complete and publish a white paper on RSONA that outlined six major operational streams and was seen as a viable strategy to improve training and access to surgical and obstetrical care in rural communities. AHS has provided funding and approval to advance this work. Since then, a steering committee has formed and is currently working on three of the operational streams: formalizing a residency program in Enhanced Surgical Skills (ESS) and Obstetrical Surgical Skills (OSS), a coaching program, and a robust continuous medical education program for ESS and OSS physicians in Alberta.

Obtaining funding to rollout a provincial prehabilitation program

Another important approach to improving access, by decreasing healthcare utilization, is through prehabilitation. Prehabilitation is any pre-surgical intervention aimed at enhancing a patient's

preoperative condition with the goal of improving postoperative outcomes. The SSCN's co-SD, Dr. Rachel Khadaroo, worked closely with the Prehabilitation Working Group on project development, vision, engagement, economic assessment, and presentations, which resulted in provincial funding for scale and spread as a new AHS program with dedicated services.

Provincial operationalization of prehabilitation will help shift from passively waiting for surgery to proactively preparing for surgery. This will help reduce complications and length of stay in hospital, ultimately improving access for patients on surgical wait lists. Collaboration with experts and partners across Alberta continues to inform a comprehensive, integrated model of service delivery.

Providing safe, high-quality surgical care

Another focus for the SSCN over the past year has been reducing surgical site infection (SSI) by 20% province-wide. To execute this work with AHS Surgical Quality Improvement Leads, Dr. Wynne Leung, Dr. Rob Stiegelmar and David Chakravorty, Provincial Lead, National Surgical Quality Improvement Program (NSQIP), competed four provincial Interdisciplinary Learning Collaboratives that brought together academic researchers, healthcare leaders and frontline staff.

The SSCN has also supported CIHR-funded work to re-invigorate the Surgical Safety Checklist in Alberta Hospitals. The work, led and supported by Dr. Mary Brindle and members of the SCN, has resulted in publications that describe how these tools can be successfully [implemented](#) and [modified](#), and a [toolkit](#) that is being used to redevelop the checklist at the Peter Lougheed Hospital, Vascular Surgery Unit with the goal to expand to other units and sites.

Using analytics and evidence to guide decisions

Evaluating a digital health tool to monitor and manage chronic post-surgical pain

With digital health at the forefront of health innovation incentives and public policy debates, the SSCN, in collaboration with the AHS Provincial Clinical Excellence portfolio, was successful in securing funding from the CanHealth Network (\$250 K) and Ontario Bioscience Innovation (\$175K) to test the implementation of a digital app for surgical and chronic pain patients.

Phase 1 of the study is complete and the evaluation showed that the Manage My Pain (MMP) app is both feasible to implement and acceptable to patients and providers. Implementation would require clinical staff to add patient onboarding and orientation activities to their daily workload and make time to review patient-reported data when preparing for a clinical visit. Phase 2 of the study, which aims to measure the impact of the MMP app on health outcomes, health service utilization, and costs when used within pain clinics in Alberta, is nearing completion, and we expect to publish the results in early 2024.

Dr. Sanjay Beesoon (SSCN Assistant Scientific Director) and Dr. Nivez Rasic (University of Calgary) are also co-leading a Health Canada grant-funded study focused on reducing long-term opioid use in surgical patients through more effective management of chronic post-surgical pain (CPSP). The goal is to develop evidence-based screening tools that identify patients at risk of developing CPSP, improve order sets guiding the use of pain relief medications for inpatients, and evaluate whether the MMP app can improve pain-related outcomes in surgical patients. [Learn more](#)

Impacts on health and care

- Together with its clinical and research partners, the SSCN continues to advance knowledge and implement practice changes that:
- ▶ Increase access to surgical consultation and treatment and reduce wait times for elective surgeries
 - ▶ Improve quality and safety of surgical care and provide data to better track surgical demand, utilization and performance
 - ▶ Support appropriate use of surgical resources, optimize efficiency, and improve coordination across care providers
 - ▶ Improve outcomes, safety, value and patient/family experience for Albertans who need surgical care

