

Diabetes, Obesity and Nutrition
Strategic Clinical Network™

Transforming care & empowering Albertans to be healthy & well

Transformational Roadmap 2022-2026



**Alberta Health
Services**

**Inspiring solutions.
Together.**

Strategic Clinical
Networks™

February 2022

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The Diabetes, Obesity & Nutrition Story: Who Have We Impacted?

*"I was really happy that the health care team knew what an insulin pump was, and supported me to continue to use my pump while I had my surgery. It is reassuring to know **AHS has policies in place for staff to support patients with diabetes** to keep their blood sugars in target while in hospital."*

- Patient who lives with Type 1 Diabetes Mellitus

*The diabetes foot care clinical pathway has been an invaluable resource in providing **accurate screening and risk assessment in primary care**. The foot screening tool is comprehensive and promotes consistency for foot exams and action plans.*

- Primary Care Nurse

*"The DON SCN was instrumental in helping us secure grant funding for our project: "Empowering food insecure Albertans to manage their diabetes through a subsidized healthy food prescription program". DON helped us **develop a partnership to ensure the longer-term sustainability** of our project. They continue to provide invaluable support as our research progresses in helping us navigate challenging issues."*

- Research Scientist

*"The Bariatric Friendly Hospital Initiative was such a great project to be a part of as it made a **positive impact in both the lives of patients and staff**. I'm approached almost weekly by many multidisciplinary staff members asking for more information about bariatric equipment/supplies so they can better assist their patients. The DON SCN has been **instrumental in keeping this project constantly moving forward**. I don't believe it would have been as successful as it has been if they weren't involved. They had access to resources and people that they willingly shared with us to ensure the project was the best it could be.*

- Clinical Nurse Educator in South Zone

*"The partnership between the DON SCN and Provincial Nutrition and Food Services has been **a recipe for moving health and nutrition of Albertans forward**. We have been able to tap into the collective expertise, connections and communications strategies to discuss the importance of nutrition and to identify opportunities to reduce the risk of malnutrition in Albertans."*

- Director in AHS Nutrition and Food Services



A Word from our Leadership Team

We are proud of our achievements as a Strategic Clinical Network (SCN) and grateful to our members and partners for their ongoing help and encouragement. Over the past four years, we accomplished:

- Successful implementation of Hospital Glycemic Management protocols in over 95% of Alberta hospitals and early adoption in the provincial Connect Care clinical information system.
- Publication of a return-on-investment study that showed that early diabetic foot screening and intervention in primary care does make a significant difference to patients and the health care system.
- The Bariatric Friendly Hospital Initiative resulted in improvements for patients living with obesity and for providers caring for patients living with obesity.
- The launch of Diabetes Infrastructure for Surveillance, Evaluation & Research (DISER), the first of its kind in Canada, which greatly enhances our ability to identify opportunities for improvement in diabetes care and evaluate proposed solutions.
- Our partnership efforts include: supporting Alberta Health Services (AHS) Nutrition & Food Services to address malnutrition among seniors, implementing the virtual Diabetes Prevention Program (vDPP) with Alberta Blue Cross and primary care, and co-designing the Diabetes Eye Care Clinical Pathway for primary care with the Neurosciences, Rehabilitation & Vision SCN.

In reflecting on the past, the current state, and looking ahead we see both tremendous need and opportunity for continuing our leadership in the areas of diabetes, obesity and nutrition. The COVID-19 pandemic has provided impetus and learnings for virtual health care delivery transformation. Technological advances have made better outcomes and greater autonomy in diabetes and obesity management a reality for many patients. One hundred years after the discovery of insulin, 2021 will see royal assent of Bill C-257 that mandates the development of a national framework to “*support improved access for Canadians to diabetes prevention and treatment*”. Updated Canadian Obesity Guidelines and the launch of the Canadian Malnutrition Taskforce mean our partnership efforts will expand to national leadership and collaboration – for the benefit of Albertans. The residential school tragedies coming to light in Canada have highlighted long-term negative effects on the health outcomes of Indigenous peoples in Alberta. As we deepen our understanding of the needs of Indigenous communities, we will work in partnership to co-design culturally appropriate healing and wellness approaches to help address inequities in health outcomes and effects of multi-generational trauma.

Collectively, these parameters set the course for the next phase of our transformational journey. We look forward, with optimism and excitement, to lead and support new

endeavors over the next three years that will improve the care and lives of Albertans with emphasis on:

- (1) Creating strategies to deploy new technologies and optimizing virtual care options that realize better health outcomes and reduced health system utilization.
- (2) Leading the development and implementation of national guidelines, such as the Canadian Adult Obesity Clinical Practice Guidelines, upcoming Canadian Pediatric Obesity Clinical Practice Guidelines, and Bill C-257.
- (3) Prioritizing prevention of chronic disease & related complications, such as diabetes, child & adolescent obesity, and malnutrition.
- (4) Transforming care delivery by co-designing solutions with Indigenous leaders and communities to bring harmony in care between traditional and western approaches and support individuals to live a good life with diseases, such as diabetes.



**ACTING SENIOR
PROVINCIAL
DIRECTOR**
LENE JORGENSEN

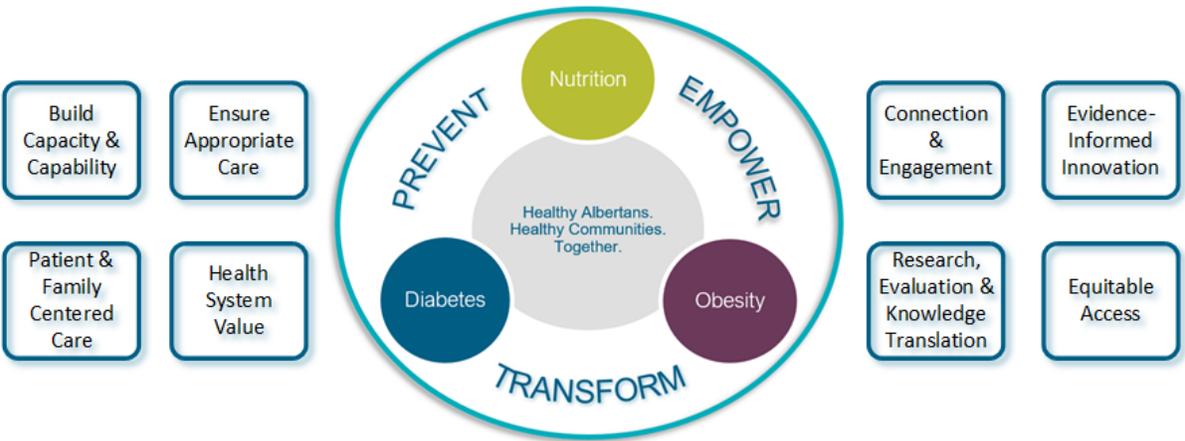


**SENIOR MEDICAL
DIRECTOR**
DR. PETER SARGIOUS

Diabetes, Obesity & Nutrition (DON) Strategic Clinical Network™ Transformational Roadmap Summary 2022-2026

DON Vision Transforming care & empowering Albertans to be healthy & well.

