

Improving How Albertans See, Think & Live

Transformational Roadmap 2020 – 2024



A Word from our Leadership Team

We are incredibly fortunate to have a diverse, engaged, knowledgeable, and forward thinking Neurosciences, Rehabilitation & Vision (NRV) community in Alberta. In its first year since launching in November 2018, the NRV Strategic Clinical Network™ has developed and strengthened connections, communication and collaboration between patient and family advisors, clinicians, researchers, administrators, government representation, and community partners from across the 5 Alberta Health Services zones.

“Improving how Albertans see, think, and live” is our mission.

Our Transformational Roadmap will guide our work from 2020-2024, through these four strategic directions:

- Improving care through research and innovation;
- Integrating care across the patient journey;
- Supporting evidence-informed decision making;
- Ensuring timely and equitable access to care.

We are excited to serve Albertans, enhancing their health and quality of life.

Sincerely,



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NRV SCN™
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Transformational Roadmap Summary

AHS VISION: Healthy Albertans. Healthy Communities. Together.

NRV SCN MISSION: Improving how Albertans see, think, and live.

Strategic Directions	Improving care through research & innovation	Integrating care across the patient journey	Supporting evidence-informed decision making	Ensuring timely & equitable access to care
Priorities	<p>Understand & improve the patient experience</p> <ul style="list-style-type: none"> Visually-impaired patients post-stroke 	<p>Develop & implement provincial clinical pathways</p> <ul style="list-style-type: none"> Diabetes eye care Pressure injury prevention Adult concussion 	<p>Determine appropriate tests & therapies</p> <ul style="list-style-type: none"> Low back pain Wound care products 	<p>Understand the gaps in equitable service delivery</p> <ul style="list-style-type: none"> Scan/audit service delivery practices
	<p>Promote a provincial rehabilitation innovation strategy</p> <ul style="list-style-type: none"> Alberta Pain Strategy Alberta Surgical initiative Rehabilitation before, during & after surgery 	<p>Improve care transitions from hospital to home</p> <ul style="list-style-type: none"> Spinal cord injury Complex chronic neurological conditions 	<p>Identify quality indicators & performance measures</p> <ul style="list-style-type: none"> Neurosciences Rehabilitation Vision 	<p>Deliver care closer to home</p> <ul style="list-style-type: none"> Identify models of care for rural communities Explore potential use of virtual health technology

PRINCIPLES	Culture of Quality	Patient & Family Centered Care	Provincial Focus	Research	Innovation & Transformation	Evidence-informed	Outcomes Focus
ENABLERS	Partnerships	Communication	Patient & Provider Education	Technology	Healthcare Equity	Implementation Science	Data & Performance Measurement

Figure 1: NRV SCN Transformational Roadmap (TRM) Summary highlights the overall plan for network activities over the next four years. Components of the TRM are described in detail in Figure 4 and in the Strategic Directions sections



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Introduction

The NRV SCN™

Strategic Clinical Networks (SCNs) improve the health of Albertans through support from a broad and diverse network of experts, including patients, clinicians, researchers and innovators.

On November 26, 2018, Alberta Health Services launched the Neurosciences, Rehabilitation and Vision Strategic Clinical Network (NRV SCN), Alberta's 16th SCN.

The NRV SCN is guided by a Core Committee comprised of:

- Patient and Family Advisors
- Researchers and Educators
- Community Partners
- Health System Operational Leaders
- Healthcare Professionals
- Industry Partners
- Policy Makers

See Appendix A for a full listing of NRV Leadership and Core Committee members.

NRV Network

Members of the Core Committee will collaborate to drive health system improvement and innovation in [neurosciences](#), [rehabilitation](#), and [vision](#).

Additional Network members will work on advisory and steering committees as well as working groups that will support the NRV SCN's focus on its specific content areas.

Neurosciences

Neurosciences includes all clinical and research activities addressing prevention and treatment of diseases, disorders, or injuries of the brain and nervous system such as:

- Brain and Spinal Cord Injury
- Parkinson's Disease
- Alzheimer's Disease
- Dementia
- Stroke
- Autoimmune diseases of the nervous system including Multiple Sclerosis



While fitting under the NRV SCN, stroke and dementia are currently championed by the Cardiovascular Health and Stroke SCN and Seniors Health SCN respectively. There are opportunities to work together with these other networks.

Rehabilitation

Activities involved with restoring individuals to health and function after illness, injury, surgery or certain disorders are included within rehabilitation. It involves skilled care and assessments provided by many health disciplines including: physiatry, nursing, and allied health.

A **Physiatrist** is a rehabilitation doctor.



Rehabilitation activities occur across the continuum of care in all health care settings including the community, primary care, acute care, and long term care.

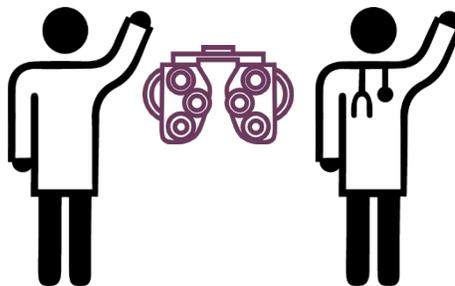
Vision

Vision includes all activities that prevent or reduce vision impairment caused by aging, infections, illness such as diabetes or stroke, injury and certain disorders. Conditions include:

- Glaucoma
- Macular Degeneration
- Diabetic Retinopathy
- Myopia/Hyperopia

Services include screening, assessment and treatment that are carried out in community and hospital settings by a team of professionals including opticians, optometrists and ophthalmologists.

A Doctor of **Optometry** is a primary health care practitioner that provides routine and urgent eye care.



An **Ophthalmologist** is a medical doctor who has specialized as an eye physician and surgeon.

The Scientific Office

The NRV SCN's work depends on research and evidence-based best practices. The NRV SCN's Scientific Office is devoted to leveraging existing knowledge and translating evidence into practice. With support from the Scientific Office, we know that our work will reflect the latest advancements in healthcare sciences, and will have the greatest impact on the quality of life of Albertans.



Building on AHS' vision of:

Healthy Albertans. Healthy Communities. Together.

The NRV SCN Core Committee developed the mission for the NRV SCN:

Improving how Albertans see, think, and live.

The Transformational Roadmap

A Transformational Roadmap (TRM) is a strategic plan to help guide the NRV SCN in achieving the AHS Vision and our NRV SCN Mission. It is a dynamic document based on an iterative process, and constant feedback from our stakeholders. This TRM is intended to guide our work over the next four years.

To identify gaps, opportunities, and to develop this TRM, the NRV SCN leadership team consulted:

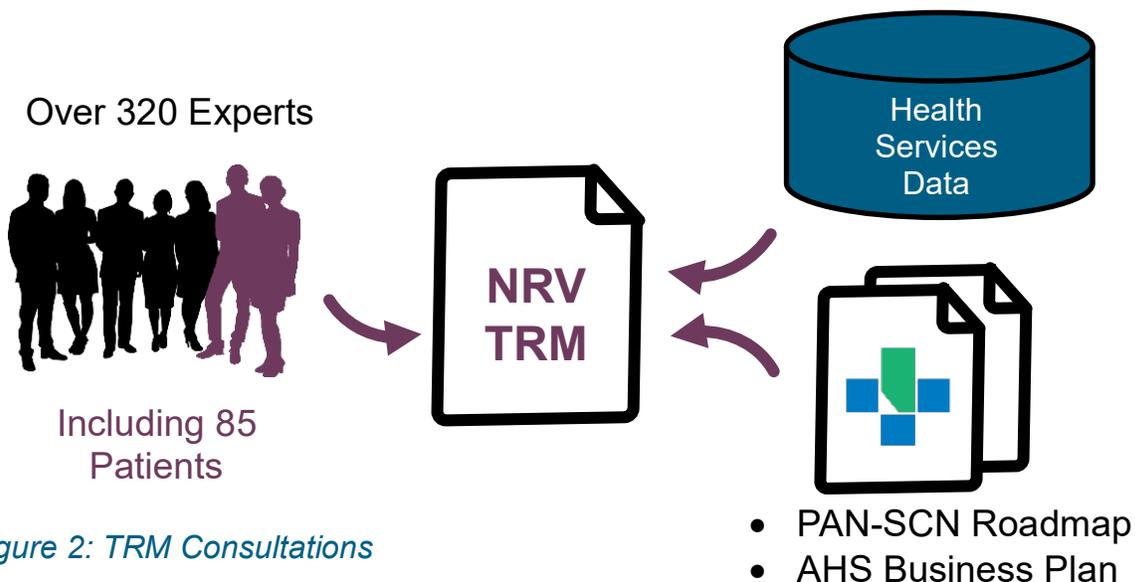


Figure 2: TRM Consultations

During this process we identified variation in practice and a need to standardize care across Alberta in all three NRV areas. Standardizing care will help ensure that all Albertans receive the right care in the place at the right time. In these 3 major clinical areas, we learned that there are no health outcome measures that are consistently used across Alberta, no consistent way of collecting or assessing health outcomes to determine how effective our health care practices are or how well our health care system is performing. We also identified healthcare innovators that are working on great ideas in their local areas but do not have the tools or capacity to spread them provincially. From these learnings our Core Committee identified four key strategic directions:

- 1. Improving care through research & innovation**
- 2. Integrating care across the patient journey**
- 3. Supporting evidence-informed decision making**
- 4. Ensuring timely & equitable access to care**



“Going forward, our roadmap has identified potential areas of transformation that include improving hospital to home transitions and creating provincial clinical pathways for NRV conditions. I am confident that the individuals involved in this network, including our group of patient and family advisors, will meet our mission to improve how Albertans see, think and live, which will enable our health system to provide better and more efficient care for Albertans.”

Jordan Vincent - Patient Advisor, Red Deer
NRV SCN Core Committee Member

Who will help us improve how Albertans see, think and live?

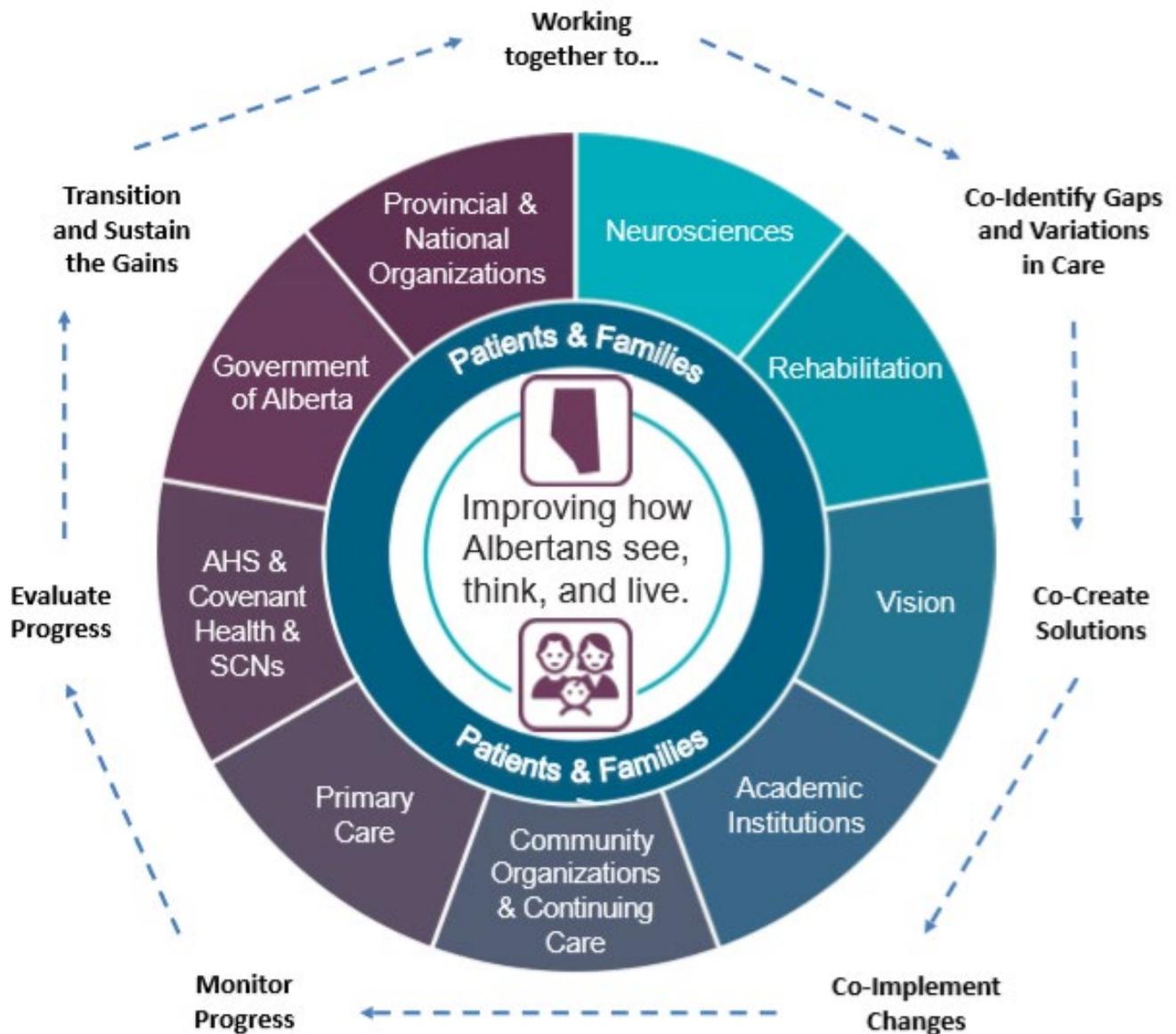


Figure 3: The NRV SCN's partners in improving how Albertans see, think, and live.

Development of the 2020-2024 TRM

An overview of the development of the NRV TRM is outlined below:

Transformational Roadmap Components

AHS VISION

NRV SCN TRM aligns with overall AHS Vision.

NRV SCN MISSION

Broadly reflects who we are, where we want to be, and how we plan to get there.

STRATEGIC DIRECTIONS

Informed by gap analysis and reflects overall plans to fulfill our vision and mission.
Captures a wide range of potential activities within a few defined areas of work.

PRIORITIES

Outlines the specificity of work within the strategic directions and reflects how we plan to achieve our mission. There are multiple priorities within each strategic direction.

OUR PLANS

Identifies specific actions, initiatives, or projects to achieve priorities.
There are multiple actions within each priority area.

How we will MEASURE SUCCESS

Broadly defines how we will measure our progress and success.
More detailed quality indicators will be developed within specific project plans.

ENABLERS

Key elements of focus to move work forward and be successful.

PRINCIPLES

Foundational guiding principles that informs how we approach our work.

Figure 4: A map of how our TRM components support the NRV's and AHS's vision

Guiding Principles

There are 7 foundational principles that guide all of our work.



Culture of Quality

We follow the Health Quality Council of Alberta's guidelines, and build quality into everything we do.



Patient and Family Centred Care

We work with patients and families to make sure the NRV SCN's work is relevant to Albertans.



Provincial Focus

We collaborate with experts from across the province, maximize the use of resources from across the province, and work to improve healthcare across the province.



Evidence-Informed Approach

We work to reduce unwarranted variation in care by using guidelines and pathways to spread best practices.



Innovation and Transformation

We value change and pushing the envelope, using innovations like new evidence, value-added devices, technology, treatments, or services to improve healthcare.



Research

We support research in Alberta, taking what we have, building on it, and using what we find to guide best practices and policy.



Outcome Focused

We design our work with the outcome in mind, and we use outcome measurement and performance feedback to make sure our work is making a difference.



Tedra Kindopp - Optometrist, The Eye Studio, Red Deer
NRV SCN Core Committee Member

“The NRV SCN is a diverse group of talented people who are focused on helping improve how Albertans see, think and live. Partnering and listening to the patient voice allows compassion to be a driving force in the work of the NRV SCN. I believe the network of those in the NRV SCN and the opportunities to partner with existing SCN’s will have a positive impact for all Albertans!”

Enablers

Our success as an SCN depends on seven key enablers:



Partnerships

We will partner with diverse groups, from patients, to medical professionals, to industry, including [Campus Alberta Neuroscience](#), [Spinal Cord Injury Alberta](#), [Workers' Compensation Board](#) and [Vision Loss Rehabilitation Alberta](#).