SURGERY

Grants and Publications		Engagement		Outcomes and Impact
	82 Peer-reviewed Publications		54 Workshops & Presentations	Obtained funding to implement Prehabilitation and Rural Surgical and Obstetrical Networks of Alberta . These programs are expected to improve access to surgical care by: <ul style="list-style-type: none">✓ reducing complications & length of stay in hospital✓ improving access to training, surgical and obstetrics care in rural Alberta
	\$2.5M Research Grants		300 Research Members	



INDIGENOUS WELLNESS CORE

Integrated Provincial Program

Contact

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Key Partners

Indigenous communities

Indigenous organizations

[Indigenous Services Canada](#)

AHS Clinical Operations

AHS Wisdom Council

[Primary Care Networks](#)

[Alberta Medical Association](#)

Alberta Universities (UA, UC, UL)

Major initiatives and achievements, 2022-2023

The Indigenous Wellness Core (IWC) continues to work to better integrate, coordinate and advance Indigenous health within AHS in alignment with the [Indigenous Health Commitments: Roadmap to Wellness](#) based on health-related recommendations of the Truth and Reconciliation Commission of Canada. Partnering with Indigenous communities, organizations, health and community stakeholders, healthcare professionals, researchers, and others throughout the province, the IWC is helping advance and positively impact patient care and health outcomes with Indigenous Peoples. A few examples from 2022-2023 are highlighted below.

The Honouring Life Program: Building community capacity to support Indigenous health

Honouring Life helps build community capacity to support Indigenous youth through life promotion and suicide prevention programming, developing protective factors grounded in culture. Following the end of its initial grant funding (Alberta Health, 2018-2022), the program is now operationally funded and able to offer multi-year grants to communities that support continuous programming for youth. Honouring Life 2.0 has also introduced a crisis funding stream, providing short-term funding to address acute mental health emergencies, as well as financial support for community-based program evaluation.

Since 2018, the program has funded 61 communities and organizations across the province. In fiscal year 2022-23, Honouring Life executed 17 contracts. These included four new communities that had not accessed the program previously, and two communities were assisted through crisis funding. The program also sponsored four youth to participate in the University of Calgary's Patient and Community Engagement Research (PaCER) program, where they received foundational research training and conducted qualitative research projects.

Enhancing Indigenous patient experience through navigation and cultural supports

The **Four Winds Project** was co-designed with Indigenous partners to support Indigenous patients and their families in navigating the complexities of the health system and help them through transitions during their journey in and out of care in South Zone. The Indigenous Patient Navigation (IPN) service supports:



Members of the Four Winds core team

- ▶ Pre-admission – access to health-related programs and to support continuity of care
- ▶ Emergency or hospital admission – assisting the healthcare team provide medical translation of diagnosis and hospital process
- ▶ Inpatient stays – providing culturally safe support, medical translation and education to patients and families
- ▶ Discharge – assisting Indigenous patients navigate services and programs between hospital and community

The IPN service was “soft re-launched” in October 2022, following the COVID-19 pandemic. Two full-time IPNs were hired, and a formal media re-launch occurred in January 2023 in Lethbridge. Regular meetings with the

Four Winds Steering Committee (including Elders, community managers, and AHS stakeholders) are ongoing to progress planned deliverables and adjust service implementation. Building hospital and community settings into the IPN job description has been an impactful success that expanded the scope to be able to meet Indigenous patients where they are on their healing journey, which sometimes extends beyond AHS facilities.

A total of 266 Indigenous patients have been directly supported by the navigators from October 2022 to March 2023 in hospitals as well as through discharge/transitions, emergency departments or hospital admission, post-discharge supports, and community referrals.

Indigenous Support Line Innovation



Through advocacy and efforts of the Wisdom Council that began in 2022, the culturally safe toll-free **Indigenous Support Line (ISL)** is now available in the South, North and Central Zones and plans to expand to Calgary and Edmonton Zones in 2024. The ISL provides the opportunity for Indigenous Peoples to navigate appropriate health services. Since the ISL launched in June 2022, listeners have fielded 2,021 inbound and outbound calls in nine months (to March 2023).