DON Mission To build a patient centred health care system that prevents the onset and complications of diabetes, obesity and malnutrition.



Embedded in all strategic priorities, we will focus on:

- Virtual Care
- Primary & Community Care



2022-2026 Strategic Priorities:

- Diabetes**
- Prevent diabetes in the community:
 - Virtual Diabetes Prevention Program
 - Diabetes Eye & Foot Care Clinical Pathways
 - Facilitate transformation of diabetes management

- Obesity**
- Improve the care & experience of patients living with obesity
 - Collaborate with primary care partners to identify opportunities for obesity prevention & management

- Nutrition**
- Improve nutrition transitions of care
 - Decrease risk of malnutrition for seniors in the community

- Scientific Office**
- Use Diabetes Infrastructure for Surveillance, Evaluation and Research (DISER) to:
 - Inform & identify gaps in diabetes care in Alberta
 - Build new collaborative partnerships with researchers in Alberta & Canada
 - Evaluate effectiveness of diabetes interventions in hospital & community

Celebrating our Successes

As we look into the future, we celebrate many successes from our past TRMs:

To date, over 2,600 AHS workers have completed the online courses

Obesity

- Standards and guidelines for care of bariatric patients in hospital developed
- Education and implementation tools developed to support hospitals to become bariatric friendly
- Obesity education modules for AHS staff developed
- Bariatric Friendly Hospital Initiative implemented at Medicine Hat Regional Hospital to improve patient safety and promote awareness / mitigate weight bias



Validated tools demonstrated improved attitudes & beliefs of staff after implementation of education on weight bias & obesity

Diabetes in Community

- Diabetes Foot Care Clinical Pathway in primary care developed and implemented



Improved foot screen practices including increased number of diabetes foot screens

\$3,500 in health services utilization was avoided per patient per year using the pathway

Diabetes in Hospital

- Provincial Glycemic Management Policy suite developed for adult and pediatric populations
- Basal Bolus Insulin Therapy (BBIT) implemented across the province
- BBIT order sets built into Connect Care
- Insulin Pump Therapy Guidelines developed (www.ipumpit.ca)
- Perioperative Guidelines for patients with diabetes developed



Improved patient outcomes

Decreased length of hospital stay by 1 bed day per patient

Nutrition

- Malnutrition Symposium and Workshop
- AHS Malnutrition Strategy
- Experiences of malnourished patients studied and challenges to eating well identified
- Increased nutritional information provided on hospital menus especially carbohydrate content for people living with diabetes



Created partnerships to support pilot of nutrition care pathway

Partnerships and Innovation

- AHS Nutrition and Food Services
 - Malnutrition in the community and screening
- Primary care clinics / Primary Care Networks
 - Virtual Diabetes Prevention Program
 - Diabetes Foot Care Clinical Pathway
- Alberta Blue Cross
 - Virtual Diabetes Prevention Program
- Other Strategic Clinical Networks (SCNs)
 - Surgery SCN: Perioperative Guidelines
 - Maternal Newborn Child & Youth SCN: Diabetes in Pregnancy Guidelines
- Scientific Community
 - Partnership for Research and Innovation in the Health System (PRIHS)-5 Food Insecurity and diabetes
- Indigenous Partnerships
 - AHS Indigenous Wellness Core



*Based on [Calgary Hospitalist data](#)

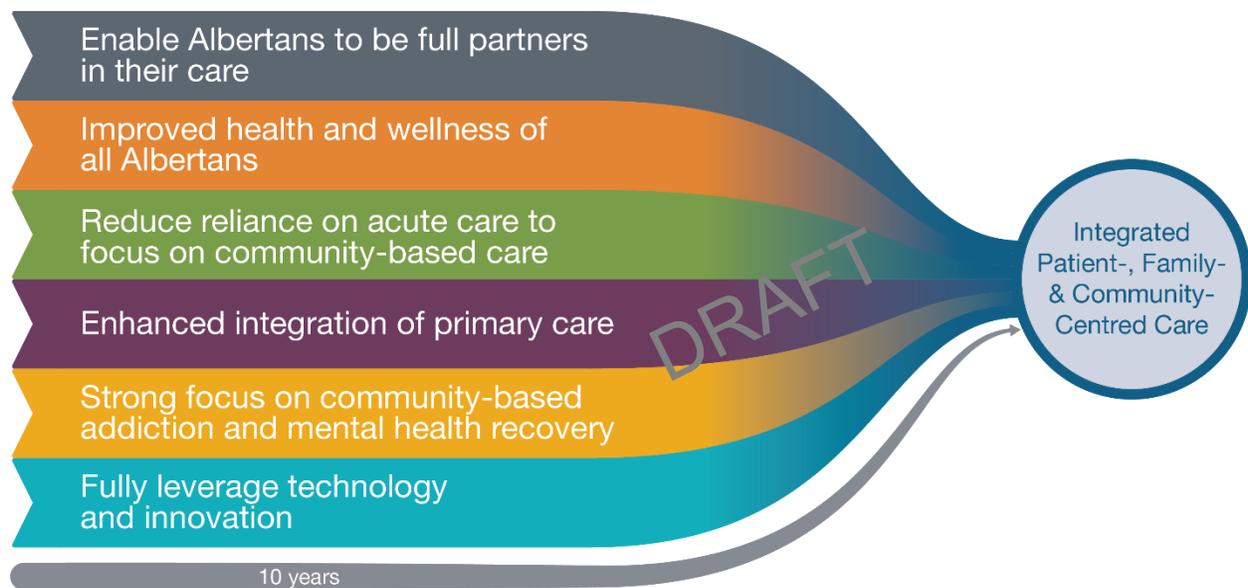
Introduction

The Diabetes, Obesity & Nutrition (DON) Strategic Clinical Network™ (SCN™) which launched in June 2012 is a diverse group of patients, healthcare providers, operations, associations, and researchers who are passionate and knowledgeable about diabetes, obesity, and nutrition. Together we look for ways to deliver care that will **provide better quality, better outcomes, and better value for every Albertan**. Please visit the DON website for a description of our programs and progress of our initiatives to date:



<https://www.albertahealthservices.ca/scns/page7676.aspx>.