Where our interests align we can make the greatest impact together.



Technology

We will leverage the best technology at our disposal, and assess emerging technologies, from clinical data to new therapeutic treatments.



Communication

We will use open communication to keep others aware of the NRV SCN's activities, and also to listen to the province to find opportunities to seize.



Provider and Patient Education

We will use education to help spread NRV SCN initiatives and share knowledge.



Healthcare Equity

The NRV SCN will strive to ensure all Albertans have access to high level health care, understanding that different populations may require different levels of support.



Implementation Science

We will bridge the gap between theory and effective practice by using knowledge translation and change management.



Data & Performance Management

We will measure the outcomes of our work to confirm we did what we said we would and to measure our success.



Yoshi Okuma - Research nurse, Psychometrist, Physical Medicine & Rehabilitation, Neuroscience Program, University of Alberta, AHS, NRV SCN Core Committee Member

“There is a significant gap in knowledge translation between researchers and clinicians, and also between clinicians and patients. NRV SCN brings all stakeholders together to promote evidence-based best patient care across the province.”

Our Strategic Directions

The NRV SCN has identified four strategic directions to help focus our work over the next four years:



Figure 5: NRV SCN's Four Strategic Directions

All four strategic directions have been prioritized equally, and include addressing potential sex/gender, age, as well as race and location disparities in care and healthcare outcomes. We believe that these opportunities will allow us to meet the needs of Albertans by improving care delivery across the continuum of care.

Actionable priorities have been identified under each strategic direction (as shown in the Transformation Roadmap Summary, [Figure 1](#)). These priorities consider the needs of patients and frontline practitioners, priorities across SCNs, and reflect the opportunities within our network and the health care system as a whole.



Elaine Finseth - Associate Chief Allied Health Officer, Allied Health Professional Practice and Education, Health Professions Strategy and Practice, AHS NRV SCN Core Committee Member

“As leaders and clinicians, we see every day the impact our service has on Albertans, but struggle to translate this into why we should continue to invest in this valuable service from an economic perspective. This SCN provides hope.”

1. Improving care through research and innovation

The NRV SCN has identified three key priorities that will enable us to successfully achieve this Strategic Direction. These priorities are:

Strategic Direction 1:	Improving care through research and innovation
Priority 1	Understand and improve the patient experience
Priority 2	Promote a provincial rehabilitation innovation strategy

Strategic Direction 1:

1.1. Understand and improve the patient experience

Why is this important?

Organizational Alignment:

Understanding and improving patients' and families' experiences is one of AHS' Strategic Directions and pan-SCN priorities.



It is now one of the NRV SCN's priorities as well.

To make a difference for patients, we must first understand the patient experience. We have selected patients with visual impairment following stroke as a starting point. These patients face visual impairment and need visual rehabilitation.

Post-stroke visual impairment affects between 30% and 85% of stroke patients

(Khan et al., 2008; Rowe et al. 2019; Rowe et al. 2013)



Visual impairment in adults increases risk of falls, social isolation, and depression.

(Teutsch et al., 2016)

There are many unknowns around visual rehabilitation, including availability, effectiveness, and variation in care. This creates an opportunity for the NRV SCN to collaborate and partner with ophthalmologists, optometrists, neurologists, etc. By understanding the patient experience, and through partnerships, we will be able to identify, target, and improve gaps in vision impairment care.

Did you know?

A joint study by the Canadian National Institute for the Blind and the Canadian Ophthalmological Society (Cruess et al., 2011) reported that vision loss was associated with disability and loss of productivity costing about \$15.8 billion in 2007 (about 1.19% of Canada's gross domestic product).

Our Plans

We will work with the Alberta Vision Research Group, the Eye Institute of Alberta and members of the Cardiovascular Health & Stroke SCN's Action Plan initiative to better understand the experience of patients with vision impairment following stroke. This research will be used to:

- Build a care pathway to support patients from diagnosis to living in the community with visual impairment
- Develop a visual-rehabilitation system involving health (e.g. AHS) and social partners (e.g. Vision Loss Rehabilitation Alberta)
- Evaluate these innovations for implementation and patient outcomes

How we will Measure Success:

- ↑ Increase routine early assessment & treatment of visual impairment following stroke
- ↑ Increase patient satisfaction with health care services
- ↑ Improvement in patient reported health outcomes/experience



Andrea Lasby – Optometrist, Mission Eye Care, Calgary
NRV SCN Core Committee Member

“I recently joined the NRV SCN for the opportunity to help improve the patient experience navigating our healthcare system. Neurological disorders, traumatic brain injuries, and vision loss, can all cause a significant strain on our patients' daily lives. Patients are forced to navigate a very confusing healthcare system when care is transferred from the hospital to outpatient care. I believe our work with this SCN will improve patient pathways and improve communication between providers to ensure the best evidence-based practices are put in place.”

Strategic Direction 1:

1.2. Promote a provincial rehabilitation innovation strategy

1.2.1. Opportunities arising from the Alberta Pain Strategy

Why is this important?

There are gaps in care that can be addressed through research and innovation, knowledge translation and implementation. This will benefit both patients and the health system. The NRV SCN will work with partners including the AHS' Innovation, Evidence, and Impact



Team, and Alberta's Universities to solve these gaps. We have identified opportunities in the area of pain research, pain rehabilitation and rehabilitation for Albertans with COVID-19. In working to improve these areas we will collaborate with stakeholders and pan-SCN colleagues on the Alberta Pain Strategy and the post-COVID-19 Rehabilitation Taskforce.

Direct healthcare cost of chronic pain **\$7 billion/year** (Hogan et al., 2016)

Pain is the **most common** reason for seeking healthcare services (Todd et al., 2007)

10-30% of surgical patients report chronic post-surgical pain (Shipton, 2014b)

Much of this can be **prevented**,

but there are significant **gaps in care**.

Our Plans

- Work with the AHS Innovation, Evidence, and Impact team. Identify, test, and evaluate innovations that solve care gaps or problems related to priority projects.
- Use available resources and partnerships to generate/use evidence to implement innovations.
- Strengthen partnerships by supporting the Alberta Pain Research Network and the collaboration between Campus Alberta Neurosciences, Hotchkiss Brain Institute, and other pain researchers across Alberta. The results of that collaboration may guide pathway development.
- Establish a post-COVID-19 Rehabilitation Taskforce, in partnership with the Critical Care SCN, Cardiovascular Health and Stroke SCN, Medicine SCN, Rehabilitation Operations and Allied Health Professions Strategy and Practice.

How we will Measure Success

- ↑ Increased collaboration with innovators on testing and evaluation of promising interventions and models of care. Increased research capacity through partnerships, increasing research publications and contributing to a high performing health system.
- ↑ Increased research around pain for visually/neurologically impaired patients and the value of rehabilitation in pain management and recovery.
- ↑ Develop a coordinated and timely provincial rehabilitation approach (including provincial strategies, clinical recommendations and guidelines, and patient and family educational resources) to address and deliver the rehabilitation needs of Albertans with COVID-19 along the full continuum of care.

1.2.2. Rehabilitation in the context of the Alberta Surgical Initiative



Why is this Important?

Rehabilitation plays a critical role in a patient's surgical experience. Rehabilitation can prevent or delay the need for some types of surgery. Pre-surgery rehabilitation can help some patients achieve better surgical outcomes. Effective post-surgery rehabilitation can help a patient optimize function, maintain their quality of life, prevent future injury and reduce chronic complications. This also has a large impact on the health system. People who have successful rehabilitation require fewer follow-ups and are less likely to require additional costly procedures.

The Alberta Surgical Initiative, led by the Surgery SCN, offers a tremendous opportunity for collaboration to ensure optimal patient experience and surgical outcomes. The NRV SCN will work closely with the Surgery SCN on pre-and post-surgical management including those of the Alberta *Enhanced Recovery After Surgery (ERAS)* program to ensure rehabilitation best practices will be standardized in all Alberta hospitals.