Early evaluation results indicate that callers are very satisfied with the ISL and feel that it improves healthcare access and builds trust. This service continues to be recognized provincially and nationally, receiving numerous awards for innovation and patient experience. These include the 2023 Health Quality Council of Alberta's Patient Experience Award (provincial), the 2023 Healthcare Excellence Award Canada-Virtual Care Award (national), and the 2022 i4 Innovation in Diversity & Equity Award (national).

Other quality and outcome improvements

Cancer prevention and improved health screening for Indigenous Peoples and vulnerable populations

The IWC has continued to lead the **Indigenous Health Innovation and Cancer Prevention (HICP) Grant Program**, in close partnership with Indigenous communities and organizations across the province. Twelve community-led cancer prevention and screening projects in 25 urban, rural, and remote Indigenous communities were carried out since the program began. Evaluation efforts employed a mixed qualitative, collaborative participatory-action methodology to achieve a comprehensive understanding of the multifaceted impact of HICP programs in reducing the burden of cancer. Eight overarching themes emerged from this evaluation: 1) Health Promotion, 2) Health Prevention, 3) Social Justice, 4) Organizational Capacity, 5) Partnerships, 6) Self-Determination, 7) Access & Equity, and 8) Mental Health. Selected outcomes and deliverables to date include:

- ▶ Provided cancer education and screening to more than 5,000 Indigenous people, ranging from children to Elders.
- ▶ Referred 158 people to programs, supports or services.
- ▶ Established and strengthened a network of 89 relationships with service providers and cultural supports.
- ▶ Developed the Métis Model and Indigenous Cancer Screening Pathways for breast, colorectal and cervical cancer.
- ▶ Developed eight infographics and 14 digital stories.

Indigenous identity disclosure within AHS

In collaboration with colleagues from the University of Calgary, the IWC has undertaken research to advance the response to Truth and Reconciliation Commission of Canada Call to Action and the priority areas of the Roadmap to Wellness. A series of studies are being carried out with diverse Indigenous subject matter experts and health system partners to identify best practices for, and potential consequences of, collecting Indigenous self-identifiers as part of accessing health services. Secondary questions have also emerged around possibilities for data linkage between AHS and First Nations in Alberta and potential barriers. These questions are being examined in collaboration with Blackfoot Confederacy Tribal Council Health Department and supported by a CIHR Planning Grant.

Indigenous Addiction and Mental Wellness Grant Program

Supported by Alberta Health, flexible funding was made available through the Indigenous Addiction and Mental Wellness Grant Program (IAMW), which seeks to increase capacity to support the design and delivery of a holistic continuum of healing and strengths-based, culturally rooted mental health and wellness services, as well as support recovery-oriented practices. A total of 24 communities were notified of successful applications.

INDIGENOUS WELLNESS CORE

Grants and Publications		Engagement		Outcomes and Impact
	6 Peer-reviewed Publications		28 Workshops & Presentations	2,000+ callers supported through the Indigenous Support Line in its first nine months
	\$5.0M Research Grants		102 Research Members	5,000+ Indigenous people (children to Elders) received cancer education and screening through community-led cancer prevention initiatives in 25 urban, rural and remote communities



PRIMARY HEALTH CARE INTEGRATION NETWORK

Integrated Provincial Program

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Key Partners

[Accelerating Change Transformation Team](#)

[Alberta Health](#)

[Alberta Medical Association](#)

[Primary Care Network Leadership](#)

Primary Care Network Members

[Virtual Patient Engagement Network](#)

Major initiatives and achievements, 2022-2023

Over the past year, medical leaders within the Primary Health Care Integration Network (PHCIN) have collaborated extensively with AHS and primary care to increase understanding of key issues impacting integration, at a system level and between primary and specialty care.