This **2022 - 2026 Transformational Roadmap** (TRM) is the strategic plan for the DON SCN and will guide our work for the next three years. It highlights new areas of focus and builds on the successes of our last 2017 - 2021 TRM. Our strategies are aligned with the SCN Roadmap 2019 – 2024, and the Draft 2020-22 Health Plan and 2021-22 Business Plan which includes the below Alberta Health Services (AHS) 10-year vision of achieving a more integrated healthcare delivery system that provides local services co-designed with patients, families and communities.



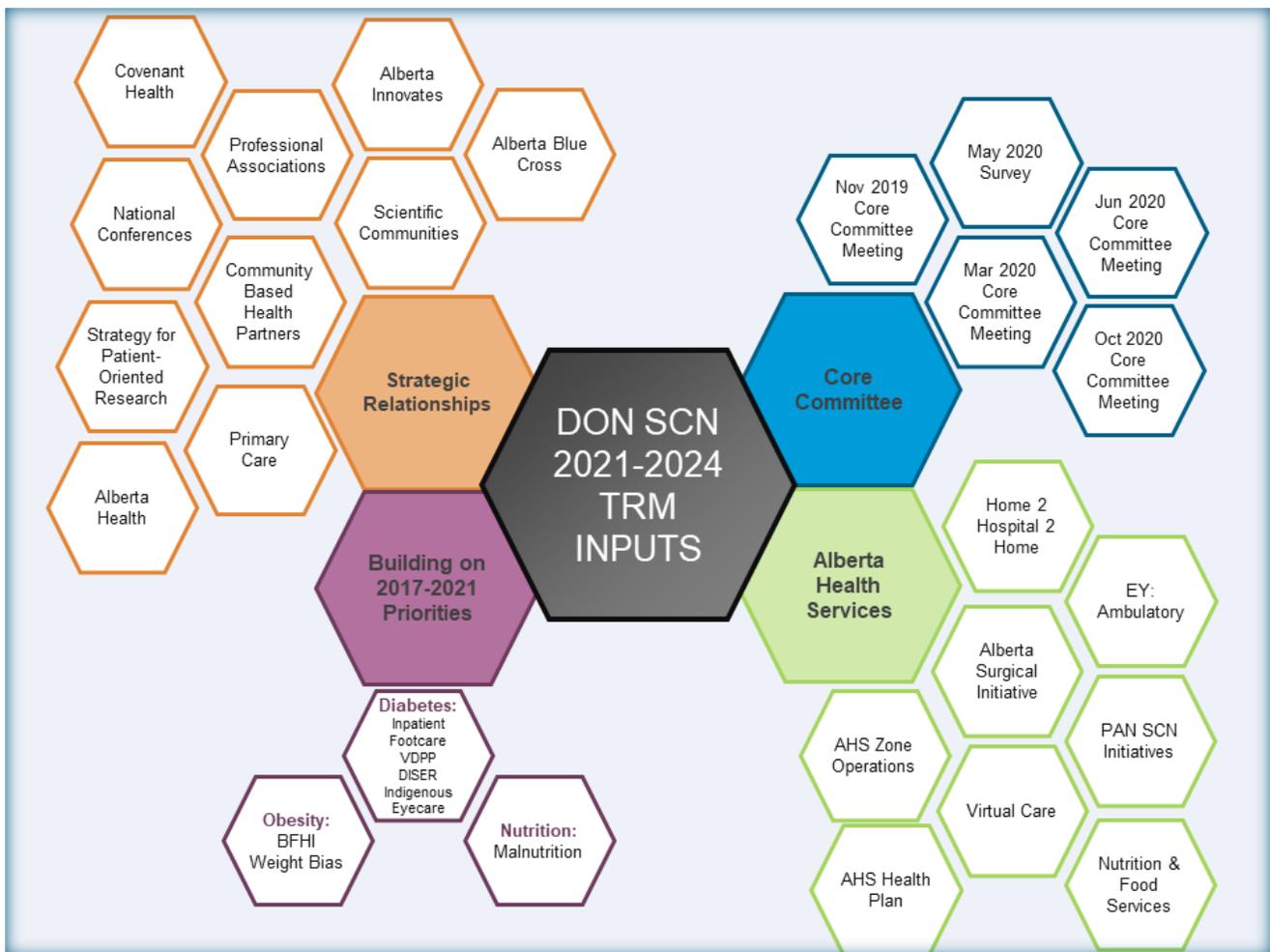
Our **Core Committee**, **DON SCN team** and **DON SCN leadership** worked through the following steps together to refresh the TRM:

Fall 2019



Note: Delays during 2020/2021 due to COVID-19 pandemic.

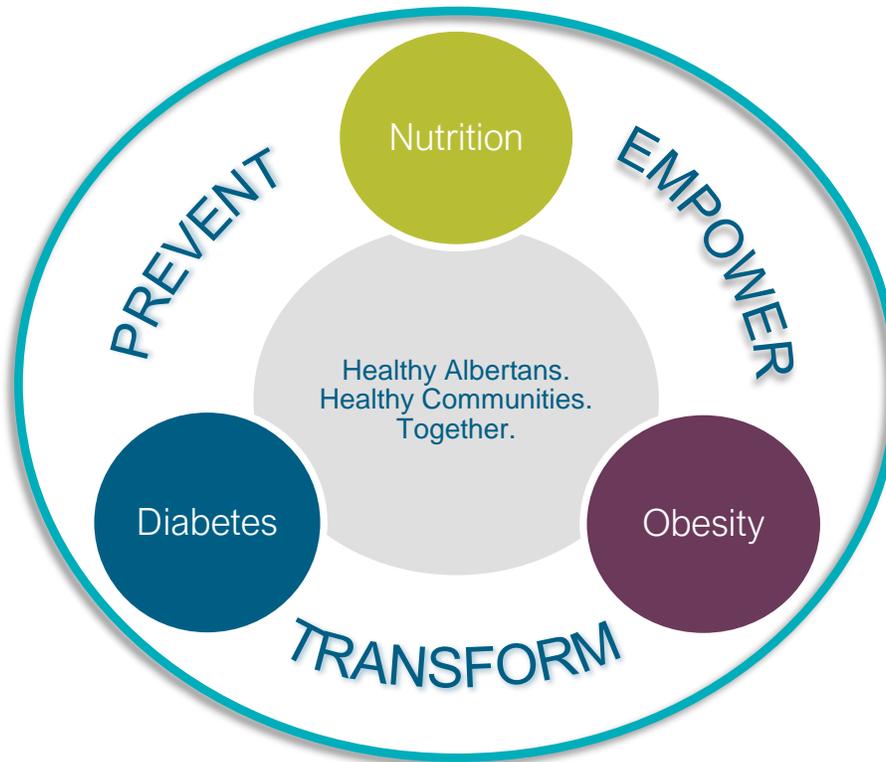
The many contributions from our diverse network **helped shape and define** our priorities and journey over the next several years. This picture shows how **input from our stakeholders** across AHS and beyond have informed our TRM:



Making a Difference: Our Strategic Directions & Focus

We will continue to focus on three strategic domains:

1. **Prevent** the onset & progression of diabetes, obesity & malnutrition.
2. **Empower** patients & providers to better manage diabetes, obesity & malnutrition to live well and long.
3. **Transform** the health care system through research, surveillance & partnerships.