Our Plans

- Identify health outcomes and measures to assess the effectiveness of rehabilitation services/activities.
- Inform community-based models of care to allow patients with chronic disabilities to receive rehabilitation and care closer to home versus having to travel to tertiary care centres in Edmonton or Calgary.
- Review opportunities for virtual health technology to access rehabilitation resources more equitably across the province, beginning with orthopedic surgeries and then spreading to other surgeries.
- Support the Alberta Surgical Initiative (ASI) by identifying, integrating and assessing evidence-based prehabilitation and post-surgical rehabilitation practices to inform ERAS protocols

How we will Measure Success

- ↑ Consistent use of health outcome and health system performance measures to assess effectiveness of rehabilitation services/activities.
- ↑ Improved integration of pre- and post- surgical rehabilitation practices to increase surgical capacity, reduce wait times, and avoid the need for surgery.
- ↑ Increased use of virtual health technology to access rehabilitation services remotely.



Jaynie Yang - Researcher, University of Alberta
NRV SCN Core Committee Member

"I am excited to be part of the NRV SCN, as it provides a unique opportunity for researchers to hear the perspectives of health care workers, policy makers, and most importantly, the lived experiences of people with neurological, rehabilitation and visual needs. It is also a vehicle for researchers to share with others. Together, the SCN will help ground and guide the way forward."

1.2.3. Improve understanding of the role of rehabilitation before, during and after surgery

Why is this Important?

Through the ASI, AHS aims to promote access to sustainable surgical services by improving wait times (Alberta Surgical Initiative, 2019). Rehabilitation has been identified as a key part of multi-modal care that can enhance patient outcomes and decrease length of stay (LOS) for surgical patients (Modesitt et al., 2016). The cost of, and capacity for, appropriate rehabilitation services must be considered to enhance surgical outcomes.

Nearly 14% of all Albertans have osteoarthritis, the most common indication for arthroplasty (Plotnikoff et al., 2015). Arthroplasty is the surgical reconstruction or replacement of a hip or knee joint. These patients are likely to wait three times longer than their clinically-appropriate wait time. There is a growing body of evidence on the impacts of pre- and post- arthroplasty rehabilitation on improving surgical capacity, patient satisfaction and system cost reductions.

Rehabilitation and behavioural interventions are underutilized in Alberta and internationally. When used properly, they can treat osteoarthritis and prevent the need for arthroplasty (Plotnikoff et al., 2015; Alberta Bone and Joint Health Institute, 2019).

The NRV SCN will conduct a rapid review of the evidence on arthroplasty rehabilitation among adult patients:

- a) having a condition that could lead to arthroplasty;
- b) preparing for arthroplasty;
- c) recovering from arthroplasty.

This rapid review is the first step towards supporting the ASI and AHS' planning of rehabilitation services. It will inform the full cost implications of arthroplasty, including rehabilitation costs. Alberta Health and the ASI Steering Committee endorse this work.

This project's outputs will inform:

- Comparing best-practice recommendations to existing practices in AHS
- Planning the management of arthroplasty wait times
- Informing the allocation of rehabilitation resources provincially.

Our Plans

- Conduct a rapid review to explore the scope, quality and consistency of clinical practice recommendations (CPRs) (e.g. guidelines, pathways) for rehabilitation interventions to prevent, prepare for, or post-surgically support any arthroplasty
- Support the ASI as a working group, particularly to define pre/post-surgical rehabilitation practices to inform clinical operations and contribute to further systematic understanding of Enhancing Recovery After Surgery (ERAS) protocols in novel areas
- Select and implement evidence-informed outcomes/indicators for quality improvement

How we will Measure Success

- Support the ASI and improve system capacity and AHS' planning of rehabilitation services by clarifying best practices in rehabilitation.
- Support initiatives that cost ASI complications, particularly around costs of rehabilitation and implications of preparedness for surgery, cost avoidance and shorter recovery times.
- Build on these initial findings focused on arthroplasty, as a high volume orthopedic service, to other areas (e.g. ERAS) as an ASI working group

2. Integrating care across the patient journey

The NRV SCN has identified two key priorities that will enable us to successfully achieve this Strategic Direction. These priorities are:

Strategic Direction 2:	Integrating care across the patient journey
Priority 1	Develop and implement provincial clinical pathways
Priority 2	Improve care transitions from hospital to home

Strategic Direction 2:

2.1. Develop and implement provincial clinical pathways

Conditions related to neurosciences, rehabilitation, and vision can be complex and chronic. Treatment for these conditions typically requires many different care providers over a patient’s lifespan. This can be challenging because of challenges in coordination and integration between healthcare providers. This can lead to poor patient outcomes, unsatisfactory patient and provider experiences, and increased costs to the health system, patients, families and caregivers (OAG, 2017 and Gerein, 2017). Many clinical care pathways currently do not recognize the benefit of rehabilitation in health and quality of life outcomes or potential prevention of surgical procedures.

2.1.1. Diabetes eye care clinical pathway

Why is this important?

Diabetes is one of the largest global health emergencies of the 21st century (International Diabetes Federation Atlas, 2015).

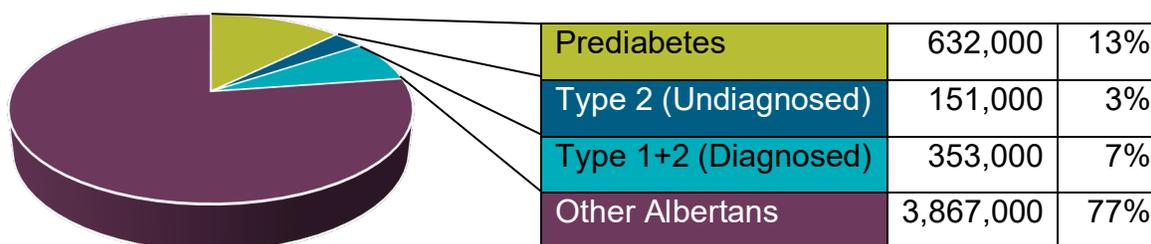


Figure 6: Diabetes in Alberta in 2019 (Diabetes Canada)

Diabetic retinopathy refers to damage to the retina by diabetes. It is asymptomatic until advanced and often goes unnoticed until vision loss occurs. Patients with both Type 1 and Type 2 diabetes are at risk for diabetic retinopathy.

Many patients do not know that they need regular eye screening exams to check for diabetic retinopathy. Patient education on the potential for eye disease is key in preventing vision loss. In Alberta, fewer than 50% of people with diabetes visit an Optometrist or Ophthalmologist each year, indicating that most are not receiving an annual diabetes eye exam (Alberta Health Services Analytics, 2019).

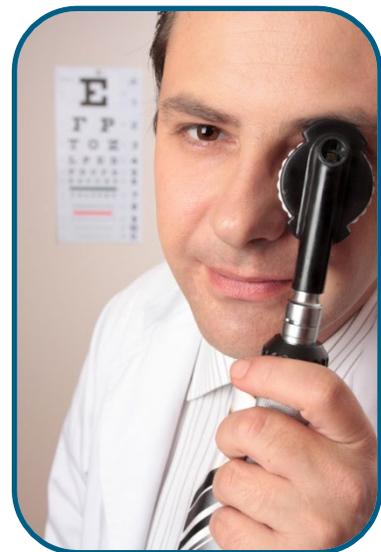
Diabetic retinopathy is the most common cause of legal blindness in people of working age

(Altomare et al., 2018)

Optimal glycemic control with regular diabetes eye exams, to screen for early detection of diabetic retinopathy, will reduce the risk of vision loss (Filiberto et al., 2018). In order to achieve these outcomes a diabetes eye care clinical pathway is being developed.

Our Plans

- Partner with Alberta’s vision care community and the Diabetes, Obesity, and Nutrition SCN (DON SCN) to create, implement and evaluate a Diabetes Eye Care Pathway. Leverage the DON SCN’s experience developing the Diabetes Foot Care Clinical Pathway.
- Use Ocular Telehealth to improve access to care, enabling Optometrists and Ophthalmologists to perform diabetes eye exams remotely.
- Improve coordination, communication and transition of care between Primary Care, Optometrists and Ophthalmologists.
- Inform Albertans living with diabetes of the importance of annual diabetes eye exams and the available coverage provided by the government.



