

Cancer Strategic Clinical Network

Research and Innovation

Strategic Plan

March 2nd, 2016

I. Introduction

The Strategic Clinical Networks (SCNs) are mandated to develop a focused provincial health research program in collaboration with academic partners and to create new knowledge and translate it into measurably improved health and health care for Albertans¹. The mandate involves developing health care research capacity and executing prioritized population-specific health services, systems, and policy research and population and public health research. Where appropriate and needed, the SCNs may also become engaged in applied clinical and basic research. Further, the SCNs are expected to access provincial, national, and international research support to execute their 'for Alberta' mandate.

SCN research priorities are based on the health care needs of the citizens of Alberta. As such, the community-at-large, or the SCN's provincial research network, or the SCN leadership or Core Committee, can recommend research topics and projects. The impact of research within the SCNs is measured by the outputs from six categories, which include the Canadian Academy of Health Sciences' categories of performance indicators: creating new knowledge; creating research capacity; informing decision-making; providing health benefits; improving health system effectiveness and efficiency; and broader economic and social benefits.

Research and innovation in the SCNs is prioritized according to five major deliverables:

- improving the health of Albertans: preventing diseases and injuries
- improving the quality of care (six dimensions of quality; Figure 1)
- decreasing unjustifiable variances in the quality of care
- improving value over time
- actively translating knowledge of improvements into common practice in Alberta

Validation of evidence-informed, value-added devices, technologies, systems, and services (innovations) can provide value to Alberta and potential users of the innovation. As such, each SCN has been encouraged to develop a program around innovation. Internal innovations are high priority; however, the innovations of others that potentially add value to patients and AHS should also be evaluated and, if appropriate, adopted for use in Alberta.

Innovation and applied health research by the SCNs is aimed at improving the quality of care in the six health care quality dimensions (Figure 1)². These dimensions can be quantified and are often accompanied by major monetary implications to the health system. Financial gains realized from savings to the health system can be reinvested in new research and innovation strategies, or priority quality improvement areas of the SCN, or in the operational groups that supported the work. Reinvestment serves as an incentive to stakeholders to support applied research and to help quantify its benefits.

¹ Alberta Health Services Strategic Clinical Networks: A Primer & Working Document, 2012 – V5.

² Health Quality Council of Alberta.



Figure 1. Health Quality Council of Alberta Six Dimensions of Quality.

II. Stakeholder Consultation

The Cancer SCN hosted a research and innovation strategic planning meeting with its Core Committee members and several cancer research leaders from across the province on June 18, 2014 in Calgary. The meeting goals were to characterize the role of research within the Cancer SCN, to delineate the role of research to achieve the Cancer SCN's strategic objectives, and to identify a process for prioritizing Cancer SCN research. Following presentations by several of the Cancer's SCN's strategic partners, as well as two panel discussions and a breakout session, common themes emerged:

- Transitions of care research
 - Address patient and provider research questions around the delivery of care;
 - Support patient-oriented and patient-led research;
 - Strive to integrate the Canadian Institutes of Health Research (CIHR) pillars of research (i.e., biomedical, clinical, health services, and population health); and
 - Focus on access to care, continuity of care, and gaps in transitions of care.
- Cancer clinical care pathway implementation research
 - Focus on uptake and sustainability; and
 - Identify the culture necessary for change.

- Building cancer research capacity
 - Provide a venue for targeted collaboration in areas of strategic value;
 - Provide access to research resources; and
 - Provide access to funding opportunities.
- Dissemination of new cancer knowledge and information
 - Provide access to opportunities for knowledge translation; and
 - Provide access to SCN-based conferences and meetings.

III. Environmental Scan

The cancer research landscape in Alberta is rich with basic scientists, clinical researchers, and population health researchers. These individuals represent three main bodies: CancerControl Alberta, the Charbonneau Cancer Institute (formerly, Southern Alberta Cancer Research Institute) at the University of Calgary, and the Cancer Research Institute of Northern Alberta (CRINA) at the University of Alberta. Additional basic research generated out of the University of Lethbridge further complements the work being done at the Charbonneau Cancer Institute and CRINA. Among the Canadian Institutes of Health Research (CIHR) four research pillars, health services research in cancer remains the one area that is less developed in Alberta. There is no organized health services research program for cancer at either of the universities or within CancerControl Alberta. As such, this may represent a niche area that the Cancer SCN is well-positioned to support by complementing the work being done by our partners (Figure 2). Cancer health services research is well-reflected in the key messages brought forward by the Cancer SCN Core Committee through the consultation process.



Figure 2. Cancer research partners in Alberta; CRINA = Cancer Research Institute of Northern Alberta; CCA = CancerControl Alberta; SCN = Strategic Clinical Network (Alberta Health Services).

