Research & Innovation Priorities for Health

The purpose of this document is to highlight Research and Innovation priorities for health and illustrate the projects and activities currently occurring within Alberta Health Services' (AHS) Strategic Clinical Networks[™] (SCNs) that address these priorities.

A strong commitment to research, innovation and analytics provides a significant opportunity to improve health outcomes for Albertans while achieving the best value for every healthcare dollar spent.

The following system-level research and innovation priorities highlight where research and innovation can support current Ministerial areas of focus, including community-based health care, integration of care, disparities in health care delivery, and addiction and mental health. This list highlights alignment between Alberta Health, AHS System Innovation and Programs, the SCNs, and our major academic partners. Hyperlinks to relevant SCN Transformational Roadmaps (TRMs), outlining individual SCN priorities, are included to demonstrate existing linkages within the provincial health system landscape. Each SCN, in collaboration with academic partners, patients, clinicians, policy makers and partners have developed the transformational road maps outlining these efforts.

Highlighting the research and innovation priorities for health enables the provincial research and innovation community to align with health system focus areas. Increased alignment along the provincial health system continuum will support improving health outcomes for Albertans and increasing value for investments in research, innovation and the health system.

Community-based Health Care Priorities

Community-based health care encompasses integration of care across the entire continuum: Health promotion and illness/injury prevention; Primary care; Urgent care/after-hours care; Home and continuing care; Addiction and mental health; Paramedicine; Chronic disease prevention and management; and Palliative and end-of-life care. Within each of these sectors, there are a number of ways that research and innovation can enable the shift towards community-based health care:

1. Innovations in care & funding models

- Innovative care models
 - Addiction & Mental Health SCN
 - Cancer SCN
 - Cardiovascular Health & Stroke SCN
 - Digestive Health SCN



Alberta Health Services Strategic Clinical Networks

- Kidney Health SCN
- Maternal Newborn Child & Youth SCN
- Population Public & Indigenous Health SCN (TBD January 2018)
- Respiratory Health SCN
- Seniors Health SCN
- Innovative funding models, including innovations in physician compensation and funding to support team-based care
 - Cancer SCN
 - Cardiovascular Health & Stroke SCN
 - Critical Care SCN (TBD January 2018)
 - Maternal Newborn Child & Youth SCN
 - Population Public & Indigenous Health SCN (TBD January 2018)
- Models to support rural and remote care
 - Addiction & Mental Health SCN
 - Cancer SCN
 - Cardiovascular Health & Stroke SCN
 - Digestive Health SCN
 - Kidney Health SCN
 - Maternal Newborn Child & Youth SCN
 - Population Public & Indigenous Health SCN (TBD January 2018)
- Workforce planning and innovative staffing
 - Addiction & Mental Health SCN
 - Maternal Newborn Child & Youth SCN

2. Integration, care transitions, continuity of care

- Substance Use and mental health
 - Addiction & Mental Health SCN
 - Cardiovascular Health & Stroke SCN
 - Emergency SCN
 - Maternal Newborn Child & Youth SCN
- Seniors' health
 - Cardiovascular Health & Stroke SCN
 - Respiratory Health SCN
 - Seniors Health SCN
- Child → adult
 - Addiction & Mental Health SCN
 - Maternal Newborn Child & Youth SCN
- People with multiple chronic conditions integration of care across multiple providers
 - Cancer SCN
 - Cardiovascular Health & Stroke SCN
 - Critical Care SCN (TBD January 2018)
 - Digestive Health SCN
 - Kidney Health SCN
 - Primary Health Care Integration Network
 - Respiratory Health SCN

- Health care sector and social services sector
 - Addiction & Mental Health SCN
 - Maternal Newborn Child & Youth SCN
 - Population Public & Indigenous Health SCN (TBD January 2018)
 - Primary Health Care Integration Network