How we will Measure Success

- ↑ Increased rates of diabetes eye exams (minimum 10% per year)
- ↓ Decreased rates of emergent surgery to prevent vision loss due to severe diabetic retinopathy



Phil Bobawsky - Patient Advisor, Calgary
NRV SCN Core Committee Member

“One in five Canadians lives with a disability, I am one of them. I have been legally blind for thirteen years now, so I was excited to learn about the Neuroscience Rehabilitation and Vision SCN and thought I need to be part of this. I hope to bring my voice as a blind patient advisor experiencing the health care system to improve the care experience for 60,000 plus Albertans living with vision loss. Being blind in a sighted designed world is challenging enough, health care needs to be an inclusive and safe environment.”

2.1.2. Pressure injury prevention in acute care

Why is this important?

Pressure injuries are an indicator for quality of care and patient safety (Canadian Patient Safety Institute, 2016).

An AHS audit of over 1000 adult patients at 4 hospitals in Calgary, identified that over 1 in 6 patients has a pressure injury, of which over 70% developed after admission to hospital. **These are largely preventable.**

1 in 6 patients has a
pressure injury



Preventing pressure injury is important both for preventing harm to the patient, as well as reducing the cost to the health care system. Treatment of pressure injuries costs from \$2,450 to \$12,648 per month per patient (Bennett, 2004). The equipment and interventions required to prevent pressure injuries are less expensive than the cost of treatment (Parslow, 2011).

Less than 11% of patients at risk may receive fully adequate prevention while in bed or in a sitting position (Vanderwee, 2011).



A multidisciplinary approach, with the patient and family as key members of the team, is required to prevent hospital acquired pressure injuries.

Our Plans

- A knowledge translation strategy will be developed to support clinical practice change in hospitals, to prevent hospital acquired pressure injuries. Change management, barriers, facilitators, audit and feedback will be used to help sustain the change.
- Leverage the work that has been completed to date by AHS provincial pressure injury prevention committee, AHS accreditation, Covenant Health pressure injury committee, Calgary Zone Safe Clinical Practice Program, and others.
- Support work on clinical pathways, decision support tools, and measurement framework for pressure injury prevention in acute and adult post-concussion care.
- Support provincial wound care steering committee, for example, using a survey to help identify gaps and opportunities.

How we will Measure Success

- ↑ Increased adoption of provincial pressure injury clinical pathway and pressure injury prevention interventions, resulting in:
 - ↓ Decrease in unwarranted variations in care based on established standards of care
 - ↑ Increased screening and reporting for pressure injuries in acute care
 - ↓ Decreased prevalence of pressure injuries in acute care

2.1.3. Early detection and management of adult concussion

Why is this important?

Concussion (or mild traumatic brain injury, (mTBI)) is a complex health issue affecting over 250,000 Canadians each year (Agius, 2019). It puts a significant burden on patients, families, and the health care system. Care for concussion needs to address early identification, treatment, and prediction of clinical outcomes. In Canada, the health care burden for concussion has increased 200% over the past five years (now estimated to top \$1B annually) (Parachute, 2017)



Beginning with an initial investment of \$1.4 million in 2016, the federal health ministries, alongside Public Health Agency of Canada (PHAC), have prioritized the development of evidence-informed pathways to inform better practice and policy surrounding concussion prevention and management (Parachute, 2017).

Due to the varied nature of concussion, there is no single course of treatment or recovery, as not all patients with concussion require all types of interventions from all providers. Assessment and treatment need to be individualized. We aim to identify the

optimal treatments for specific categories of concussion victims, and will establish evidence-informed standards to improve the quality of life for thousands of Albertans. We will also advance public/private partnerships for long-term sustainable change. Integrating health, engineering, and economics is key in creating effective solutions to the challenge of concussions.

Our Plans

- Conduct an environmental scan to better understand health service delivery and health service utilization for adult post-concussion trajectory.
- Understand and implement strategies for decreasing emergency department use for concussion diagnosis and post-concussion symptom management.
- Review standards and guidelines from other areas, modify them for use in Alberta, and implement them. For patients with persistent symptoms, or at risk of delayed recovery, promote access to appropriate and timely, coordinated, interdisciplinary and evidenced-based care.
- Leverage the experience, learnings, and relationships gained through the implementation of Maternal Newborn Child and Youth SCN (MNCY SCN) Clinical Pathway for Acute Care of Pediatric Concussion and Emergency SCN work with implementing Choosing Wisely Canada recommendations and patient-focused education for unwarranted use of diagnostic imaging for concussion.

How we will Measure Success

- ↑ Increased uptake of provincial clinical pathway for post-concussion in adults
- ↓ Decrease emergency department utilization for post-concussion care and symptom management
- ↓ Reduce diagnostic imaging utilization for concussion in the emergency department

Strategic Direction 2:

2.2. Improve care transitions from hospital to home

Transitions in care are a priority for patients and families, AHS, for SCNs, and for Accreditation Canada.

2.2.1. Spinal cord injury

Why is this important?

There are about 85,000 Canadians, including 5,200 Albertans living with a Spinal Cord Injury (SCI). In terms of health care utilization, they are:



Re-hospitalized 2.6X more often

Spend 3.3 more days in hospital



Are 2.7X more likely to have physician contact

And required 30X more home care service hours



Source: (Bakal et al., 2018)

Because of this, traumatic spinal cord injury has an estimated annual economic burden of \$2.67 billion in Canada (Bakal et al., 2018). The estimated lifetime economic burden per Canadian with SCI (depending on the complexity of their injury), ranges from \$1.5 to \$3.0 million. This is a significant burden on Canadian society (Fehlings et al., 2017; Krueger et al., 2013).

In Alberta, transitions between healthcare, community, and home are the largest gaps identified by those with SCI, healthcare providers and administrators. There is no standardized process for transitions from the SCI inpatient rehabilitation setting to the community. Existing transitions vary significantly by provider. If patients need SCI care, they are often referred back to the SCI specialists, rather than being co-managed in

their own community. If they need rehabilitation in the community, there is even less support. Rehabilitation clinicians in the community often have little SCI training and even less access to specialized SCI rehabilitation services. To address these gaps, transition processes between inpatient rehabilitation, primary care and community services are greatly needed.

Our Plans

Support the Canadian Institutes of Health Research (CIHR) funded Transitions in Care project (CONCENTRIC: A New Model for Spinal Cord Injury Care in Alberta) focused on the spinal cord injury populations in Alberta. The CONCENTRIC project plans to design, implement and evaluate an improved transitions model for people with SCI. This model will be evidence-based, implemented provincially, and guided by engaging strategic stakeholders involved in SCI care. Learnings can also be used to consider similar models for patients with other complex chronic disabilities such as brain injury or neurodegenerative conditions.

How we will Measure Success

- ↑ Improved coordination of care and patient experience with transition from hospital to home.
- ↑ Increased patient and provider knowledge of all resources/supports available in the community.
- ↓ 11% reduction reduced in re-hospitalizations, ER visits and secondary complications, and improvement in patient and provider experience and satisfaction.
 - Preliminary analysis of existing AHS data showed that an 11% reduction in emergency department utilization by Albertans with spinal cord injury would result in \$1M saved per year.

3. Supporting evidence-informed decision making

The NRV SCN has identified two key priorities that will enable us to successfully achieve this Strategic Direction. These priorities are:

Strategic Direction 3:	Supporting evidence-informed decision making
Priority 1	Determine appropriate tests and therapies
Priority 2	Identify quality indicators and performance measures



Strategic Direction 3:

3.1. Determine appropriate tests and therapies

3.1.1. Review of select low back pain/spine condition related interventions and procedures

Why is this important?

Overall, 85% of Canadians will suffer from back pain during their lifetime (Cassidy et al., 1998). The cost of low back/spine conditions is significant. In 2017-18:

- **\$27M** - 445,000 annual visits to primary care for back pain
- **\$50M** – 50,000 visits to emergency departments
- **\$16M** – 25,000 requisitions for lumbar spine MRIs
- >500,000 medical office visits annually from nearly 300,000 low back patients

Back pain is ranked as the #1 disability in the world!

Not all currently implemented interventions/procedures are supported by strong evidence. This is confusing for patients and providers, puts patients at risk, and puts a burden on Alberta's healthcare system. These interventions/procedures need to be reviewed to inform their continued use. The NRV SCN, in collaboration with the Bone & Joint SCN (BJH SCN), will further define the problem, assess evidence, and incorporate results in a low back/spine condition pathway.

