Medicine Strategic Clinical Network™

Transformational Roadmap
Summary 2021-2026

Alberta Health Services
Inspiring solutions. Together.
Medicine Strategic Clinical Network™

September 29, 2022

About the Medicine SCN

The Medicine SCN (MSCN), launched in April 2020, builds on past achievements in kidney and respiratory health while extending its scope and relationships to hospital medicine.

Bringing these communities together as one network enables us to advance common priorities, tackle complex, multidisciplinary challenges, and accelerate innovation and health system improvements on a provincial scale.

Figure 1
The Medicine SCN includes three Sections: Hospital Medicine, Kidney Health and Respiratory Health*

** presented in alphabetical order throughout this document*

It also brings together the expertise of clinicians, researchers, patient advisors, operational leaders, community partners, and others to ensure integrated, high-quality care and patient- and family-centered solutions that improve continuity of care, patient outcomes, safety, and experience.

Our Medicine SCN's Core Committee, with diverse geographic and cross-disciplinary representation from each of the three Sections, provides broad oversight and direction across all patient populations, and identifies opportunities for cross-sectional work and impact. The Hospital Medicine, Kidney Health, and Respiratory Health Section Committees identify gaps, issues, strategies, priorities, and performance indicators for the specific populations they serve.

We collaborate with patients and families in the planning and delivery of safe, quality healthcare for all Albertans. Within our network we have a Patient and Family Advisory Council (PFAC) which consists of a group of volunteer patient and family partners. The PFAC provides a platform for meaningful patient engagement and participation in identifying and supporting SCN priorities and initiatives that are important to the patient populations we serve.

Our Scientific Office champions and facilitates a wide-ranging research agenda addressing the health needs of the hospital medicine, kidney, and respiratory populations, and focuses on improving the evidence base, methodological rigor, and sustainability of Alberta's health system. The Scientific Office works towards using practice-based evidence to drive research and innovation in areas where knowledge gaps exist.

Our Core Committee, three Section Committees, Scientific Office, PFAC and all of our Working Groups, work closely together to achieve excellence in sustainable quality care and outcomes for Albertans through integration, innovation, research and implementation of evidence-informed practice.

Current landscape at-a-glance

1 in 11 Albertans is living with COPD or asthma (2019-2020)[1]

1 in 10 Albertans has chronic kidney disease[2]

Individuals with these conditions often require hospital care & services.

Respiratory conditions were the **2nd most common** reason for hospitalizations in Alberta from 2017-2021[1]

Alberta has seen a **20%** increase in demand for dialysis over the past 5 years[2]

$1.84 billion per year spent caring for hospitalized Albertans on internal medicine and hospitalist services (2019)[3]

$254 million Alberta's annual healthcare expenditures for COPD alone (2013-2014)[3]

$1,400–$2,500 per year out-of-pocket expenses for treatment, transportation and medication for patients starting dialysis[4]

---

[1] Soril, L., Fong, A., Stickland, MK. on behalf of the Data Management Working Group and the Scientific Office of the Respiratory Health Section – Medicine Strategic Clinical Network, Acute Respiratory Care in Alberta and the Impact of COVID-19: Administrative Data Snapshot of Chronic Obstructive Pulmonary Disease and Asthma. (2022).

[2] Armstrong, M.; Weaver, R.; Pannu, N. Prevalence and Quality of Care in Chronic Kidney Disease. Kidney Health Strategic Clinical Network Report, Alberta Health Services. February. (2019)

[3] Alberta Health Services. Medicine Strategic Clinical Network. Hospital Medicine Tableau Dashboard (2022).

[4] The Kidney Foundation of Canada. The Burden of Out of Pocket Costs for Canadians with Kidney Failure. https://kidney.ca/KFOC/media/images/PDFs/3-2-1-NAT-Burden_of_Out-of-Pocket_Costs.pdf (2018).

Development of the TRM

This Transformational Roadmap (TRM) was developed through the collaborative effort of a wide network of stakeholders with an interest in improving care and patient outcomes across Alberta. The TRM is an integrated plan that includes shared and section-specific priorities.