Sector-Specific Research and Innovation Priorities

1. Indigenous health

- Disparities in health outcomes and services received define and address inequities
 - Cardiovascular Health & Stroke SCN
 - Emergency SCN
 - Kidney Health SCN
 - Maternal Newborn Child & Youth SCN
 - Population Public & Indigenous Health SCN (TBD January 2018)
- Culturally responsive models of care define, design, deploy, and evaluate
 - Cancer SCN
 - Emergency SCN
 - Kidney Health SCN
 - Maternal Newborn Child & Youth SCN
- Population Public & Indigenous Health SCN (TBD January 2018)
 Identify and address differing needs of urban and rural and remote populations
 - Cancer SCN
 - Diabetes Obesity & Nutrition SCN
 - Emergency SCN
 - Kidney Health SCN
 - Maternal Newborn Child & Youth SCN
 - Population Public & Indigenous Health SCN (TBD January 2018)

2. Substance Use & mental health (AMH)

- Substance Use the opioid crisis, harm reduction
 - Addiction & Mental Health SCN
 - Emergency SCN
- Rural & remote addressing the AMH needs of Albertans outside the major centres
- Improved integration and continuity of care for AMH services, including services outside the health system (e.g. mental health in schools)
- Cannabis
 - Addiction & Mental Health SCN

3. Seniors' health

- Dementia innovations to improve quality of life, keep patients home longer
 - Critical Care SCN (TBD January 2018)
 - Seniors Health SCN
- Frail elderly address health care costs by keeping the frail elderly out of acute care
 - Bone & Joint Health SCN
 - Cardiovascular Health & Stroke SCN

- Critical Care SCN (TBD January 2018)
- Diabetes Obesity & Nutrition SCN
- Respiratory Health SCN
- Seniors Health SCN
- Healthy aging keep seniors in their homes longer
 - Diabetes Obesity & Nutrition SCN
 - Kidney Health SCN
- Facility-based continuing care, including quality
 - Bone & Joint Health SCN
 - Diabetes Obesity & Nutrition SCN
 - Seniors Health SCN

4. Rural and remote care

- Models for rural and remote care
 - Addiction & Mental Health SCN
 - Bone & Joint Health SCN
 - Cancer SCN
 - Cardiovascular Health & Stroke SCN
 - Critical Care SCN (TBD January 2018)
 - Diabetes Obesity & Nutrition SCN
 - Digestive Health SCN
 - Kidney Health SCN
 - Maternal Newborn Child & Youth SCN
 - Population Public & Indigenous Health SCN (TBD January 2018)
 - Respiratory Health SCN
 - Surgery SCN (TBD January 2018)
- Innovations to support rural and remote care
 - Addiction & Mental Health SCN
 - Bone & Joint Health SCN
 - Cancer SCN
 - Critical Care SCN (TBD January 2018)
 - Digestive Health SCN
 - Diabetes Obesity & Nutrition SCN
 - Kidney Health SCN
 - Maternal Newborn Child & Youth SCN

5. Women's health

- Maternal health
 - Maternal Newborn Child & Youth SCN
 - Population Public & Indigenous Health SCN (TBD January 2018)
 - Surgery SCN (TBD January 2018)
- Reproductive health
 - Maternal Newborn Child & Youth SCN
- Mental health (women as caregiver)
 - Addiction & Mental Health SCN
 - Maternal Newborn Child & Youth SCN

6. Population, public health, health promotion, and prevention

- Evaluation of wellness policy and practice
- Identification of and interventions for people at rising risk of chronic disease
 - Bone & Joint Health SCN
 - Cancer SCN
 - Cardiovascular Health & Stroke SCN
 - Digestive Health SCN
 - Diabetes Obesity & Nutrition SCN
 - Kidney Health SCN
 - Population Public & Indigenous Health SCN (TBD January 2018)
 - Respiratory Health SCN
- Evidence-based collaborative community work to create environments that support healthier choices
 - Cancer SCN
 - Cardiovascular Health & Stroke SCN
 - Diabetes Obesity & Nutrition SCN
 - Population Public & Indigenous Health SCN (TBD January 2018)
 - Respiratory Health SCN

