

CRITICAL CARE STRATEGIC CLINICAL NETWORK

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Critical Care Strategic Clinical Network Update

The Critical Care Strategic Clinical Network (SCN) is designed to be a mechanism to empower and support critical care physician, operational and clinical leads to develop and implement evidence-informed, clinician-led, team delivered health improvement strategies across Alberta. The ability to establish a *Critical Care Community of Practice* that engages key stakeholders—including patients and families and the clinical workforce— provides value to drive our initiatives, priorities and services.

Critical Care SCN Mission:

To be a recognized leader in the provision of optimal, sustainable, patient and family centered critical care across the health continuum.

To Date the Critical Care SCN has:

- Determined the initial priorities for the Critical Care SCN work over the next year which are outline in the Transformational Roadmap diagram below;
- Supported and resourced the development of a provincial critical care orientation program and curriculum;
- Conducted an ICU Inventory Survey to support development of a provincial Critical Care Standards and Operational Model for care and service delivery;
- Collaborated with eCritical Alberta provincial CIS implementation to all 35 critical care units provincially.

Research and Innovation

PRIHS Grant #1: Evaluating the capacity of ICU to care for critically ill patients in Alberta.
PRIHS Grant #2: Identifying evidence-care gaps in critical care in Alberta and developing interventions to close them.

Current Projects

*Position Statement and Provincial Practice Guidelines for use of Inhaled Nitric Oxide in Critical Care in Alberta
*Orientation Program for Adult Critical Care in Alberta
*Delirium Assessment & Prevention Management Guideline
*Patient and Family Centered Care Toolkit

Quality Improvement

Critical Care Performance Measurement and Reporting Framework

“Finally someone has brought the right people to the table to look at evidenced-based practice...”

- Dr. Mohamad Zibdawi,
iNO Project Adult Cardiac Lead

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Welcome to the Critical Care SCN!

The Critical Care SCN is a community of clinicians and other stakeholders from across Alberta hospitals' critical care units and our health system brought together to create partnership and collaboration that we oftentimes refer to as a *Critical Care Community of Caring*.

Our critical care community includes adult and pediatric ICUs and adult CVICUs.

Critical care is the provision of complex life support technologies to critically ill patients with *potentially reversible diseases*. We are stronger working together as a *Critical Care Network* rather than in isolation because we can optimize system access across the province, share resources, and develop evidence-based practices and expertise to improve patient outcomes.

Optimization of Evidenced-Based Practice for the use of Pulmonary Vasodilator Therapy - not only a Reassessment Project but also the Right Thing To Do.

The use of inhaled pulmonary vasodilators has become a focus of clinical appropriateness for certain patient conditions and a cost-reduction initiative in some Alberta hospitals where this therapy is provided to critically ill patients. The Critical Care SCN, in collaboration with certain critical care units, is supporting a practice change in providing this therapy that includes tracking costs and utilization.

Since 2005 we have seen a cost increase in the use of inhaled nitric oxide (iNO) of 1,366%. We continue to see variation in clinical practice use of iNO with no evidence to support its use in some patient populations. The use of a more cost effective alternative—Epoprotenol—is supported by evidence in some clinical conditions.

A *Position Statement* and *Practice Guidelines* will be developed and piloted to support a reduction in the use of iNO where limited evidence exists regarding its clinical effectiveness. Operational tools will also be developed to assist critical care units understand their iNO and Epoprotenol usage, costs, clinical impact, economic efficiency, and patient outcomes.

Critical Care SCN takes Provincial Approach to Registered Nurse Training.

Whether in Medicine Hat or Grande Prairie, critical care nurses for adult patient populations in Alberta will receive training before stepping foot into their local care units. The Critical Care SCN Education Team developed a standardized provincial orientation for all new Registered Nurses to the adults ICUs, CICUs, and CVICUS in the province. This five-week program covers everything from how to use the specialized ICU equipment to how to care for ventilated or intubated patients.

The Education Team was recognized nationally for this program at the Canadian Association of Critical Care Nurses conference held in London, Ontario in October 2011 and was awarded the 2011 runner-up prize for innovation.

Throughout the orientation Registered Nurses also work several clinical shifts with senior ICU nurses to apply theory to practice. Currently, content is being revised based on feedback so that material is contemporary and evidenced-based. An evaluation of cost-effectiveness measures and the delivery system is underway to ensure long-term program sustainability.