Figure 2: TRM Development Process

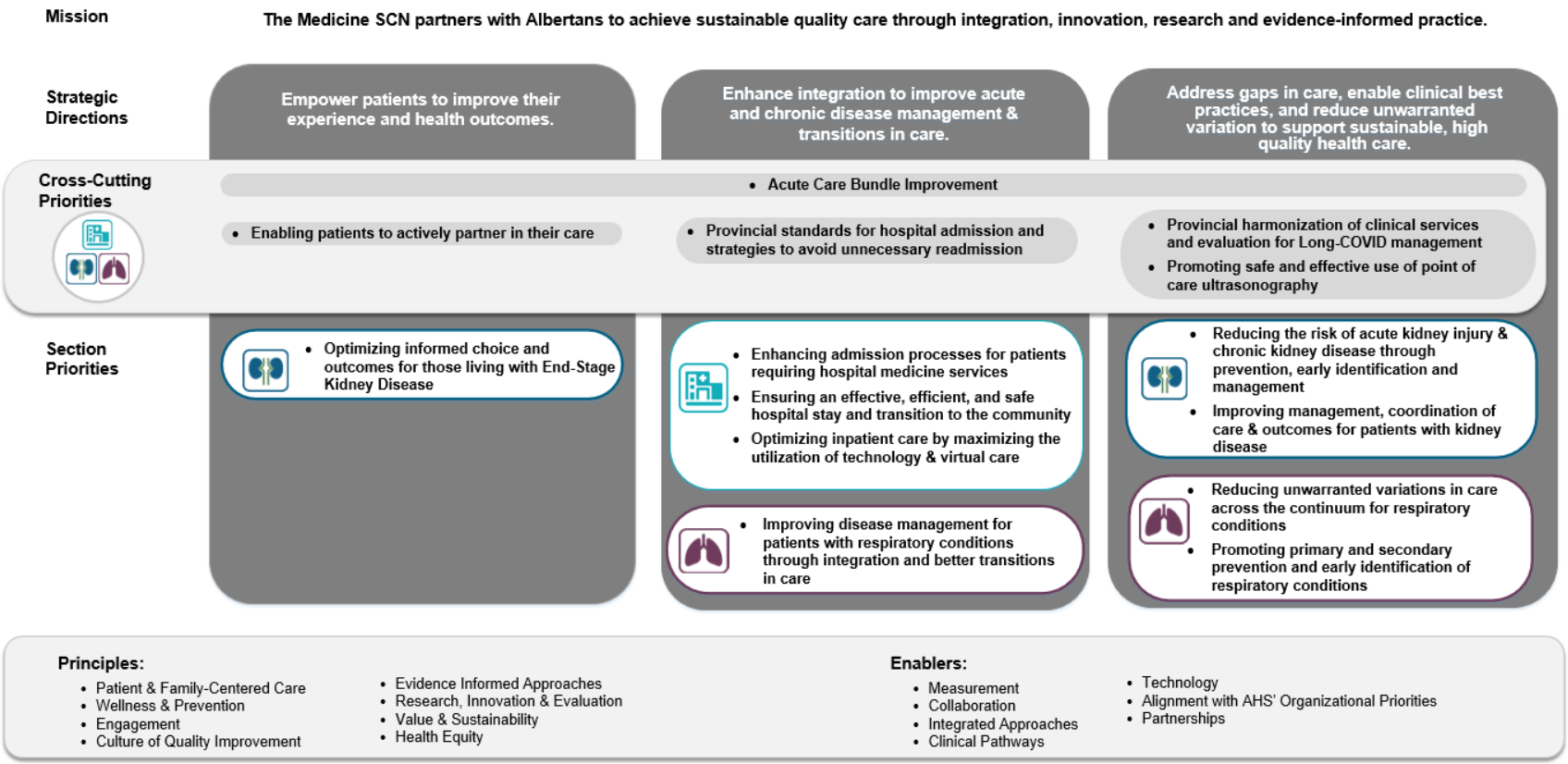
Patient Engagement

In addition to the Patient and Family Advisory Council (PFAC), patients and family members are integrated throughout our network; they lead projects and serve as members of our Core and Section Committees and on our Working Groups. They have contributed to the development of this TRM through their participation in generating patient-centered and patient-led priorities and initiatives.