Where are we going?

- Lead the development of innovative **virtual care delivery**.
- Continue to focus on **preventing complications** of chronic disease.
- Implement and evaluate innovations in **preventing the onset of chronic disease**.
- Collaborate with Indigenous communities to create **Harmony in Care**.
- Strive to build our work from a foundation of **equity, diversity, and inclusion**.
- Support the Government of Alberta Ministry of Health in developing policies related to **emerging technologies** for diabetes management.

Support the Switch to Virtual Care

- Using **virtual health** technologies has been a priority for Albertans for a long time and was highlighted in the AHS Performance Review. The COVID-19 pandemic highlighted the need for and benefit of these technologies for both health care providers and patients. As Connect Care (electronic clinical information system) is implemented across AHS, there is an opportunity to bridge this platform with existing technologies.

Research on COVID-19 impact shows that people with diabetes are approximately **twice as likely to require hospitalization** and intensive care as those without, and about **three times as likely to die of COVID-19**.



In April 2020, **52% of care** (e.g. patient visits, psychotherapy and consults with other physicians) was **provided virtually** as a result of the COVID-19 pandemic.



How will we make an impact?

- In alignment with the AHS Virtual Health 2021 – 24 Strategy Plan, the DON SCN will support long-term consistent use of virtual health technologies in both community-based and specialty-care chronic disease management (CDM) programs for delivery of diabetes, obesity and nutrition services.
- The following DON SCN priorities will enable provision of appropriate, safe, high-quality care that is accessible and consistent:
 - Support the development of a common **CDM evaluation framework**.
 - Support the development of a consistent **program navigation** approach for patients and providers across all zones.
 - Support the development of tools and processes for:
 - o Programs and clinics' decision-making to determine **appropriate use** of virtual care.
 - o Providers, whether in sole or multi-disciplinary setting, including **best practices** and **guiding principles**.

Scientific Office

The **DON SCN Scientific Office**, led by our Scientific Director and Assistant Scientific Director, aims to **support research** to inform **evidence-based strategies** and **innovation** in areas where knowledge gaps exist in **health care prevention, services, and delivery**.

How will we make an impact?

1. Support implementation, evaluation, and dissemination of scientific research in diabetes, obesity, and nutrition.

- Identify and assist in development and implementation of research aligned with DON SCN strategic areas/priorities.
- Ensure the integration of research within the DON SCN when evaluating diabetes, obesity, and nutrition-related initiatives.



2. Engage and support a strong community of researchers and relevant partnerships.

- Foster and support research network meetings on priority topics to explore evidence, identify evidence gaps, and encourage research team development in SCN priority areas.
- Collaborate as co-investigators, collaborators and knowledge users on research projects related to diabetes, obesity, and/or nutrition.



3. Use Diabetes Infrastructure for Surveillance, Evaluation and Research (DISER) data source to support research in diabetes.

- Execution of Research and Quality Improvement Activities aligning with DON SCN priorities.
- Support clinicians and researchers to further our understanding of diabetes in Alberta.



Diabetes: Improving Diabetes Care in Community & Hospital

Why is this important?

Among Albertans, **25%** live with diabetes or pre-diabetes

Empower

In Canada, diabetes is the leading cause of **vision loss** in people of working age

Prevent

Canadians with diabetes are almost **20 times** more likely to be hospitalized for a non-traumatic **lower limb amputation** compared to the general population



Patients with high blood glucose (greater than 10 mmol/L) in hospital can experience **increased length of stay, risk of infections, and poor outcomes**

Transform

Over **25%** of residents in long term care facilities in Canada have **type 2 diabetes**

“Diabetes care in hospital isn’t perfect, but at least we are on the right track. Nurses have so many things to worry about and I think sometimes diabetes management scares them. I am glad all hospital staff are realizing the importance of glycemic management (in and out of hospital).”

- *Nurse who lives with T1 Diabetes Mellitus*



How will we make an impact?

Our Priorities & Actions:

Diabetes in Community:

1. In partnership with Alberta Blue Cross and Primary Care Networks,
 - a. Assess barriers and facilitators to implementing the virtual Diabetes Prevention Program (vDPP) in Alberta primary care settings for people at risk of Type 2 diabetes.
 - b. Assess feasibility and viability of a 'value-based health care model' (linking how much money is spent on healthcare programs/services over a patient's journey to the outcomes that matter most to patients) for diabetes prevention in Alberta.
2. In collaboration with Neurosciences Rehabilitation & Vision SCN, support implementation of the Diabetes Eye Care Clinical Pathway (DECCP) leveraging learnings from the Diabetes Foot Care Clinical Pathway (DFCCP) in the community.
 - a. Partner with Alberta Association of Optometrists to create a more effective referral process for primary care by adding all optometrists into the Alberta Referral Directory.
 - b. Develop patient education in MyHealthAlberta.
 - c. Partner with Alberta Strategy for Patient Oriented Research SUPPORT Unit (AbSPORU) for eye care screening awareness amongst immigrant population.
 - d. Examine barriers and facilitators for patient awareness and access to diabetes eye health exams.
3. Leverage the Diabetes Infrastructure for Surveillance, Evaluation and Research (DISER).
 - a. Use DISER to identify care gaps in people with diabetes.
 - b. Leverage findings from DISER to inform quality improvement tools and strategies.
 - c. Refresh the Alberta Diabetes Atlas 2011.
4. Improve care for people living with diabetes in the community:
 - a. In collaboration with the Health Quality Council of Alberta, update guidelines and audit and feedback reports for primary care physicians related to medical management.

- b. In collaboration with the Maternal Newborn Child & Youth SCN:
 - Develop guidelines for diabetes during pregnancy; and
 - Tools and strategies for the transition of youth with Type 1 diabetes to adult diabetes management services.
 - c. Support implementation including determination of eligibility criteria for emerging technologies related to continuous glucose monitoring in pediatric populations.
5. Collaborate with Indigenous communities to prevent poor health outcomes associated with diabetes such as eyes, foot, and kidney complications. This will include co-designing culturally relevant information to enhance the existing foot, eye, and nutrition pathways.