Systems Foundation for Integration (IT Integration Activities)

PHCIN and the PHC Provincial Program support several high priority AHS initiatives that are focused on improving how health information flows across our healthcare system. These are mostly focused on integration—interfaces where 'bridges' between sectors are being built. These ongoing efforts involve providing support to community healthcare providers during the implementation of AHS' Connect Care program (Launches 1-6) and facilitating the implementation of Community Information Integration and Central Patient Attachment Registry (CII/CPAR) in AHS community clinics. Notably, the PHC Provincial Program is primarily responsible for the implementation of CII/CPAR in AHS' primary care clinics. We are also involved in ensuring that these new initiatives are working well with existing IT infrastructure, such as eDelivery (electronic results routing), the provincial electronic health record, and Netcare.

Both PHCIN and the PHC Provincial Program contribute to how this information is communicated to stakeholders across primary care and acute care, as well as considering the voice of the patient. We also work collaboratively with the SCNs and the Alberta Medical Association (AMA) to advocate for, and advance, initiatives designed by, and for, primary care. An example is [One:Care Path](#), a pathway and primary care/patient-developed care plan to support patients with multiple conditions.

The PHCIN and Program have also continued to support the rollout of **Connect Care** in Alberta. The work of the Connect Care Provider Bridge has included communicating with primary care providers, listening to their concerns, and coordinating a response back to address specific concerns and questions related to Connect Care. A priority piece of work has been to support family physicians with troubleshooting eDelivery of lab reports and other clinical documentation and reporting any results routing issues for efficient and effective resolution.

Linking to Specialists and Back: Alberta Surgical Initiative (ASI) Specialty Access Bundle

Work on the ASI Specialty Access Bundle is continuing with the aim to have all bundle components co-designed and implemented by the end of the 2023 fiscal year. This work is provincial in scope and aims to improve access to specialty care for patients across Alberta.

Following extensive engagement and co-design activities designed to interface with primary care, the **Facilitated Access to Specialized Treatment (FAST)** project was launched provincially in 2022 for Orthopedics and Urology. FAST is a centralized access and intake system that will help to ensure that patients are seen by the most appropriate provider in the shortest amount of time.

The [Provincial Pathways Unit \(PPU\)](#) launched in September 2022. The PPU is a shared priority between AHS Primary Health Care and the Strategic Clinical Networks that aims to promote collaboration between primary care providers, specialists, and patients in the development of clinical and patient pathways. [Alberta's Pathway Hub](#), a centralized provincial repository for all clinical, patient and referral pathways, has been under development. The first iteration of the Hub soft-launched in May 2023, with the official launch in September 2023. The coming months will provide an opportunity to test and optimize the site based on user feedback. [Learn more](#)

Alberta's Pathway Hub

Transforming Healthcare: One Pathway at a Time.



Recent pathway co-design work includes:

- Optimization of three provincial clinical pathways for Orthopedics
- Completion of provincial clinical and patient pathways for Urology in March 2023
- An in-person co-design session involving specialists, primary care providers and patients (held March 2023 in Calgary). This day launched the pathways work with General Surgery, Vascular and Gynecology and focused on the ongoing evolution of the Specialty Access Bundle.

Transitioning from Home-to-Hospital-to-Home (H2H2H): Implementing the H2H2H Guideline

The PHCIN, in collaboration with the AMA, is working with partners in both acute care and primary care to support the interfaces and implementation of the H2H2H guideline. H2H2H is being integrated into the implementation of priorities such as Connect Care, Acute Care Bundle Improvement (ACBI), and the Alberta Health-led Continuity of Care Policy, which supports principles and role clarity for AHS and Primary Care Networks to support information continuity and access. Monitoring measures are being developed to support the H2H2H transition, including Team Targets for acute care and primary care. This data will help primary and acute care play their respective parts and work to advance AHS' priority to improve patient flow. It will also provide leadership with meaningful metrics to support planning decisions.