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

- *MSCN's PFAC co-Chairs on behalf of PFAC members*

Medicine SCN's Transformational Roadmap At a Glance (2021 – 2026)



Strategic Directions & Priorities

The Medicine SCN has established three strategic directions. Both cross-cutting and section-specific actions will support us in achieving the expected outcomes.

Strategic Direction 1: Empower patients to improve their experience and health outcomes

39.4% of patients feel there is room for improvement for them to be involved in decisions about care & treatment during their hospital stay.

AHS C-HCAHPS Data for Medicine Patients, 2019-2020

Actions

- Enable patients to actively partner in their care
- Develop and support a PFAC
- Develop and implement tools and strategies to support a reciprocal relationship of respect, trust, dialogue, and shared decision-making

Expected Outcomes

- Improved patient outcomes
- Improved patient and provider experiences

Strategic Direction 2: Enhance integration to improve acute and chronic disease management and transitions between community and the hospital

Standardized admission criteria can improve clinical outcomes and resource utilization, and potentially **reduce length of stay and avoidable admissions**

Actions

- Develop, implement, and evaluate provincial standards for hospital admissions and strategies to reduce avoidable admissions and unnecessary readmissions

Expected Outcomes

- Reduction in number of avoidable admissions and readmissions

Strategic Direction 3: Identify opportunities and address gaps in care, enable clinical best practices and reduce unwarranted variation to support quality health care

10-20% of Albertans who contract COVID-19 will experience debilitating sequelae from long COVID that impact their quality of life. *World Health Organization. Coronavirus disease (COVID-19): Post COVID-19 condition 2021.*

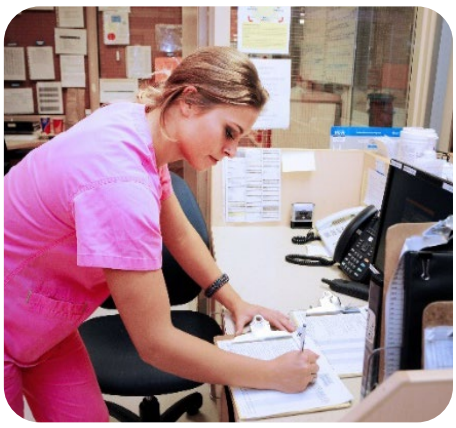
Point-of-care ultrasound use is increasing in the absence of provincial guidelines.

Actions

- Build on the work of AHS Post-COVID Task Force supporting the management of patients with long COVID. Develop strategies to provincially harmonize clinical services and evaluation, with a focus on specialty care
- Develop a provincial approach for the safe and effective use of point-of-care ultrasonography (POCUS)

Expected Outcomes

- Standardized assessments across Long-COVID specialty clinics
- Regular reporting of key indicators, including patient outcomes and experience
- Consistent use of POCUS is expected to reduce complication rates and improve patient outcomes, resulting in decreased costs and shorter hospital stays



Improving care for every patient, every time

As part of our cross-cutting work, the Medicine SCN will support improvements in patient care and outcomes and achieve acute care efficiencies through their participation in an AHS organizational-wide priority called the Acute Care Bundle Improvement (ACBI). ACBI focuses on optimizing “care for every patient, every time” to improve quality outcomes for patients, providers, and the system (Figure 2). The Bundle integrates:

- **Common foundational elements** of collaborative care practices achieve seamless care delivery and transitions for optimal health outcomes and that improve patient, family, and provider experiences for “every patient, every time.”
- **Condition and procedure-specific elements** of evidence-based clinical care that build on the common foundation, starting with clinical pathways in Medicine (heart failure, chronic obstructive lung disease, and cirrhosis) and Surgery focused strategies (enhancing recovery after surgery and reducing surgical site infection).

This quality improvement work is being conducted at 14 of Alberta’s largest acute care centers. It combines patient and family-centered care and a multi-disciplinary team approach with evidence-based care delivery.

Operational teams at the acute care sites will identify the elements of the Acute Care Bundle that align with their priorities and needs, develop action plans to achieve their goals, and track progress through associated metrics. They are supported by their local improvement teams and provincial programs and Strategic Clinical Networks that constitute the ACBI collaborative.