Diabetes in Hospital:

In-hospital Improved Glycemic Management Initiative

Develop guidelines for smooth transition of patients between home & hospital
- UNDERWAY -

Implementation strategy for Basal Bolus Insulin Therapy (BBIT) & co-developed Basic Diabetes Education
- COMPLETE - ✓

Guidelines for Safe Management of Insulin Pump Therapy in Acute Care
- COMPLETE - ✓

Develop Clinical Knowledge Topic on perioperative management for patients with diabetes
- COMPLETE - ✓

In partnership with Emergency SCN, develop Clinical Knowledge Topic for Safe Management of Diabetic Ketoacidosis (DKA) in Emergency Department
- COMPLETE - ✓

Implement & update Glycemic Management Policy
- COMPLETE - ✓

Simplified Insulin Formulary
- COMPLETE - ✓

Supporting patients to achieve their glycemic targets in hospital

Inpatient self-management guidelines
- TBD -

Patient-Specific Insulin Dispensing Project
- COMPLETE - ✓

Nutrition & Food Services: Diabetes nutritional support [patient resources & menu update]
- COMPLETE - ✓



Key projects under the **In-hospital Improved Glycemic Management Initiative** for the next 3 years:

- Support implementation of perioperative guidelines for patients with diabetes through partnership with Medicine and Surgery SCNs.
- Adapt the Improved Glycemic Management Initiative for the continuing care setting in collaboration with the Provincial Seniors Health & Continuing Care integrated provincial team.
- Develop and socialize the Provincial Pediatric Glycemic Management Policy in partnership with Maternal Newborn Child & Youth SCN.
- Support safe transition of diabetes care in collaboration with Primary Health Care Integration Network and as part of the Home to Hospital to Home (H2H2H) Transitions Initiative, between home to hospital to home including virtual care considerations.

What will Success Look Like?

Diabetes in the Community:

- Virtual Diabetes Prevention Program (vDPP):
 - Prevent or delay the development of Type 2 diabetes in the project population.
 - Understand barriers and facilitators to implementing vDPP using a value-based health care model in Alberta.
- Diabetes Eye Care Clinical Pathway (DECCP):
 - Increase number of patients who receive a diabetes eye health exam to screen for diabetic retinopathy screen through increased provider and patient awareness.
 - Improve coordination of care between optometrists, patients, and primary care.
 - Decrease number of patients with advanced diabetic retinopathy.
 - Understand barriers and facilitators to diabetes eye health exams.
- Diabetes Infrastructure for Surveillance, Evaluation and Research (DISER):
 - Leverage DISER to identify gaps in care for people with diabetes.
 - Use findings from DISER to inform care strategies for people with diabetes.
 - Refresh of the Alberta Diabetes Atlas 2011.

- Collaboration with Indigenous communities to prevent poor health outcomes:
 - Adoption of tailored Diabetes Foot Care Clinical Pathway (DFCCP) and DECCP in Indigenous communities.
 - Increase in provider and patient awareness on importance of diabetic retinopathy screening and improvement of primary care providers referral process for diabetic retinopathy screening.
 - Improved prevention of diabetic foot ulcers, early detection and treatment of foot problems related to diabetes, and reduced amputations.

In-hospital Improved Glycemic Management Initiative:

- Improve patient and provider experience & satisfaction with diabetes care while in hospital and continuing care.
- Decrease incidence of hypoglycemia and hyperglycemia and other medical complications of diabetes while in hospitals and continuing care.
- Decrease length of hospital stay for patients requiring insulin.



“People who live with diabetes manage their diabetes (including the risks) every day of their lives. They just want to be part of the team to help manage their diabetes and blood glucose in hospital.”

- Patient Advisor

Obesity: Improving Bariatric Care in Hospitals

Why is this important?

29% of adults in Alberta live with obesity

Empower

When a person with obesity experiences weight bias and stigma in health care it can lead to **depression, anxiety, and avoiding accessing health care**

Patients with obesity are at a **higher risk for complications and injury** due to inadequate facility design, equipment, and staff training



The annual direct cost of health care for treating patients living with obesity in Canada is **5 to 7 billion dollars** and is estimated to rise to 9 billion by 2021

Prevent

Patients living with obesity face many limitations and barriers in health care such as **accessing treatment** and **long wait times** for bariatric clinic visits and surgery

Transform

“The bigger you get, the more invisible you become.”

- *Patient Advisor*



How will we make an impact?

Our Priorities & Actions:

1. Spread and scale implementation of the Bariatric Friendly Hospital Initiative:
 - a. Adapt standards and guidelines for continuing care settings.
 - b. Promote awareness of the standards and identify cost effective implementation strategies for acute care hospitals across Alberta.
2. In partnership with primary care:
 - a. Explore opportunities for optimizing care for patients with obesity:
 - Understand the current state of obesity management in primary care to identify successes, gaps and opportunities for improvement such as staff education on weight bias
 - b. Understand the potential opportunity to spread and scale the virtual Diabetes Prevention Program (vDPP) for people living with obesity.
3. Engage with the growing number of physicians in Alberta who are certified by the American Board of Obesity Medicine to identify potential priorities and strategies for adult obesity prevention and management in the province.
4. Work in collaboration with provincial Managing Pediatric Obesity Committee to identify strategies for pediatric obesity prevention and management.
5. Collaborate with the Surgery and Bone & Joint Health SCNs to prevent/delay the need for surgery (e.g. hip and knee replacement surgery), and improve surgical outcomes for patients living with obesity (Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP)).
6. Create a single provincial repository of evidence-based obesity resources for the public and health care providers.



What will Success Look Like?

- Patients with obesity will have interactions with the health care system that are free from weight bias and stigma.
- Disabling Injury Rates amongst staff will be reduced due to safer patient lifts/transfers.
- Bariatric surgical outcomes will improve with implementation of MBSAQIP recommendations.
- Ensure that eligible Albertans have access to accredited and standardized bariatric surgery programs.



Nutrition: Improving the Nutritional Health of Albertans

Why is this important?

Empower

Patients who are malnourished in Canada are **twice as likely to be readmitted** to hospital and have approximately **3 days longer length of stay**

In Canada, about **1 out of 3 Canadian seniors** living in the community are **malnourished** or at **risk** of malnutrition



Prevent

1 out of 5 patients leave the hospital in **worse nutritional health** than when they were admitted

Transform

“It is a very painful experience to understand how serious malnutrition is for some seniors.”

- Patient and Community Engagement Research (PaCER) participant

75% of patients admitted to hospital who are malnourished **never see a Registered Dietitian** during their hospital stay, and therefore nutrition for most of these patients **does not improve** during hospitalization



How will we make an impact?

Our Priorities & Actions

1. In partnership with our provincial Nutrition Services portfolio, we will enhance and improve nutrition transitions of care as part of the Malnutrition Strategy:
 - a. Engage with community partners to embed screening tools that identify malnutrition risk and recommend interventions to improve nutrition and overall health.
 - b. Collaborate with the Primary Health Care Integration Network to align with the Home to Hospital to Home (H2H2H) Transitions Initiative and implement the Primary Care Nutrition Pathway for Hospital to Community Transitions.