Our Plans

- Partner with Bone and Joint Health SCN to identify appropriate & effective low back pain interventional treatments.
- Conduct a Health Evidence Review to examine the types of interventions/procedures currently used in Alberta, how often they are used, and other related information.
- Review evidence on relevant interventions and procedures for their appropriateness and effectiveness with a team of patient advisors and clinical experts.
- Develop criteria to help clinicians and patients make informed decisions.

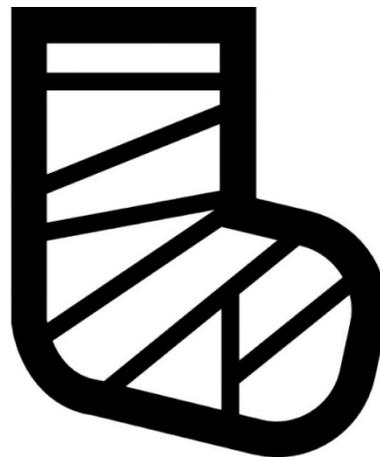
How we will Measure Success

- ↓ Decrease duplicated tests and therapies, and reduce of use of ineffective tests and therapies. Measure pre/post rates of interventions/procedures based on the results of the health evidence review. Specific reduction rates and timelines will be developed for interventions/procedures that are ineffective, have a high cost to benefit ratio, or increased risk.
- ↑ Improvement in patient health outcomes including a reduction in pain and increase in mobility.
- ↓ Decrease unnecessary costs to health care system.
- ↑ Increase patient and provider satisfaction.

3.1.2. Wound care products

Why is this important?

Wound care in Alberta is inconsistent. It is not standardized across the province and this has resulted in unwarranted practice variation in care for patients with wounds. Providers do not always have a clear understanding of when to refer a patient to a wound care specialist. There is also inconsistent use of specialty wound care products across the province, often driving up the cost of care but not necessarily the quality of care. While vendors currently provide education on their specific products there is no standardized education to focus on the assessment of wounds. Wound care inconsistencies occur in acute care, across the continuum of care, home care, and long term care.



These variances highlight an opportunity to improve care while reducing costs.

Our Plans

We plan on taking a multi-faceted approach to ensure patients receive appropriate wound care while reducing costs.

- Perform a provincial survey to identify gaps, and define the extent and scope of the problem.
- Assist with standardizing processes around:
 - Supply ordering for wound care.

- The use of consumable dressing supplies for Negative Pressure Wound Therapy, as well as the machine purchase/rental.
- Appropriate use of silver embedded dressings.

How we will Measure Success

- Standardize wound care processes.
- Consistent evidence-based wound care practices across the province and across different areas of care (e.g. acute care, community care, continuing care)
- ↑ Improved patient experience.
- ↓ Reduction in infection rates, occupational therapy visits, and hospital admission.
- ↑ More cost effective utilization of wound care products.



Denise Santoni - Director of Allied Health, South Zone NRV SCN Core Committee Member

“Having worked as a sole-charge therapist in the remote north of Alberta, I know firsthand what it feels like to be disconnected from a larger clinical community, answering to questions from other health professions about why you are doing what you are doing, and beginning to question your own professional judgement. For me, the NRV SCN provides an opportunity to support every clinician in every corner of the province with evidence informed, current best practices that have been vetted by the experts in the field. It also provides the opportunity to have Rehabilitation ideas and issues included at the broader planning tables at AHS.”

Strategic Direction 3:

3.2. Identify quality indicators and performance measures

Why is this important?

Indicators can be used to measure progress against set targets or goals. This helps to demonstrate if specific interventions are effective and if healthcare in Alberta is improving. In the areas of neurosciences, rehabilitation, and vision there are no indicators that are standardized and consistently used across the province. There is also no system to support outcome measure reporting, and evaluation within community rehabilitation services. This has created an opportunity to build upon existing clinical guidelines and indicators to create metrics specifically suited for Alberta's populations.

Meaningful quality indicators allow clinicians and hospital staff to make informed decisions to improve quality of care. In addition, being able to monitor and analyze clinical data allows clinicians and clinical operations to understand where programs are working, and where they need improvement.

Our Plans

- Develop and implement a core set of indicators based on a review of relevant internationally recognized and recommended health outcome measures and health system performance measures for Neurosciences, Rehabilitation & Vision.

How we will Measure Success

- Consensus on a list of key health outcomes and health system performance metrics in Neurosciences, Rehabilitation and Vision that will be consistently used across the province to assess patient health outcomes and system impacts.

4. Ensuring timely and equitable access to care

The NRV SCN has identified two key priorities that will enable us to successfully achieve this Strategic Direction. These priorities are:

Strategic Direction 4:	Ensuring timely and equitable access to care
Priority 1	Understand the gaps in equitable service delivery
Priority 2	Deliver care closer to home

Strategic Direction 4:

4.1. Understand the gaps in equitable service delivery

Why is this important?

There are regional variations and a lack of provincial structure for many NRV services across Alberta. Most neuroscience services are provided in major tertiary care centres in Calgary and Edmonton. Rehabilitative care is offered in tertiary centres, regional health care facilities and in the community, whereas vision care is offered through some health care facilities but mostly in the community (OAG, 2017 and Gerein, 2017). Moreover socioeconomic disparities and issues surrounding Indigenous peoples' health may hinder equitable access to care (Canadian Physiotherapy Association, 2014).

Many current clinical care pathways do not recognize the potential value or benefit of rehabilitation in health and quality of life outcomes or potential prevention of surgical procedures. The NRV SCN activities will highlight the importance of Albertans having access to rehabilitation and its positive impact on patient outcomes.



Our Plans

It is expected that there are gaps in delivery across the NRV areas. With every clinical pathway project the NRV SCN undertakes, an environmental scan will be conducted to understand the current service delivery practices in order to better identify where the current gaps and opportunities exist, for example:

- **Diabetes eye care:** Through this pathway work we are learning about the current service delivery gaps in diabetes eye care in Alberta. As a result, we are identifying innovative opportunities to equitable service delivery, while focusing on improving patient outcomes for individuals living with diabetes. We plan to increase the awareness, coordination of care and rate of screening for diabetic retinopathy, decreasing the rate of complications. We also aim to have the right care delivered by the appropriate clinician at the right time.
- **Experience of visually-impaired patients post-stroke:** The outcomes of this research project will help inform the gaps in equitable service delivery for patients who have visual impairments and opportunities to improve these patient experiences moving forward.

How we will Measure Success

- Develop a clear understanding of the current service delivery practices.
- Identify where the current gaps and opportunities exist.





Chris Taylor - Coordinator, Slave Lake Family Care Clinic, Alberta Health Services, NRV SCN Core Committee Member

Dalique van der Nest - Executive Director, Allied Health, North Zone, Alberta Health Services, NRV SCN Core Committee Member

Johan van der Nest - Manager, Slave Lake Family Care Clinic, Alberta Health Services, NRV SCN Core Committee Member

“From a North Zone perspective it is encouraging to see how the Mission of the NRV SCN (Improve how Albertans see, think and live) aligns with the provincial Rehabilitation Conceptual Framework (Function for Meaningful Living) & Strategic Plan. Collectively we need to advocate for and enhance the system foundations for rehabilitation in the province by collaborating in knowledge research, innovation and service planning in order to get us to a place where all Albertans (including those living in our rural, Northern communities) can receive more integrated (seamless), timely and equitable services. We are particularly excited to be involved in the CIHR Transitions in Care project and cannot wait to see what experience and functional outcome impact the “CONCENTRIC Model” will have on our local SCI patients & families as well as our care teams.”

Strategic Direction 4: 4.2. Deliver care closer to home

Why is this important?

Alberta covers a large geographical area with ~19% of people living outside of the urban centres (StatCan Population Estimates, 2019). When care is primarily delivered in the urban tertiary care centres, many people are either unable to access it, or are forced to incur large costs (ex. time, travel, loss of work) to receive it. Travelling for care can also be dangerous in poor weather, and increase the risk of developing secondary complications (ex. increased pressure injuries for people with spinal cord injury). These conditions may disproportionately impact older individuals, and those who experience financial challenges, frailty or are family caregivers. Delivering appropriate and timely care to people closer to home is necessary to ensuring equitable service delivery for all Albertans.