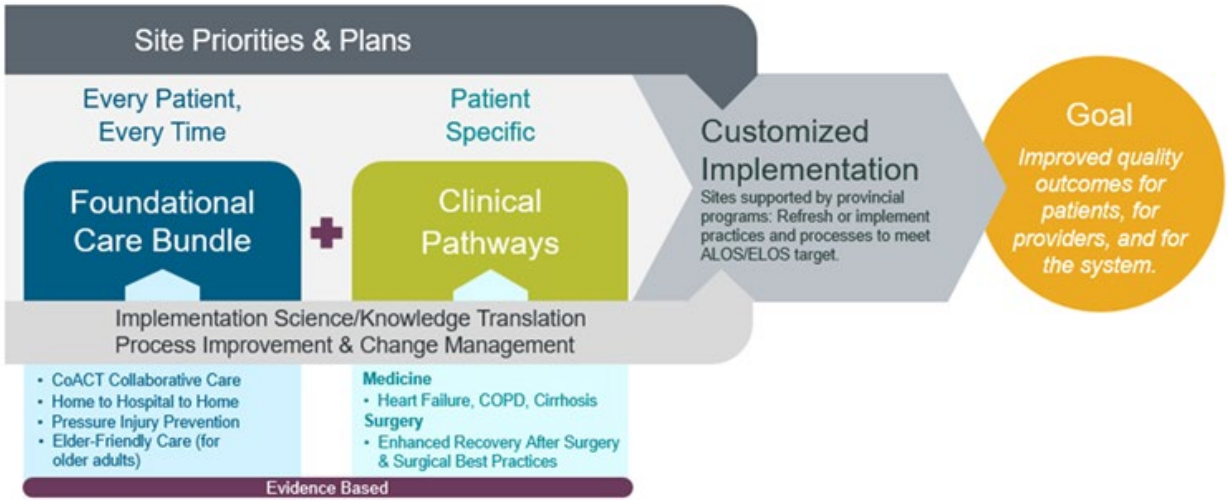


Figure 3: Acute Care Bundle Improvement

Other than mental health, **medicine admissions represent the greatest opportunity** for reducing length of stay

Actions

- In partnership with provincial programs and other SCNs, they support development and implementation of a foundational acute care bundle, as well as condition- and procedure-specific clinical pathways, to improve patient outcomes and acute care utilization.

Expected Outcomes

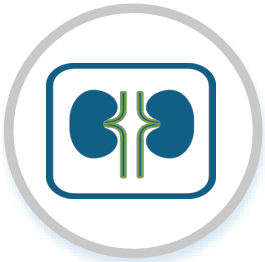
- Improved quality of care and outcomes.
- Improved patient and provider experiences.
- Reduction in length of stay and readmission rates.

Priorities that Support Specific Patient Populations

The Hospital Medicine Section uses a patient-centered approach to improve outcomes across the care continuum of hospitalization from pre-admission to post-discharge.

Our focus:

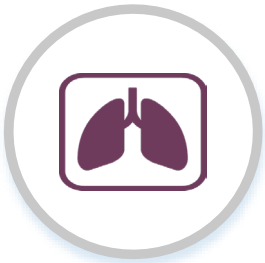
- acute and chronically ill adult patients with complex health needs not supported by other specialty-focused SCNs
- whole-systems approach to treatment - built around the clinical and social needs of the hospitalized patient



The Kidney Health Section strives to optimize prevention, early identification, and appropriate management across all ages and stages of kidney health.

Our focus:

- adults and children with, and at risk of developing kidney health issues
- working together with Alberta Kidney Care and other kidney community stakeholders, to improve the quality of care and outcomes for patients and their families



The Respiratory Health Section facilitates optimal respiratory health through the implementation and evaluation of innovative, patient-centered, evidence-informed, and coordinated services.

Our focus:

- adults and children with, and at risk of developing respiratory health conditions
- in collaboration with our stakeholders, we seek to reduce the impact of respiratory disease on individuals and the healthcare system

Each section has identified priorities and actions that support the three strategic directions of the Medicine SCN and address the needs of their patient populations.

Strategic Direction 1: Empower patients to improve their experience and health outcomes

Optimize informed choice and outcomes for Albertans living with End-Stage Kidney Disease	• Increase access to and improve patients' experiences with kidney transplantation. • Increase uptake of home dialysis. • Improve the lives and well-being of patients living with End-Stage Kidney Disease. • Improve transitions in care from one treatment approach to another.