The Transitions in Care Provincial Implementation Network (PIN)

The Transitions in Care PIN is part of the provincial Primary Care Network governance structure. Its aim is to support implementation of the H2H2H guidelines, and facilitate local customization regarding transitions in care. The PIN is a forum for teams to bring their lived experiences and commitment to quality improvement through Plan, Do, Study, Act (PDSA) trials, outcomes, data and more; learn from each other; and share knowledge and best practice. It is intended to help healthcare professionals find innovative ways to implement the recommendations in the H2H2H Transitions Guideline.

As a provincial structure, the Transitions in Care PIN aims to amplify collective impact, prevent redundancies across zones, and improve system integration between primary and acute care. In addition, it will: provide a common voice for escalation and advocacy; simplify the coordination of reporting and implementation activities; track progress through standardized dashboards; identify risks and mitigation strategies; develop change management resources; leverage IT systems like CII/CPAR, EHR, EMRs, patient and provider portals, and Connect Care; and endorse leading operational practices (LOPs) that will bring the guideline to life.

Impacts on health and care

- ▶ Improved transitions, especially from home to hospital and back to home
- ▶ Better coordinated, faster access to specialist care when appropriate, informed by clinical pathways and guidelines
- ▶ Patients, families, caregivers and community members more actively engaged with care providers and other partners to co-create innovative solutions for care coordination challenges
- ▶ Improved continuity of information and care
- ▶ Improved patient flow between acute care and primary care

Other highlights: PHCIN Virtual Patient Engagement Network (VPEN)

PHCIN continues to interface and co-design with patients and partners by including them in a variety of working groups associated with high priority initiatives, such as ASI/SAB and Transitions in Care/H2H2H. Over the past year, patient and family advisors have contributed to a diverse range of PHCIN initiatives. Several examples are highlighted in the [Year-End Engagement Summary](#) produced by the **PHCIN Virtual Patient Engagement Network**. This report recaps patient and family advisor engagement with Primary Health Care over the 2022-2023 fiscal year and showcases the diverse range of projects where patient and family advisors are impacting the transformation of Primary Health Care in Alberta.

From April 1, 2022, to March 31, 2023, the Primary Health Care Virtual Patient Engagement Network (VPEN) received 31 requests for patient and family advisor support, resulting in 25 engagement opportunities shared with members. For more information contact PHC.IntegrationNetwork@ahs.ca

PRIMARY HEALTH CARE INTEGRATION NETWORK

Grants and Publications



3

Peer-reviewed
Publications

Engagement



56

Workshops & Presentations

Outcomes and Impact

Improved access to evidence-informed clinical, patient and referral pathways via Alberta's Pathway Hub, an online, searchable repository.



\$2.5M

Research Grants



115

Research Members

50

pathways currently available on the Hub, spanning 15 health disciplines



PROVINCIAL ADDICTION & MENTAL HEALTH

Integrated Provincial Program

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Key Partners

[Addiction & Mental Health Provincial Advisory Council](#)

[Ministry of Mental Health and Addiction | Alberta.ca](#)

Strategic Clinical Networks

Major initiatives and achievements, 2022-2023

Provincial Addiction and Mental Health (PAMH) is leading a number of research initiatives that focus on service delivery and improving health outcomes and working with health and community partners. Several of these projects involve innovative models of care, including digital health services that bring care to individuals wherever they live. Others focus on inter-sectoral data sharing and enhancing analytics related to substance use and health care utilization.

Expanding research opportunities with the Virtual Opioid Dependency Program

Many individuals who live with opioid use disorder (OUD) visit emergency departments (EDs) and urgent care centres (UCCs) because of an overdose, withdrawal symptoms, or other issues related to opioid use. The Virtual Opioid Dependency Program (VODP) offers technology-delivered, same-day medication starts, opioid treatment transition service, and ongoing opioid dependency care.

Within the framework of the VODP, there are several research initiatives in the planning stages to assess the impact of treatments provided. This work supports patient care for Albertans living with opioid use disorder and aims to lessen demands on emergency services.

eMental Health services for youth and young adults

The use of eMental Health services for youth and young adults with mental health and substance use issues is being implemented and evaluated to improve quality of services and mental health outcomes of young people. The program uses measurement-based care to assess and track client outcomes, and provides apps and e-tools as additional supports to in-person care. Outcome assessment is currently underway.