2. Develop collaborations across sectors/organizations and leverage opportunities for evaluation to improve the nutritional health of seniors in the community.
 - a. Study the impact of self-isolation during the outbreak of COVID-19 in Alberta for seniors in the community on their nutrition and overall health.
 - b. Pilot the Primary Care Nutrition Pathway for seniors in partnership with The Golden Circle and Red Deer Primary Care Network.
3. Increase awareness among Albertans regarding the importance of nutrition in recovery.
 - a. In partnership with Nutrition Services, support the inclusion of nutrition in the Alberta Surgical Initiative pathways.
 - b. In collaboration with Neurosciences, Rehabilitation & Vision SCN, include nutrition screening, assessment and interventions in the Post COVID-19 Rehabilitation Task Force implementation plan.

What will Success Look Like?

- Fewer patients in hospital, continuing care facilities and in the community will suffer from malnutrition.
- Effective, patient-centered guidelines for identification and treatment of malnutrition as patient's transition between care environments and/or after discharge from hospital.
- Enhanced understanding of older adults' experiences with malnutrition, including perceived barriers to healthy eating and supports needed to improve their nutrition status.
- Increased awareness among Albertans regarding role of nutrition in recovery.



Conclusion

By focusing on **prevention of chronic diseases**, patient and provider **empowerment**, and system **transformation**, this Transformational Roadmap will enable the province of Alberta to be leaders for **diabetes**, **obesity**, and **nutrition** improvements in care in Canada. We look forward to working together with our network partners to meet the challenges and opportunities ahead.



Glossary

Term	Definition
Alberta Diabetes Atlas 2011	Information on the incidence, prevalence and mortality of diabetes and its complications and comorbidities in Alberta.
Alberta Strategy for Patient Oriented Research SUPPORT Unit (AbSPORU)	Dedicated to transforming health outcomes in Alberta through Patient-Oriented Research (POR). POR actively engages patients and other stakeholders in research that focuses on patient-identified priorities and improves patient outcomes.
Alberta Surgical Initiative (ASI)	An initiative that will help ensure all Albertans receive scheduled surgeries within clinically appropriate wait times.
Bariatrics	The branch of medicine that deals with the study and treatment of obesity.
Bariatric Friendly Hospital Initiative	An initiative focused on the implementation of standards and guidelines to improve the safety, care, and experience of patients who live with obesity.
Basal Bolus Insulin Therapy (BBIT)	A way of ordering multiple daily injections of subcutaneous insulin that better replicates how our body naturally produces insulin. It is an evidence-based approach in comparison to sliding scale insulin orders.
Chronic disease	Having an illness persisting for a long time or constantly recurring that requires ongoing management.
Clinical Knowledge Topic	Best practice/evidence-informed clinical guidance for defined diseases/conditions, specific patient populations or segments of a clinical pathway.
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, caregivers and communities to deliver the highest quality of care across settings.
Connect Care	Electronic clinical information system that will house all AHS, partner and affiliate medical records, and all information needed to support care wherever Connect Care is the record of care.
Continuous Glucose Monitor (CGM)	Monitors interstitial glucose values. Data is intended to provide information related to trends in glycemic management. A glucose sensor (small electrode) is inserted under the skin and measures interstitial glucose every 1-5 minutes. The readings are sent wirelessly to a device, either automatically or manually by scanning the sensor with a reader. There are two major types of CGM (real-time CGM or intermittent CGM/Flash).

Term	Definition
Continuing care	A system that provides Alberta with the health, personal care and accommodation services they need to support their independence and quality of life. Occurs in 3 settings: home living, supportive living and facility living.
Diabetes Eye Care Clinical Pathway (DECCP)	A clinical pathway to help guide and standardize care for diabetic eye care. The objectives of the pathway are to increase provider and patient awareness on importance of diabetic retinopathy screening and to improve primary care providers referral process for diabetic retinopathy screening.
Diabetic Foot Care Clinical Pathway (DFCCP)	A clinical pathway to help guide and standardize foot screening practices in primary care. The goal of the pathway is to prevent diabetic foot ulcers and improve early detection and treatment of foot problems related to diabetes, thereby reducing the need for amputations.
Diabetes Infrastructure for Surveillance, Evaluation and Research (DISER) Project	A joint effort between AHS and the Alliance for Canadian Health Outcomes Research in Diabetes to integrate existing diabetes data sources and introduce a new data collection mechanism.
Diabetic Ketoacidosis (DKA)	A complication of diabetes that can result in death. DKA occurs when there is not enough insulin in the body. Too little insulin leads to a buildup of acids, called ketones, in the blood.
Disabling Injury Rate (DIR)	The DIR metric measures the number of staff per 100 full-time staff who sustain a work-related injury that is severe enough to miss work or require modified work duties.
Glycemic Management	Regulation and maintenance blood glucose levels within normal ranges.
Health Quality Council of Alberta (HQCA)	A provincial agency that pursues opportunities to improve patient safety and health service quality for Albertans.
Home to Hospital to Home (H2H2H) Transitions Initiative	A provincial guideline that outlines what support Albertans need to safely transition from their home to hospital and then back to their community.
Hyperglycemia	High blood glucose (sugar), usually in excess of 10 mmol/L (for the purposes of the Inpatient Diabetes Management Initiative).
Hypoglycemia	Low blood glucose (sugar), typically below 4 mmol/L (for the purposes of the Inpatient Diabetes Management Initiative).
In-hospital Improved Glycemic Management Initiative	A provincial SCN initiative with the goal of improving and standardizing how patients with diabetes are cared for in Alberta's hospitals.
Inpatient glycemic control	Achieving blood glucose (sugar) levels that are within the recommended range (5 – 10 mmol/L) for most patients that are in an acute care facility.