Blood Transfusion Best Practices - A pan SCN Initiative.

The Critical Care SCN is working along-side the Cardiovascular Health & Stroke, Surgery, and Bone & Joint SCNs to examine blood usage among athroplasty, vascular and cardiac surgery, and critical care patients. Strategies to support blood conservation and appropriate transfusion practices will be developed along with site and physician specific reporting mechanisms. Stay tuned for more details.

PATIENTS and FAMILIES have a VOICE in the Critical Care SCN

Patient and Family Centered Care is an approach to the planning, delivery, and evaluation of health care that is grounded in mutually beneficial partnerships among health care providers, patients, and their families.

We are partnering with **Patient and Family Advisors** to create a critical care specific Philosophy, Standards and Toolkit to support critical care units by ensuring we understand, from patients and families, what is important to them when experiencing adult and pediatric critical care services



One of our mandates is to lead and support evidence-informed critical care improvements in team-delivered prevention and in clinical performance to achieve the highest quality and best outcomes at the lowest reasonable costs.



Critical Care Vital Signs - defining Key Performance Metrics supports care delivery...

Research Collaboration through the Critical Care SCN

Our research team, led by our Scientific Director Dr. Tom Stelfox, has a mandate to develop a focused provincial critical care research program in collaboration with academic partners and to create new critical care knowledge and translate it into measurably improved health and health care for Albertans.

Long-term Research Goals:

- To increase capacity for scientific work within the Alberta critical care community;
- To enhance the culture of science and innovation within the Alberta critical care community;
- To improve the health and health care delivered to critically ill patients through knowledge creation and knowledge translation.

Current Research:

Two new research programs have recently been identified and prioritized by our research community:

- **Program #1** is being led by Dr. Sean Bagshaw and proposes to focus on evaluating the capacity of intensive care units to care for critically ill patients in Alberta (i.e. what care do you get for a critical care bed; can we improve the value; how many beds are optimal in a health system?)
- **Program #2** is being led by Dr. Tom Stelfox and proposes to focus on identifying evidence-care gaps in critical care within Alberta and developing interventions to close them.

Critical Care SCN Leadership Team

David Zygun	Senior Medical Director
Barbara Sonnenberg	Vice-President
Patty Wickson	Executive Director
Tom Stelfox	Scientific Director
Michelle Salessse	Manager
Arlene Providence	Administrative Assistant
Elizabeth Grierson	Administrative Assistant
Kimberly McGrann	Administrative Assistant

New! *Dispute Prevention and Resolution in Critical Care Settings* Policy & Procedure ... officially Launched May 8, 2013!

The new *Dispute Prevention and Resolution in Critical Care Settings* policy and procedure will provide practical guidance and promote consistent respectful and transparent clinical practice to prevent or resolve disputes in our critical care units.

This policy and procedure is intended to deliver the following:

- Guidance for resolving disputes between health practitioners and patients/alternate decision-makers;
- Timely and consistent processes in dispute prevention and resolution;
- Support to patients and families;
- Reassurance to health practitioners that they are supported by the organization when due process has been followed.

The CC SCN is Central Communication Hub for AHS Working Groups and Alberta Critical Care

The CC SCN is the central communication hub for AHS Working Groups and Alberta critical care areas for all matters as we work to develop consistency and standardize across the provincial critical care areas.

Pandemic Planning

The Critical Care Provincial Pandemic Planning team has been working on compiling ICU capacity (existing and surge) information from across the province; gathering admission/transfer/discharge protocols from all sites to understand and record common practice and principles; and, initiated a review and update process to bring the 2009 Clinical Practice Guidelines for Care of Critically Ill Influenza-Like-Illness patients and the ECLS/ECMO protocol to 2013 standards. The 2013 standards will be posted to the CC SCN and E/DM websites once complete.

Accreditation

The CC SCN Accreditation Working Group will begin meeting November 2013 to reviewing previous standards compared to new and historical data from the last survey visit to set priority actions such as strategies to address past required follow up items, highest risk/unmet needs and status of Required Organizational Practices (ROPs)

The Working Group plans to meet every two months beginning November 2013 until about nine months prior to the accreditation at which time meetings will be more frequent as required for final preparations.

More Information

In the coming months we will keep you posted on the work of our Critical Care SCN.
If you wish to learn more, or become involved, please contact :

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