The research component of this work focuses on measuring client outcomes and provider satisfaction with the tool. The aim is to empower patient-centered and recovery-oriented care. If successful, the use of this platform can provide improved and more effective care at the community level that may divert use of more costly services (inpatient and emergency) by creating opportunities for earlier intervention.

Comprehensive assessment of the Provincial Mental Health Diversion Program

This project involves a comprehensive economic assessment of the Alberta Diversion Program, which is delivered by the AHS Addiction and Mental Health team. PAMH has supported this work by providing advice during methods development and leading the ethics submission. As this is a complex project that involves data sharing between the Alberta Ministry of Justice and AHS, extensive support is required to navigate data sharing and privacy protocols. A sub-study to assess potential de-identification methods has been included in this work, led by PAMH in collaboration with researchers at the University of Calgary. This work is in the initial stages and is expected to continue through 2023-24.

Cannabis research on health system impacts of cannabis use

Cannabis use in Canada is of interest to policymakers, researchers, and clinicians due to the novelty of legalization and increased accessibility to the drug after legalization in 2018. PAMH has been highly involved in researching the health system impacts of cannabis use, as well as clinical issues related to problematic cannabis use. Our team has been at the forefront in building an evidence base for the prevalence of cannabinoid hyperemesis syndrome; in particular, looking at its burden on Alberta's emergency departments (EDs) and how this syndrome is found to be positively correlated with cannabis use disorder. This work may help inform clinical care, planning and decision making.

PAMH has also studied the impacts of cannabis legalization and its subsequent burden on the health care system in Alberta and in Canada, with particular emphasis on ED presentations and inpatient admissions. Our research found that while there was an initial increase in ED presentations during the first year of cannabis legalization, this rate has since steadied. Through our cannabis research, we have also discovered gaps in cannabis-related patient documentation (primary care and emergency care). In response, we have investigated current documentation standards and made recommendations for future data collection.

Repetitive Transcranial Magnetic Stimulation (rTMS) treatment completion

Alberta’s provincial repetitive transcranial magnetic stimulation (rTMS) program launched in 2019, and data from four sites (two in Edmonton and two in Calgary) has been monitored by the PAMH evaluation team. Prior interim reports, using data from rTMS patients who completed treatment and have admission and discharge records available, produced consistent evidence of **strong positive effects on reduced depressive symptomatology and clients’ state of health and functionality**.

In an additional examination of three years of data, rTMS treatment completion was not associated with client demographics, including age, gender, and level of education. While larger distances from treatment sites and longer travel times were associated with higher percentages of non-completion, the magnitude of these differences was small. Overall, these results indicate that there are no structural biases influencing treatment completion rates.

Other partnerships and outcome improvements

CRISM-AHS advancement of analytics in substance use

Alberta Health Services and the Canadian Research Initiative in Substance Misuse (CRISM) have held a long-standing partnership to promote innovation in analytics related to substance use and health care utilization. With the integration of the Addiction and Mental Health SCN and the Provincial Addiction and Mental Health program, the CRISM partnership now falls under PAMH Applied Research & Innovation. The long-term goal of this partnership is to support access to substance use and mental health (AMH) client data from relevant health care services and programs in AHS for researchers and to promote innovative analytic projects. Through this partnership, we are building regional capacity for AMH research and quality improvement, and are promoting innovation in data analytics related to substance use and health care utilization.

Impacts on health and care

PAMH supports many facets of addiction and mental health care to positively impact health outcomes, increase access to addition and mental health services, and address capacity through innovation and collaboration with health and community partners. Over the past year, PAMH has been actively involved in evaluating the impact of innovative care models and cannabis use on health system utilization in Alberta. The team has also secured nearly \$6 million for grant-funded research on AMH in Alberta. The vast majority of these grants have come from outside the province (CIHR).