IV. Supports Available for Research

The Cancer SCN's Scientific Office, which consists of the Scientific Director, Assistant Scientific Director, and Senior Researcher, are positioned within the Research Innovation and Analytics portfolio of Alberta Health Services. This purposeful organization provides the Cancer SCN with access to a variety of research supports that cancer researchers can leverage.

Cancer SCN Research Staff. The Assistant Scientific Director (1.0 FTE) and Senior Researcher (1.0 FTE) will support the entire continuum of research, from idea generation to knowledge dissemination. Supports include:

- identifying local, provincial and national research funding opportunities and communicating them to the Cancer SCN research community;
- assisting research teams with identifying and engaging suitable inter- and cross-disciplinary collaborators;
- providing expert scientific advice and/or mentorship (as negotiated) on the critical appraisal of best evidence, the development and articulation of research questions, and the selection of appropriate research methodologies and analytic/evaluation plans;
- helping research teams navigate the processes of grant writing, submitting applications for funding opportunities, and obtaining appropriate project approvals (e.g., Cancer Research Ethics Board of Approval, A Project Ethics Community Consensus (ARRECI) screening tool, etc.);
- providing guidance on managing post-submission reviewer feedback, and for funded applications, guidance on managing research budgets and timelines;
- facilitating access to relevant research support services available within AHS (e.g., Research Priorities and Implementation, DIMR, etc.);
- identifying and announcing to the Cancer SCN research community local, provincial, and national opportunities for knowledge dissemination; and
- providing feedback on research "end products", including presentations, reports, published manuscripts, etc.

Cancer SCN Annual Seed Grant Competition. The competition is designed to develop and strengthen larger funding proposals in the area of cancer-related health services research. For the purposes of this competition, cancer-related health services research is the investigation of: (1) access to cancer care; (2) quality of cancer care; (3) costs and processes associated with the delivery of cancer care; and (4) outcomes of cancer care provided to individuals with cancer and their families. The competition has been created to encourage the development of ideas that will improve the quality of cancer care delivery in the Health Quality Council of Alberta's six domains of quality. Where possible, the Cancer SCN seeks partnership in order to maximize funding opportunities.

Research Resources within Alberta Health Services. Within the Research Innovation and Analytics portfolio there are several departments that can be leveraged for research support. These departments offer support with biostatistics and methodology, workforce research, knowledge translation and end of grant dissemination planning, health economics and benefits realization, and health technology assessment. All requests for support must be made

to the Scientific Director or Assistant Scientific Director, who will then make a recommendation for support. All requests must align with the strategic priorities of the Cancer SCN. Depending upon the department involved, support may be available free of charge (for priority AHS and SCN endorsed projects) or on a cost recovery basis.

Collaboration with Other Strategic Clinical Networks and Zone Leaders. The collaborative nature of the SCNs offers cancer researchers the unique opportunity to become connected with researchers from other disciplines and content areas, as appropriate. Close partnerships have already been forged with many of the existing SCNs, including Critical Care, Surgery, Cardiovascular Health and Stroke, Seniors Health, Addictions and Mental Health, Respiratory Health, and several others. The Cancer SCN is also well connected with Zone Leaders, as part of the overall implementation strategy, and can advocate for project endorsement, as appropriate.

V. Research and Innovation Strategic Plan

Cancer SCN Leadership, including the Scientific Office, will ensure the operationalization of the plan. Strategic direction is often sought from the Cancer SCN Core Committee, which is comprised of patients and family, leaders from within CancerControl Alberta, funding partners, zone leaders, primary care leaders, clinicians, data experts, and operational leads. The Cancer SCN Core Committee is instrumental in providing direction on existing and new/pending Cancer SCN projects.

The goals of the Cancer SCN Research and Innovation Strategic Plan (the 'Plan') were developed largely from the Stakeholder Consultation process.

Goal #1: Knowledge Creation, Implementation, and Dissemination. The delivery of high quality cancer care throughout the patient and family journey requires knowledge on the biggest gaps in **health services** delivery and transitions of care, from preoperative assessment, to treatment, to supportive care, to palliative/end of life care or survivorship care.

The Cancer SCN will accomplish this goal by providing:

- **hands-on support and scientific advice** and **monetary support** (i.e., seed grants) for the development of competitive research funding proposals focused on researching innovative ways to close the gaps in health services delivery and transitions of care;
- access to **research resources** (i.e., data, statistical support, literature, etc.) for funding applications and non-funded research and QI projects;
- **logistical support** and leadership in meetings between collaborating researchers and stakeholders, including patients;
- **letters of support** for funding applications; and
- opportunities for **knowledge dissemination**, including presentations at Cancer SCN Core Committee Meetings, webinars, and other venues; publication of research findings in medical journals, where appropriate; capturing, transferring, and translating new knowledge into the Cancer SCN's non-research projects; and incorporating the patient experience throughout the delivery of new knowledge.