Enabling Research and Innovation Priorities

- 1. Data & analytics
 - Data liberation
 - Cancer SCN
 - Cardiovascular Health & Stroke SCN
 - Critical Care SCN (TBD January 2018)
 - Digestive Health SCN
 - Maternal Newborn Child & Youth SCN
 - Population Public & Indigenous Health SCN (TBD January 2018)
 - Point-of-care decision support tools
 - Cancer SCN
 - Critical Care SCN (TBD January 2018)
 - Cardiovascular Health & Stroke SCN
 - Digestive Health SCN
 - Kidney Health SCN
 - Maternal Newborn Child & Youth SCN
 - Population Public & Indigenous Health SCN (TBD January 2018)
 - Respiratory Health SCN
 - Data visualization for providers and Albertans
 - Cancer SCN
 - Critical Care SCN (TBD January 2018)
 - Maternal Newborn Child & Youth SCN
 - Population Public & Indigenous Health SCN (TBD January 2018)
 - Expansion of capability for Albertans to enter their own data into data repositories
 - Application of utilization data to support evaluation and decision making
 - Cancer SCN
 - Critical Care SCN (TBD January 2018)

- Kidney Health SCN
- Maternal Newborn Child & Youth SCN
- Population Public & Indigenous Health SCN (TBD January 2018)

2. Technology use and application

- Continuity of care
 - Addiction & Mental Health SCN
 - Cancer SCN
 - Cardiovascular Health & Stroke SCN
 - Maternal Newborn Child & Youth SCN
 - Population Public & Indigenous Health SCN (TBD January 2018)
 - Respiratory Health SCN
- Virtual care/alternatives to face-to-face care
 - Addiction & Mental Health SCN
 - Cancer SCN
 - Cardiovascular Health & Stroke SCN
 - Digestive Health SCN
 - Kidney Health SCN
 - Maternal Newborn Child & Youth SCN
- Advances in diagnostic testing and screening
 - Cancer SCN
 - Critical Care SCN (TBD January 2018)
 - Population Public & Indigenous Health SCN (TBD January 2018)
- Innovations to support rural and remote care
 - Addiction & Mental Health SCN
 - Cancer SCN
 - Cardiovascular Health & Stroke SCN
 - Maternal Newborn Child & Youth SCN
 - Population Public & Indigenous Health SCN (TBD January 2018)
- Technology/innovation to support self-management of disease and patient and family involvement in care
 - Addiction & Mental Health SCN
 - Critical Care SCN (TBD January 2018)
 - Maternal Newborn Child & Youth SCN
 - Population Public & Indigenous Health SCN (TBD January 2018)
- Point-of care testing
 - Cardiovascular Health & Stroke SCN
 - Kidney Health SCN

3. Evaluation and health economics

- Understanding link between health outcomes and value for money
 - Addiction & Mental Health SCN
 - Cancer SCN
 - Cardiovascular Health & Stroke SCN
 - Critical Care SCN (TBD January 2018)
 - Digestive Health SCN

- Kidney Health SCN
- Maternal Newborn Child & Youth SCN
- Quality of life metrics particularly for community-based care
 - Addiction & Mental Health SCN
 - Cancer SCN
 - Critical Care SCN (TBD January 2018)
 - Kidney Health SCN
 - Maternal Newborn Child & Youth SCN
 - Population Public & Indigenous Health SCN (TBD January 2018)
- Metrics to assess value and outcomes for virtual care
 - Addiction & Mental Health SCN
 - Cancer SCN
 - Kidney Health SCN
 - Maternal Newborn Child & Youth SCN
- Real world evidence
 - Addiction & Mental Health SCN
 - Cancer SCN
 - Cardiovascular Health & Stroke SCN
 - Kidney Health SCN
 - Maternal Newborn Child & Youth SCN
- Assess impact of innovations on the system
 - Addiction & Mental Health SCN
 - Cancer SCN
 - Critical Care SCN (TBD January 2018)
 - Kidney Health SCN
 - Maternal Newborn Child & Youth SCN