What’s next: Actions and areas of focus

Our upcoming initiatives will be driven by the following priorities:

- ▶ Improving access to services and continuity of care
- ▶ Expanding delivery of virtual health services
- ▶ Engagement with internal and external stakeholders to advance data sharing processes that support comprehensive planning of AMH services
- ▶ Focusing on equitable service delivery for underserved populations with AMH concerns, including children and youth, and Indigenous populations

PROVINCIAL ADDICTION AND MENTAL HEALTH		
Grants and Publications	Engagement	Outcomes and Impact
<div></div> <div>31</div> <div>Peer-reviewed Publications</div>	<div></div> <div>6</div> <div>Workshops & Presentations</div>	<div>Evaluation of rTMS in Alberta showed strong positive effects in reducing symptoms of depression & improving patients’ state of health and functionality.</div> <div>No significant differences were observed based on patient age, gender, or education.</div>
<div></div> <div>\$5.9M</div> <div>Research Grants</div>	<div></div> <div>245</div> <div>Research members</div>	



PROVINCIAL SENIORS HEALTH & CONTINUING CARE

Integrated Provincial Program

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Key Partners

Zone operators

Contracted care providers

Acute Care Bundle Initiative
Stakeholders

"It's important to always involve people who you are designing the service for, and not in a token way. It's good to see this happening."

– Participant contributing to
"Measuring What Matters"

Major initiatives and achievements, 2022-2023

Provincial Seniors Health and Continuing Care (PSHCC) works with AHS zones, government and other organizations to engage and empower the seniors' health and continuing care community through planning and policy. We use research and evidence to inform health innovation and implementation planning and actions undertaken by our partners. We translate government priorities, and assist and facilitate in the implementation of provincial strategic initiatives to support Albertans.

Measuring what matters – collaborating with Imagine Citizens Network to understand what is important to older Albertans

Over the past year, PSHCC has been working on developing quality indicators aligned with the Provincial Seniors Health and Continuing Care Strategic Plan. As part of this work, we sought the perspectives of users of the healthcare system – older Albertans, their caregivers, and clients receiving continuing care services. We collaborated with the Imagine Citizens Network (ICN) to undertake a unique engagement process to discuss quality indicators from a citizen's perspective. Working with ICN allowed us to explore what is most important for older Albertans to understand and know about our work, and which of the previously identified indicators most clearly reflect their values, hopes, and expectations.

Engagement activities included 24 one-on-one, semi-structured interviews with individual citizens, six small group sessions, one large group conversation, and one large group workshop. Efforts were made to include a wide range of perspectives and participant voices, including individuals residing in supportive living, in Northern Alberta, ethno-culturally diverse individuals, and people with experiences of income insecurity.

This engagement process produced important contextual information, including overarching factors and themes that comprise participants' experiences accessing care and services in Alberta. This information is vital input for strategic planning, and reinforced the need to work on certain recurring area of concern.

It also generated end-user identified priority quality indicator areas and their associated rankings. One of the foremost findings of this work was that **quality of life was identified as the outcome to strive for, measure, and report.**

The quality indicator areas captured through this collaboration reflect the values of participating older Albertans and their caregivers. Overall, the initiative allowed the PSHCC team to engage with and learn from Albertans, ensuring that our work is patient-oriented and patient-guided.