Delivering care closer to home is a priority for AHS and the SCNs.



Our Plans

Our learnings from the fore-mentioned environmental scans will inform us of the current gaps in equitable service delivery in Alberta. They will also identify opportunities to promote and deliver equitable care closer to home, independent of social, economic, geographic, and demographic factors.

How we will Measure Success

- Leverage learnings from environmental scans to deliver care closer to home, potentially through:
 - **Models of Care:** A key outcome of the above-mentioned CONCENTRIC project will be to develop a model of care for people living with a spinal cord injury in Alberta. Once established, this model could be scaled up and spread out to other complex chronic neurological conditions such as multiple sclerosis. Ideally, these models will provide tools and resources to improve transitions from hospital to home, but also to bring care closer to home once individuals have returned to community living.
 - **Virtual Care:** The increased use of virtual care for the NRV patient populations has been identified as an opportunity to bring care closer to home. Virtual care could be used for consultations, follow-up discussions, rehabilitation, and education. Specifically, the NRV SCN, Allied Health Professional Practice & Education Team, and Allied Health Zone Operations, in partnership with Health Link, collaborated on an identified key priority, resulting in the launch of the Rehabilitation Advice Line (RAL) in June 2020. The RAL is now available to Albertans for self-management advice and support to find rehabilitation services for injuries, orthopedic surgery, neurological conditions and post-COVID-19 recovery. The NRV SCN will support the evaluation of the RAL to determine feasibility over the longer term and identify operational changes/enhancements to ensure optimal use and effectiveness.



Karim F. Damji - Chair, Ophthalmology and Visual Sciences, University of Alberta, NRV SCN Core Committee Member

"I love being part of this SCN as it brings together key stakeholders and partners to design and test solutions that are in the best interest of patients, providers and the health system! One example is the diabetes eye care pathway that we are developing where the NRV SCN is collaborating with the DON SCN."

Help us make a difference!

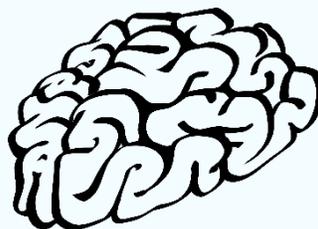
You've read the NRV SCN's transformational roadmap, so you know there is a lot of work to be done to improve care for Albertans. We are always looking for ideas, volunteers, and people who want to contribute. If you are interested in making a difference in how Albertans See, Think, and Live, contact us at: NRV.SCN@ahs.ca.

The NRV SCN:

Improving how Albertans



See



Think



Live

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Glossary

Term	Definition
Arthroplasty	The surgical reconstruction or replacement of a joint.
Best practice	Systematically developed statements of recommended practice in a specific clinical or healthy work environment area, that are based on best evidence, and are designed to provide direction to practitioners and managers in their clinical and management decision-making.
Care transitions	The movement of patients between one care setting or care provider and another.
Campus Alberta Neuroscience (CAN)	Was established by the Alberta neuroscience community in 2012 with support from the Government of Alberta to accelerate understanding of the brain, improve brain health through collaboration, develop the province as a centre of neuroscience excellence, and improve quality of life in Alberta and beyond. https://www.albertaneuro.ca/
Canadian Institute for Health Information (CIHI)	Is an independent, not-for-profit organization that provides essential information on Canada's health system and the health of Canadians.
Canadian Institutes for Health Research (CIHR)	Canada's federal funding agency for health research. Composed of 13 Institutes, CIHR collaborates with partners and researchers to support the discoveries and innovations that improve our health and strengthen our health care system. https://cihr-irsc.gc.ca/e/193.html
Change management	Change management is the process, tools, and techniques to manage the people side of change to achieve the required business outcome. Change management incorporates the organizational tools that can be utilized to help individuals make successful personal transitions resulting in the adoption and realization of change.
Chronic	Having an illness persisting for a long time or constantly recurring.
Clinical pathway	A description of evidence informed, clinician recommended interdisciplinary care to help a patient with a specific health condition or concern move progressively toward optimal health outcomes.

Term	Definition
Clinician	A physician or other health care provider who is involved in the treatment and observation of patients, as distinguished from one engaged in research.
Collaborate / collaborating / collaborative	Occurs when multiple health care providers from different professional backgrounds provide comprehensive services by working with patients, their families, carers and communities to deliver the highest quality of care across settings.
CONCENTRIC	CONnecting and Coordinating an Enhanced Network for TRansitions in Care (CONCENTRIC): A New Model for Spinal Cord Injury Care in Alberta
Connect Care	A province-wide software implementation unifying AHS clinical software systems.
Continuum	The delivery of services across sectors by different healthcare providers in a coherent, logical, and timely fashion.
Diabetes eye care pathway	A clinical pathway to help guide and standardize care for diabetic eye care. The goal of the pathway is to improve early detection and treatment of Diabetic Retinopathy, thereby reducing its incidence and severity and potential decline into blindness.
Equitable / equity / equitable access	Every Albertan must have equal access to health care, based primarily on medical need, no matter who they are, what they do or where they live.
Evidence-informed	Using evidence to identify the potential benefits, harms and costs of any intervention and also acknowledging that what works in one context may not be appropriate or feasible in another.
Hotchkiss Brain Institute (HBI)	An internationally recognized centre of excellence in brain and mental health research and education, based at the University of Calgary's Cumming School of Medicine and working in partnership with Alberta Health Services. https://hbi.ucalgary.ca/about/bi
Health Quality Council of Alberta (HQCA)	A provincial agency that pursues opportunities to improve patient safety and health service quality for Albertans.
Health Technology Assessment	The systematic evaluation of available or upcoming health technologies, considering economics, social impact, etc.

Term	Definition
Innovate / innovation	A device, drug, technique, method, system or a service procured from outside an organization or developed within, with ideally clear evidence of its added value over existing approaches.
Integrated / integrating care / health	A concept bringing together inputs, delivery, management and organization of services related to diagnosis, treatment, care, rehabilitation and health promotion. Integration is a means to improve services in relation to access, quality, user satisfaction and efficiency.
Knowledge translation	A dynamic and iterative process that includes the synthesis, dissemination, exchange and ethically sound application of knowledge to improve health, provide more effective health services and products, and strengthen the health care system.
Metrics	Measures of quantitative assessment commonly used for comparing, and tracking performance or production.
Model(s) of care	Broadly defines the way health services are delivered. It outlines best practice care and services for a person, population group or patient cohort as they progress through the stages of a condition, injury or event.
Multidisciplinary	Combining or involving several academic disciplines or professional specializations in an approach to a topic or problem.
Neurosciences	A multidisciplinary science that is concerned with the study of the structure and function of the nervous system.
Neuroscience and Mental Health Institute (NMHI)	A University of Alberta translational science institute whose goal is to foster research collaborations and partnerships across the academic and health care systems in order to help facilitate the translation of research into better health care. https://www.ualberta.ca/neuroscience-and-mental-health-institute/index.html
Ophthalmology/Ophthalmologist	A branch or medicine and surgery which deals with the diagnosis and treatment of eye disorders. An ophthalmologist is a specialist in ophthalmology.

Term	Definition
Optometry/Optommetrist	A health care profession that involves examining the eyes and applicable visual systems for defects or abnormalities as well as the correction of refractive error with glasses or contact lenses. Optometrists are health care professionals who provide primary eye care through refractions and comprehensive eye examinations to detect and treat various vision abnormalities and eye diseases.
Pan-SCN	Concepts or initiatives that are applicable or of interest to multiple Strategic Clinical Networks.
Patient and family advisors	Individuals with healthcare experience as a patient or family member who volunteer not only their time, but also their experiences within the health system, their insights, leadership and passions. They partner with AHS to co-create the healthcare system changes.
Patient and family centered care (PFCC)	Patient- and family-centered care is an approach to the planning, delivery, and evaluation of health care that is grounded in mutually beneficial partnerships among health care providers, patients, and families. It redefines the relationships in health care. It leads to better health outcomes and wiser allocation of resources, and greater patient and family satisfaction.
Performance Measures / Measurement	Regular measurement of outcomes and results, which generates reliable data on the effectiveness and efficiency of programs.
PRIHS	Partnership for Research and Innovation in the Health System (PRIHS) is a program designed to support AHS SCNs as nodes of research and innovation.
Primary Care	The day-to-day healthcare given by a healthcare provider. Typically this provider acts as the first contact and principal point of continuing care for patients within a healthcare system, and coordinates other specialist care that the patient may need.
Quality	The Health Quality Council of Alberta (HQCA) defines quality within the Alberta Quality Matrix for Health framework, which includes six quality dimensions: 1. Acceptability 2. Accessibility 3. Appropriateness 4. Effectiveness 5. Efficiency 6. Safety.
Quality improvement	A continuous process which includes identifying issues and opportunities, applying well thought out and often innovative solutions and then learning from the process and resulting outcomes.