Measuring Success. The success of the Cancer SCN in meeting this goal will be measured according to a common set of Canadian Academy of Health Sciences (CAHS) indicators agreed upon by all SCN Scientific Arms (Table 1).

Table 1. Performance Indicators for the SCN Scientific Offices.

Domain	Indicator	Indicator Definition
1. Grant applications	Submitted external grants	Count of any grants supported by the SCN submitted to a single competition.
	Successful external grants	Count of grants supported by SCN submitted to a single competition and successful in that competition.
	Unsuccessful external grants	Count of grants supported by SCN submitted to a single competition but unsuccessful in that competition.
	Pending external grants	Count of grants supported by SCN submitted to a single competition where the outcome of that competition is unknown/pending .
2. Letters of Support	Letters of support	Letters of support provided to the SCN community on behalf of the SCN.
3. SCN Research Network Membership	Number of researchers who are members of the SCN research community	Count of researchers who self-identify as members of the SCN research community
4. SCN Research Network CIHR Pillars	Pillar I – Biomedical	Distribution of researchers across the CIHR pillars (I-IV) as self-identified by the researcher. Researchers are free to select as many pillars as they feel are applicable to their work
	Pillar II – Clinical	
	Pillar III – Health Services	
	Pillar IV – Public, Population and Community Health	
5. Peer reviewed publications	Published peer reviewed publications	Count of published, peer-reviewed publications generated
	Submitted peer review publications	Count of submitted, peer-reviewed publications generated
6. Student mentorship/supervision	Students who are supervised or funded by the SCN	Count of students who are supervised by the SD or ASD or funded by the SCN
7. Research Personnel	Research personnel who are funded through the SCN by grant dollars or other SCN funding mechanisms	Count of research personnel who are funded by the SCN and supervised by the SD or ASD.
8. Engagement with the Zones	Number of projects implemented in each zone	This indicator will be reported as 5 numbers (one for each zone) and is to include a count of the SCN projects implemented in a given zone as indicated by the Zone’s Ops Plan.

In addition to the indicators listed in Table 1, the Cancer SCN will also collect and report on proposals focused on patient- and family-centered research across the cancer continuum,

and the number of projects (funded and non-funded) addressing the six dimensions of quality with a focus on patient and family priorities, gaps in care (current versus best practice), variance in care, and value in the delivery of care. We will also measure the number of new evidence-informed clinical care pathways and other tools generated from research. Finally, we will evaluate the number conference abstracts/presentations, presentations at other meetings, webinars, and/or web articles promoting new cancer knowledge.

Goal #2: Maximizing Funding Opportunities. The undertaking of cancer health services research will require that the Cancer SCN capitalize on existing funding opportunities and seek new funding opportunities. We will work with provincial and national partners to champion the creation of funding opportunities that will allow grass-roots driven (i.e., clinician- and patient-identified) research questions that address gaps in quality cancer care throughout the patient and family journey.

The Cancer SCN will accomplish this goal by:

- providing a forum for the identification of grass-roots research questions;
- creating opportunities for researchers and clinicians and patients to collaborate on grass-roots research projects; and
- working with foundation partners, university partners, the government, and non-profit organizations to develop new funding opportunities aimed at enhancing quality of care.

Goal #3: Academic Cancer Health Services Research Program. There is no organized health services research program for cancer at either of the universities or within CancerControl Alberta. Furthermore, the Cancer SCN Core Committee consultation process identified cancer health services research as an important area of focus. As such, the Cancer SCN will endeavor to create an academically-affiliated cancer health services research program. Early work may include establishing a mechanism for integrating clinician- and patient-driven research questions into the research agendas of the academic communities. We will aim to create, over time, mentorship opportunities between interested cancer clinician researchers and experienced health services researchers in order to increase capacity in this area. The expected outcome of this work is a cancer research landscape that is strong, not only in basic, clinical, and population health research, but equally competitive in health services research.

Timeline for the Research and Innovation Agenda: The research and innovation agenda is a living document; it will be updated on a quarterly basis and made available to the Cancer SCN Core Committee as well as other stakeholders, by request. As existing projects are completed and new projects are identified, the research and innovation agenda will be modified.

Further Information:

For more information on the Research and Innovation Strategic Plan, please contact us at cancer.scn@albertahealthservices.ca.