Term	Definition
Insulin Pump Therapy	Continuous subcutaneous insulin infusion (CSII) pump (also known as insulin pump). A battery-operated programmable device that delivers only rapid acting insulin 24 hours a day.
Knowledge Translation	A dynamic and iterative process that includes synthesis, dissemination, exchange and ethically-sound application of knowledge to improve the health of Canadians, provide more effective health services and products and strengthen the health care system.
Malnutrition	A decline in lean body mass (with or without fat loss) that leads to functional impairment. Decline in lean body mass is the result of a variable combination of reduced food intake and/or inflammation.
Malnutrition Strategy	A strategic approach to raise awareness of malnutrition, prevent malnutrition by addressing contributing factors, and improve detection and treatment of malnutrition. The strategy focuses on adult and pediatric populations within hospitals, Continuing Care and primary care.
Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP)	MBSAQIP accredits inpatient and outpatient bariatric surgery centers in the United States and Canada that have undergone an independent, voluntary, and rigorous peer evaluation in accordance with nationally recognized bariatric surgical standards. Bariatric surgery accreditation not only promotes uniform standard benchmarks, but also supports continuous quality improvement.
Partnership for Research and Innovation in the Health System (PRIHS)	Grants awarded to SCNs™ and researchers from Alberta Innovates.
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.
Perioperative	Refers to the three phases of surgery: preoperative, intraoperative, and postoperative.
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.
Primary Care Nutrition Pathway for Hospital to Community Transitions	An evidence-based algorithm for treating and monitoring nutrition risk and malnutrition, but not other conditions. It is designed for all medical and surgical patients who are at nutrition risk or malnourished transitioning from the hospital to the community.

Term	Definition
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 (QI)	A continuous process to identify issues and opportunities, apply well thought out and often innovative solutions and then learn from the process and resulting outcomes.
Scientific Office	Consists of the Scientific Director and the Assistant Scientific Director of the SCN.
Simplified Insulin Formulary	A strategy to improve insulin safety within the AHS acute care operations to reduce duplication and the risk of selecting the wrong insulin, and standardize insulin formulary choices.
Specialist LINK	Service that connects family doctors and specialists in the Calgary area. Includes a real-time, physician-only tele-advice line, clinical care pathways and other resources that support family physicians to care for their patients.
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 DON SCN based on their mission and vision. Each strategic direction's name reflects what the DON SCN wants to change in order to better meet their mission and help resolve strategic targets identified through stakeholder consultation and engagement.
Surveillance	The ongoing systematic collection, analysis and interpretation of health data, essential to the planning, implementation and evaluation of health practice.
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 is the delivery of health-related services and information via a myriad of technology solutions (e.g. telehealth, video calls, etc.).
Virtual Diabetes Prevention Program (vDPP)	An Alberta Health Services and Alberta Blue Cross collaborative initiative which aims to prevent or delay the development of Type 2 diabetes in the project population. It will also assess feasibility and viability of a value-based health care model for diabetes prevention in Alberta.
Weight bias	Negative attitudes toward a person because he or she is overweight or obese.

Appendix A: DON SCN Leadership & Core Committee Members

Leadership Team	
Peter Sargious, Dr.	Senior Medical Director
Lene Jorgensen	Acting Senior Provincial Director / Executive Director
Vacant	Scientific Director
Vacant	Assistant Scientific Director
Jorin Church	Network Manager (Temp)
Catherine Joseph	Network Manager (LOA)
Kathy Dmytruk	Senior Advisor
Core Committee Members	
Alison Ross, Dr.	Nurse Practitioner – Grande Prairie Bariatric Clinic and Chronic Disease Management, North Zone
Angela Dumoulin	Manager – Nutrition & Food Services, Central Zone
Angela Erza	Manager – Provincial Tobacco, Vaping and Cannabis Program, Chronic Disease Prevention and Oral Health, Red Deer, Central Zone
Bev Madrick	Patient Advisor – Calgary Diabetes Program
Carlota Basualdo-Hammond	Executive Director – Provincial Nutrition Services
Cathy Chan, PhD	Professor – Nutrition and Physiology, University of Alberta
Chris Barnsdale, Dr.	Family Physician – Sundre, Central Zone
Christin Barber	Program Manager – Clinical Nutrition, Rural and Continuing Care, Covenant Health
Cindy Colborne	Manager – Chronic Disease Management (CDM), North Zone
Cyrene Banerjee	Patient Advisor – Patient and Community Engagement Research (PACER)
Daniel Van Schalkwyk, Dr.	Family Physician – Whitecourt, North Zone
Daniele Pacaud, Dr.	Physician – Endocrinology & Metabolism, Alberta Children’s Hospital, Calgary Zone
Dusty Parker	Patient Advisor
Eileen Emmott	Area Manager – CATT & HCRT, Seniors, Palliative and Continuing Care, Calgary Zone

Core Committee Members

Isabelle Emery	Patient Advisor
Heidi Olstad	Director, Provincial Nutrition Services
Jack Cruikshank, Dr.	Physician – Internal Medicine, Calgary Zone
Jane Ballantine, Dr.	Family Physician – Calgary Zone
Janet Wayne	Executive Director – Healthy Living, Population, Public & Indigenous Health
Jennifer Steier	Manager – Chronic Disease Management (CDM) Manager, South Zone
Julie McKeen, Dr.	Physician – Endocrinology & Metabolism, Internal Medicine, Calgary Zone
Karen Ruggles	Manager – Chronic Disease Management (CDM), South Zone
Kimberly Daniels	Clinical and Quality Improvement Lead – Chinook Primary Care Network
Laura Tkach	Senior Operating Officer – Nutrition, Food, Linen & Environmental Services
Leah Gramlich, Dr.	Professor – Medicine, Gastroenterology, Royal Alexandra Hospital Provincial Medical Advisor – Nutrition, AHS
Lorraine Telford	Care Manager – Chronic Disease Management, Edmonton Zone
Mary Jetha, Dr.	Physician – Pediatric Endocrinology & Metabolism, Stollery Children’s Hospital, University of Alberta Hospital Associate Professor – Pediatric Endocrinology, Faculty of Medicine & Dentistry - Pediatrics Department, University of Alberta Hospital
Melanie Snider	Nurse Practitioner – Home Care, Brooks, South Zone
Patricia Chambers	Executive Director – Health Link & PRADIS
Patricia Martz	School Health and Wellness Manager / Provincial Nutritionist – Health Policy Research, Alberta Health / Alberta Education
Peter Rye, Dr.	Physician – Interim Medical Director, Calgary Adult Bariatric Specialty Clinic, Calgary Zone
Phyllis Hennig	Patient Advisor Patient and Community Engagement Research (PACER)
Rena LaFrance, Dr.	Physician – Stollery Children's Mental Health
Rod Wojtula	Patient Advisor Patient and Community Engagement Research (PACER)
Ron Sigal, Dr.	Physician - Division of Endocrinology and Metabolism, Department of Medicine, Calgary Zone
Rose Yeung, Dr.	Physician – Medicine & Assistant Professor - Endocrinology, Division of Clinical Sciences, Edmonton Zone
Rosemary VanHerkauger	Director – Patient Care, QEII Hospital, North Zone
Sarah Chapelsky, Dr.	Physician – Internal Medicine - Adult Bariatric Specialty Clinic, Edmonton Zone
Sasha Wiens	Innovation and Integration Coordinator, Diabetes, Hypertension & Cholesterol Centre