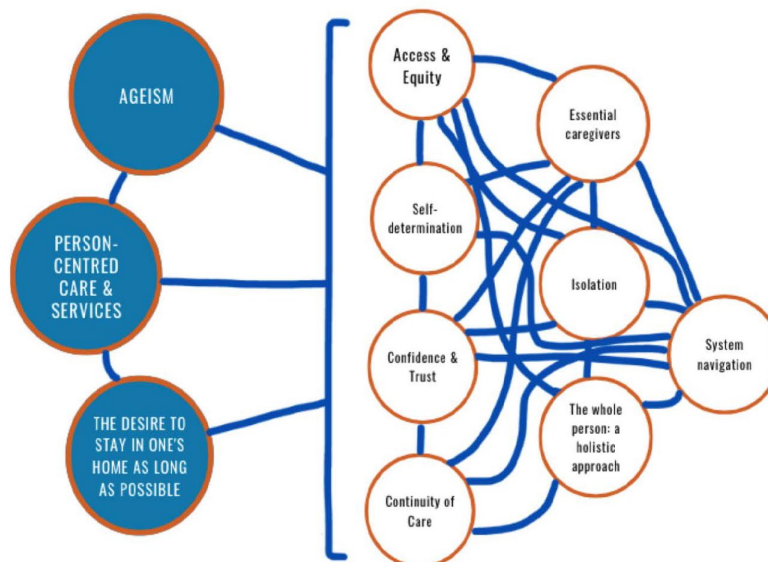


Figure 1. Measuring What Matters: Overarching factors and themes

Impacts on health and care

Rapid roll-out of Provincial PPE Safety Coaching Program in continuing care

Personal Protective Equipment (PPE) plays a vital role in the prevention and control of infections. PSHCC obtained a grant through Healthcare Excellence Canada to support the rapid roll-out of the Provincial PPE Safety Coaching Program in continuing care. This funding was used to enable staff to attend the training to become site designates and coaches. The program evaluation found that the program was well received by designates, coaches and staff in adopting facilities. A comparison of audit data, completed by the Provincial Continuing Care Audit team, demonstrated a **10% decrease in inappropriate use of PPE** following the training. The average Infection Prevention & Control (IPC) audit **risk score also improved significantly**, indicating greater compliance with IPC requirements. To date, one third of continuing care facilities in Alberta have implemented the program.

Appropriate use of antipsychotics in long-term care and designated supportive living

According to 2019 data, 1 in 5 residents in Canadian long-term care (LTC) homes is taking antipsychotic drugs without having a diagnosis of psychosis (CIHI, 2019), and this trend is increasing. In Alberta, PSHCC has continued to provide zones and care facilities with support to reduce the inappropriate use of antipsychotics. Highlights in 2022-2023 include:

- Reviewing and updating the [AUA Toolkit | Alberta Health Services](#).
- Making three revised AUA e-Learning modules available in MyLearningLink (MLL) for AHS staff, and through the [AUA Toolkit | Alberta Health Services](#) for contracted service providers'.
- Initiating qualitative research looking at potential factors that may have influenced the use of antipsychotics in LTC during the COVID-19 pandemic.
- Providing ongoing support and consultation to sites, teams, zones and organizations.

Through these efforts and those of zones and sites, **decreases in the inappropriate use of antipsychotics were observed at 29 sites** across the province in 2022-23.

Understanding social determinants of health and aging in Alberta

Following the successful James Lind Alliance Priority Setting Partnership identifying and prioritizing unmet health research questions from the perspective of older adults (article found [here](#)), the Scientific Office embarked on a project to gain older adults' views on social determinants of health that either facilitate or impede healthy aging in Alberta. The first phase of this work included the voices of 107 respondents from across the province and gathered diverse views on what affects the ability to age well.

These perspectives have informed our thinking regarding the important intersection between the health and social sectors. They also form the basis for the next phase of this work, a software-enabled sorting and ranking process that will give shape to the diverse inputs in this project and provide the basis for prioritization and planning, ensuring PSHCC's work is guided by the perspectives of older Albertans and their caregivers.



What's next: Actions and areas of focus

- ▶ Aligning with other acute care initiatives to incorporate elder-friendly care practices into the routine care of hospitalized patients
- ▶ Engaging in and informing policy and legislation development
- ▶ Focus on quality of life for residents in continuing care

PROVINCIAL SENIORS HEALTH & CONTINUING CARE

Grants and Publications		Engagement		Outcomes and Impact
	17 Peer-reviewed Publications		18 Workshops & Presentations	<ul style="list-style-type: none">• Translation and dissemination of new knowledge• Incorporation of subject matter expertise into health system change• Improvements in care and outcomes for older Albertans
	40 Active working groups		99 Research members	