Term	Definition
Quality indicator(s) (QIs)	Evidence-based and are used to identify variations in the quality of healthcare provided on both an inpatient and outpatient basis. QIs are organized into Prevention, Inpatient, Patient Safety and Pediatric.
Quantitative	Relating to, measuring, or measured by the quantity (amount) of something rather than its quality.
Rehabilitation	Therapy to regain or improve function that has been lost or diminished.
Strategic Clinical Networks (SCNs)	Networks developed by Alberta Health Services comprised of people who are passionate and knowledgeable about specific areas of health, challenging them to find new and innovative ways of delivering care that will provide better quality, better outcomes and better value for every Albertan.
Strategic Directions	Determine the long range direction of the NRV SCN based on their mission and vision. Each strategic direction's name reflects what the NRV SCN wants to change in order to better meet their mission and help resolve strategic targets identified through stakeholder consultation and engagement.
Sustainability	Incorporation of measures intended to ensure the ongoing maintenance of initiatives once project funding has ended.
Transformational Roadmap (TRM)	The strategic plan of a Strategic Clinical Network that outlines how they will transform health care over a three year time period. Includes vision and mission statements, foundational principles, and strategic pillars with corresponding priorities.
Virtual Care	Virtual care (telehealth) is the delivery of health-related services and information via a myriad of technology solutions.
Visual impairment / vision impairment / vision loss	Decreased ability to see to a degree that causes problems not fixable by usual means, such as glasses.
Vision Loss Rehabilitation Alberta	An independent healthcare service provider funded by the Government of Alberta and is the province's leading provider of rehabilitation therapy for people with vision loss. https://ab.visionlossrehab.ca/en

Appendix A: NRV SCN Leadership and Core Committee Membership

Leadership Team	
Petra O'Connell	Senior Provincial Director
Chester Ho	Senior Medical Director
Selvi Sinnadurai	Executive Director
Nicole McKenzie	Manager
Elisavet Papathanassoglou	Scientific Director
Kiran Pohar Manhas	Assistant Scientific Director
Glenda Moore	Senior Consultant

Core Committee Members	
Adalberto (Beto) Loyola-Sanchez	Physician and Assistant Professor, Division of Physical Medicine & Rehabilitation, UofA
Amanda Weiss	Executive Director, Cardiac Sciences, Clinical Neurosciences and Neuro Rehab, FMC
Amin Kherani	Physician, Ophthalmology, Calgary
Anthony Goodwin	Unit Manager, Halvar Jonson Centre for Brain Injury, Central Zone
Audrey Martyn	Patient and Family Advisor, Edmonton
Andrea Lasby	Optometrist, Primary Care, Mission Eye Care, Calgary Adjunct Professor, University of Waterloo Optometry & Vision Science
Bettina Lott	Physician, Primary Care, Edmonton
Catherine Hill	Acting Senior Operating Officer, GRH
Chris Hanson	Physician, Ophthalmology, Calgary
Chris Taylor	Coordinator, Slave Lake Family Care Clinic, North Zone
Dalique van der Nest	Executive Director, Allied Health, North Zone
Denise Santoni	Director, Allied Health, South Zone
Donna Davies	Professional Practice Lead, Physical Therapy, Central Zone
Doug Zochodne	Physician and Director, Division of Neurology, and Director (Applied Research), Neuroscience and Mental Health Institute, Edmonton

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Core Committee Members	
Elaine Finseth	Associate Chief Allied Health Officer, Health Professions Strategy and Practice, AHS
Fiona Costello	Physician, Associate Professor, Clinical Neurosciences and Surgery (Ophthalmology), UofC
Gloria Keays	Physician and Medical Officer of Population Health, and Assistant Professor, Division of Preventative Medicine, UofA
Grant McIntyre	Executive Director, Campus Alberta Neuroscience
Henry Tonkin	Patient and Family Advisor, Calgary
Isabel Henderson	Executive Director, Special Projects, AHS
Janis Miyasaki	Physician and Professor, Medicine and Neurology, UofA
Jaynie Yang	Professor, Physical Therapy, UofA
Jennifer Dotchin	Executive Director, Interim, Campus Alberta Neuroscience
Jim Raso	Senior Consultant, Research & Technology Development, GRH
Johan van der Nest	Manager, Slave Lake Family Care Clinic, North Zone
John Andersen	Physician and Associate Professor, Co-Facility Chief, Pediatrics, Child Health, UofA/ GRH
Jordan Vincent	Patient and Family Advisor, Red Deer
Karen Lundgard	Physician and Associate Zone Medical Director, North Zone
Karim Damji	Physician and Chair and Clinical Section Head, Ophthalmology, UofA
Kasey Aiello	Patient Liaison, Neurorehabilitation Program, FMC
Kate Murie	Director, Health Evidence and Policy Unit, Alberta Health
Kim Kostiuik	Executive Director, Ambulatory Care, Emergency, Endoscopy and Ophthalmology, Edmonton
Kuen Tang	Patient and Family Advisor, Edmonton
Lara Cooke	Physician, Section Head of Neurology and Professor, Clinical Neurosciences, UofC
Laurie Reid	Manager, Rehabilitation Med, IV Clinic and The Centre for Diabetes Care, Covenant Health, Edmonton
Lisa Warner	Director, Community Rehabilitation, Allied Health Professional Practice Education, HPSP, AHS
Luanne Metz	Physician and Professor, Clinical Neurosciences, UofC
Magda Mouneimne	Quality Lead, Neurorehabilitation Program, FMC
Matthew Kay	Manager, Rehabilitation Services, Vision Loss Rehabilitation Alberta

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Core Committee Members	
Matthew (Matt) Wheatley	Physician and Associate Professor and Clinical Head Neuroscience, Division of Neurosurgery, UofA
Ming Chan	Physician and Professor, Division of Physical Medicine and Rehab, UofA
Natalie (Fenske) Ardiel	Clinical Nurse Educator, Surgery, RAH
Olle Lagerquist	Chief Executive Officer, Spinal Cord Injury Alberta, Edmonton
Phil Bobawsky	Patient and Family Advisor, Calgary
Rebecca Charbonneau	Physician and Assistant Professor, Clinical Neurosciences, UofC
Rick Miller	Licensed Optician and Contact Lens Practitioner, Calgary
Robert Sutherland	Professor and Chair and Director, Canadian Centre for Behavioral Neuroscience, UofL
Steve Casha	Physician and Head of the Division of Neurosurgery and Associate Professor, UofC
Susan Reader	Executive Director, Surgical Services and Allied Health, RGH
Tara Vandertoorn	Patient and Family Advisor, Calgary
Tedra Kindopp	Physician, Optometry, Red Deer
Teren Clarke	Patient and Family Advisor, Edmonton
Tyson Brust	Physician & Clinical Assistant Professor, Neurology, UofC
Vivek Mehta	Physician and Division Director of Neurosurgery and Professor, Division of Neurosurgery, UofA
Yoshino Okuma	Research Nurse, Physical Medicine and Rehab, GRH

SUPPORTING MEMBERS	
Allan Ryan	Director, Clinical Analytics, AHS
Arianna Waye	Health Economist, System Innovation & Programs, AHS
Jennifer Ocloo	Manager, Business Advisory Services, AHS
Natasha McGuire	Senior Analyst, Clinical Analytics, Analytics (DIMR), AHS
Niall Emmott	Communications Advisor, Provincial Programs, AHS
Rachael Erdmann	Analyst, Innovation, Evidence and Impact, AHS
Nicki Kirlin (covering for Susan Sobey-Fawcett while on leave)	Senior Planner, Planning and Performance, AHS