Core Committee Members

Smitha Yaltho, Dr.	Physician – Family Medicine, Capital Care, North Edmonton PCN
Wayne LaBonte	Manager – Primary Care Access, Provincial Indigenous Health Program

Supporting Members

Allan Ryan	Director – Clinical Analytics, DIMR
Carol Kuzio	Clinical Practice Lead – Bariatrics
Glenda Moore	Senior Consultant
Korey Cherneski	Communications Advisor – Provincial Programs Communications
Leta Philp	Clinical Practice Lead – Diabetes
Linda Juse	Senior Practice Consultant – Health Professions Strategy and Practice
Melanie Mainville	Clinical Practice Lead – Diabetes
Nicki Kirlin	Senior SCN Planner
Rachael Erdmann	Analyst – Innovation, Evidence & Impact, AHS
Rhonda Roedler	Clinical Practice Leader – Provincial Pharmacy

References

Alberta Health Services. Adult Weight Management. 2021. Retrieved from <https://www.albertahealthservices.ca/info/Page13023.aspx>

Alberta Health Services. Clinical Knowledge Viewer. 2021. Retrieved from <https://www.albertahealthservices.ca/cgv/Page15918.aspx>

Alberta Health Services. Draft 2020-22 Health Plan and 2021-22 Business Plan

Alberta Health Services. Home to Hospital to Home Transitions – Primary Health Care Integration Network. 2021. Retrieved from <https://www.albertahealthservices.ca/info/Page17125.aspx>

Alberta Health Services. MyLearningLink Course Attendance Summary Dashboard. 2021

Alberta Health Services Analytics, Data Integration, Measurement and Reporting. Diabetes, Obesity and Nutrition Strategic Clinical Network: In-patient diabetes glucose testing, all zones. 2015-2018

Alberta Strategy for Patient Oriented Research SUPPORT Unit (AbSPORU). 2021. Retrieved from <https://absporu.ca>

Allard JP, Keller H, Jeejeebhoy KN, Laporte M, Duerksen DR, Gramlich L, Payette H, Bernier P, Davidson B, Teterina A, Lou W. Decline in nutritional status is associated with prolonged length of stay in hospitalized patients admitted for 7 days or more: A prospective cohort study. *Clin Nutr.* 2016; 35(1), 144-152. doi 10.106/j.clnu.2015.01.009

American College of Surgeons. Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program. 2021. Retrieved from <https://www.facs.org/quality-programs/mbsaqip/about>

Canadian Diabetes Association. Diabetes in Ontario: An ICES practice atlas. Toronto: Institute for Clinical Evaluative Sciences (ICES), 2003. Retrieved from <http://www.ices.on.ca/~media/Files/Atlases-Reports/2003/Diabetes-in-Ontario/Full%20report.ashx>

Canadian Diabetes Cost Model. Ottawa: Diabetes Canada; 2016

Canadian Foundation for Healthcare Improvement. Value-Based Healthcare Toolkit. January 2020. Retrieved from <vbjhc-toolkit-e.pdf> (cfhi-fcass.ca)

Canadian Institute for Health Information. Overview: COVID-19's impact on health care systems. 2020. Retrieved from <https://www.cihi.ca/en/covid-19-resources/impact-of-covid-19-on-canadas-health-care-systems/overview-covid-19s-impact-on>

Canadian Malnutrition Task Force. Nutrition Care Pathways. 2021. Retrieved from <https://nutritioncareinCanada.ca/resources-and-tools/primary-community-care/nutrition-care-pathways>

Curtis L, Bernier P, Jeejeebhoy K, Allard JP, Duerksen D, Gramlich L, Laporte M, Keller H. Costs of hospital malnutrition. *Clin Nutr*. 2017; 36(5):1391-1396. Doi 10.1016/j.clnu.2016.09.009

Diabetes Canada. Diabetes in Canada: Alberta Background. March 2021. Retrieved from https://www.diabetes.ca/DiabetesCanadaWebsite/media/Advocacy-and-Policy/Backgrounder/2021_Backgrounder_Alberta_FINAL_1.pdf

Diabetes Canada. How Diabetes 360° Can Support Recovery from COVID-19. June 2020

Diabetes Canada Clinical Practice Guidelines Expert Committee. Diabetes Canada 2018 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada. *Can J Diabetes*. 2018;42(Suppl 1):S1-S325

Health Quality Council of Alberta & Alberta Health Services. Fact Sheet: A Look at Obesity in Alberta. 2015. Retrieved from https://www.hqca.ca/wp-content/uploads/2018/05/HQCA_Obesity_Fact_Sheet_July.pdf

Helmle KE, Chacko S, Chan T, Drake A, Edwards AL, Moore GE, Philp LC, Popeski N, Roedler RL, Rogers EJR, Zimmermann GL, McKeen J. Knowledge Translation to Optimize Adult Inpatient Glycemic Management With Basal Bolus Insulin Therapy and Improve Patient Outcomes. *Can J Diabetes*. 2018 Oct;42(5):505-513.e1. <https://doi.org/10.1016/j.cjcd.2017.12.010>. Epub 2017 Dec 27. PMID: 29555341

Keller H, Payette H, Laporte, Bernier P, Allard J, Duerksen D, Gramlich L, Jeejeebhoy K. Patient-reported dietetic care post hospital for free-living patients: a Canadian Malnutrition Task Force (CMTF) study. *J Hum Nutr Diet*. 2018; 31(1): 33-40. doi 10.1111/jhn.12484

Laur C, Curtis L, Dubin J, McNicholl T, Valaitis R, Douglas P, Bell J, Bernier P, Keller H. Nutrition care after discharge from hospital: an exploratory analysis from the More-2-Eat study. *Healthcare*. 2018; 6(1): 9. doi 10.3390/healthcare6010009

Obesity Action Coalition. Understanding Obesity Stigma Brochure. 2021. Retrieved from <https://www.obesityaction.org/get-educated/public-resources/brochures-guides/understanding-obesity-stigma-brochure/>

Obesity Canada. Obesity in Canada. 2015. Retrieved from <https://obesitycanada.ca/obesity-in-canada/>

Obesity Canada. Report Card on Access to Obesity Treatment for Adults in Canada. 2019. Retrieved from <http://obesitycanada.ca/wp-content/uploads/2019/05/OC-Report-Card-2019-English-Final.pdf>

Nguyen X. Thanh, Dmytruk K, O'Connell P, et al. Return on investment of the diabetes foot care clinical pathway implementation in Alberta, Canada, Diabetes Research and Clinical Practice, Volume 165, 2020 <https://doi.org/10.1016/j.diabres.2020.108241>

Ramage-Morrin P, Garriguet D. Nutritional Risk Among Older Canadians. Statistics Canada Catalogue. 2013; 82-003