Strategic Direction 2: Enhance integration to improve acute and chronic disease management and transitions between community and the hospital

Enhance admission processes for patients requiring hospital medicine services	• Develop and implement strategies to reduce avoidable medical admissions. • Enable timely medical admission from the Emergency Department.
Ensure an effective, efficient, and safe hospital stay and transition to the community	• Reduce ordering of low-value diagnostic tests and procedures. • Enhance quality of care provision for patients requiring specialist consult support. • Safely minimize length of stay, maximize outcomes, and manage transitions of care to the community. • Reduce medical readmission rates through validated predictive tools.
Optimize care of medical in-patients by maximizing utilization of technology and virtual care	• Leveraging existing technologies (e.g. electronic medical records and remote patient monitoring) to improve care provision to Albertans closer to home. • Support alternate models of care for providing acute care services (e.g., support development of a provincial approach to virtual hospital care to reduce avoidable admissions and readmissions and in-patient LOS).
Improving disease management for patients with respiratory conditions through integration and better transitions in care	• Improve care in the community for managing acute and chronic respiratory conditions. • Improve transitions in care for patients with chronic respiratory conditions.

Strategic Direction 3: Identify opportunities and address gaps in care, enable clinical best practices and reduce unwarranted variation to support quality health care

Reduce the risk of acute kidney injury and Chronic Kidney Disease through prevention, early identification and management	• Increase early identification of kidney disease and its risk factors in high-risk populations. • Identify those at high risk of acute kidney injury and develop strategies to reduce the risk. • Collaborate with others on strategies to prevent kidney disease and address common modifiable chronic disease risk factors.
Improve the management, coordination of care and outcomes for patients with kidney disease	• Increase use of evidence-informed therapies that delay progression of kidney and associated vascular diseases. • Reduce variability in identification and management of glomerulonephritis. • Improve appropriate utilization and integration of healthcare services for people living with kidney disease.
Reduce unwarranted variation in care across the continuum for respiratory conditions	• Improve understanding of variation in testing and therapies and reduce inappropriate variation to optimize care delivery. • Increase access to respiratory care by improving referral and triage processes and exploring alternative care models. • Develop and implement evidence-informed provincial strategies to improve quality and safety of care in treating respiratory conditions.
Promote the primary and secondary prevention and early identification of respiratory conditions	• Promote the prevention and early identification and management of respiratory conditions using evidence-informed strategies to reduce risk, slow disease progression or minimize exacerbations.

Research and Innovation

The Medicine SCN strives to ensure our research initiatives are evidence-informed, coordinated, implemented, and evaluated. The Scientific Office plays a vital role in enhancing the quantity and scientific quality of research activities and projects that align with the priorities of the TRM. Key aspects of this include: (a) developing research priorities in collaboration with patients/caregivers and clinicians; (b) the creation of measurement frameworks that allow for the evaluation and monitoring of established quality indicators across the identified priorities; (c) facilitating access to relevant data and analytic resources; and (d) supporting collaborations for cross-cutting Medicine SCN projects for research funding opportunities, such as the Partnerships for Research and Innovation in the Health System (PRIHS) grants.

Next Steps / Future Work

The Medicine SCN represents the next step toward inspiring solutions in health care. By reorganizing the former Kidney Health and Respiratory Health networks into sections with a new Hospital Medicine section, and folding these under the new Medicine SCN, we look to build on success while broadening our impact. Empowering patients, enhancing integration, and addressing gaps in care, serve as the common Strategic Directions that will guide our activities.

The Medicine SCN has laid out a plan that will enable the SCN and our stakeholders to achieve our goals. Together with our operational partners, we will implement the various strategies laid out in this plan, at a pace and scope that will be both feasible and impactful.

The Medicine SCN is pleased to be collaborating and aligning with our partners to implement transformational solutions in hospital medicine, kidney and respiratory care in Alberta. The strategies identified in this TRM will drive quality, innovation, and value across our system over the next five years.

The detailed Medicine SCN Transformational Roadmap 2021-26 can be found at

Medicine SCN | Alberta Health Services