

# Critical Care Strategic Clinical Network



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## Driving Quality Improvement Through Key Performance Indicators

On March 19, 2014, the Critical Care Strategic Clinical Network (SCN) hosted a full-day retreat in Calgary that brought together members of the Critical Care community to determine and prioritize a provincial set of clinical, operational and quality performance indicators and measurement standards in accordance with the [Alberta Health Quality Matrix and the Six Dimensions of Quality](#).

To inform our work, the SCN pursued several activities to ensure that the retreat was evidenced-

based, reflected current clinical and operational needs, and could lead to actionable strategies for quality improvement.

Pre-retreat work included a literature search and



scoping review, stakeholder consultations, an

application of the Alberta Health Quality Matrix and the Six Dimensions of Quality, and a pre-retreat prioritization survey.

While at the retreat, 54 attendees participated in a World Café and Voting Prioritization exercise.

Several common indicators and quality improvement topics were identified across all activities leading up to and during the KPI retreat. The common indicators and quality improvement topics are listed in alphabetical order on page 2....

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## New Investigator Seed Funding Grant Competitions Awarded

The Critical Care Strategic Clinical Network (SCN) New Investigator Seed Funding Grant Competitions have been Awarded.

The Scientific Portfolio of the Critical Care SCN held a competition for biomedical, clinical, population health, and health services research proposals that were designed to provide critically ill patients

with better care and better health.

Proposals could target science and innovation in any part of the continuum— from improved understanding of the biologic aspects of a particular disease, to the application of a new therapy or supportive care, to improvement of the quality of lives of patients, their families or both, to

enhancing the quality of survivorship or bereavement and to strengthen the training of critical care providers. Please turn the page to learn more about how the competition advances the Critical Care SCN's long-term research goals and to see which projects were funded.

....continued on page 2....



**Our Mission**

*Critical Care in Alberta will strive to be a recognized leader in the provision of optimal, sustainable, patient and family centered critical care across the health continuum.*



**Our Vision**

*To create a seamless experience across critical care in Alberta*

## New Investigator Seed Funding Grant Competitions Awarded

....continued from page 1....

This competition was designed to advance the Critical Care SCN's long-term research goals:

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

We are thrilled to announce that we received several high-quality applications and after the review process was complete we were able to fund four projects:

1. Blackwood, J. "Metabolomics and cytokine analysis for the differentiation of life-threatening and non-sever appendicitis in the pediatric population."
2. Jenne, C. "The role of platelets and neutrophil extracellular traps (NETs) in disseminated intravascular coagulation."

3. Niven, D. "The adoption and de-adoption of intensive insulin therapy among critically ill adults."
4. Van Diepen, S. "Improving care transitions in post-operative cardiac surgery patients."

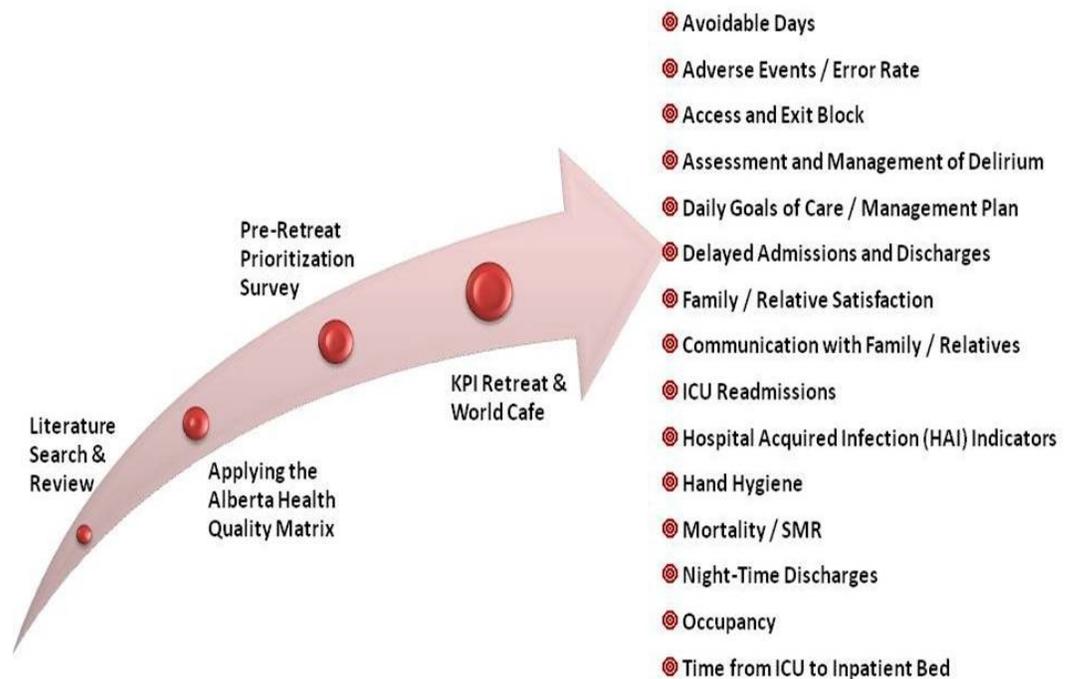
*Congratulations to all the successful applicants!*

*Sincerely,*

*Drs. Tom Stelfox, Sean Bagshaw, and Melissa Potestio*

## Driving Quality Improvement through Key Performance Indicators

### Commonly Identified Critical Care Indicators and Quality Improvement Topics



# Critical Care SCN — Patient and Family Centered Care *Journey*

Over the past year, the Critical Care SCN has embarked on its journey to increase focus on Patient and Family Centered Care (PFCC), something which continues to be exciting and inspiring...



## Key STEPS along this *Journey* have consisted of:

### STEP

#### Recruit Advisors & Monthly Critical Care SCN Meetings —

Two Family Advisors (one representing adult ICU and one pediatric ICU) joined the SCN, took part in monthly meetings and started building relationships with SCN committee members.

### STEP

#### High level Critical Care PFCC Survey & Interviews of ICU Managers —

Showed that across Alberta's adult ICU's:

- Defining PFCC (what it is, what it isn't) and having a way to measure progress is

important

- A difference exists in the use of PFCC across units
- No PFCC standards or guidelines seem to exist
- Many Critical Care staff show great interest and passion in enhancing PFCC

• Many resources exist which can be leveraged in enhancing Critical Care PFCC

- ICU staff treat both the patient and their family members
- Having the disciplines who work a lot with families directly involved in the group is important
- Early involvement of patients and families on the PFCC journey is important

### STEP

#### Sharing of Personal Stories—

Both Family Advisors shared their stories (experiences) with the SCN. These helped reinforce the importance of stories, as captured well by comments after one of the stories was shared...

### STEP

#### Research —

The SCN Research team reached out to the Patient and Community Engagement Research (PACER) team (through the University of Calgary) to engage patient-oriented research teams with two Critical Care research projects in 2014. The objectives are to understand what is most important to patients and their family members, related to both of these studies.

*“In a healthcare world that too often focuses on statistics and economics, you provided a relevance to our work that no ‘number’ could ever provide. You left all of us with tears in our eyes, but you also left us with a renewed strong desire to improve our focus on patient and family centered care. We must get better. There is no option.”*

— Dr. David Zygun —

## **STEP**

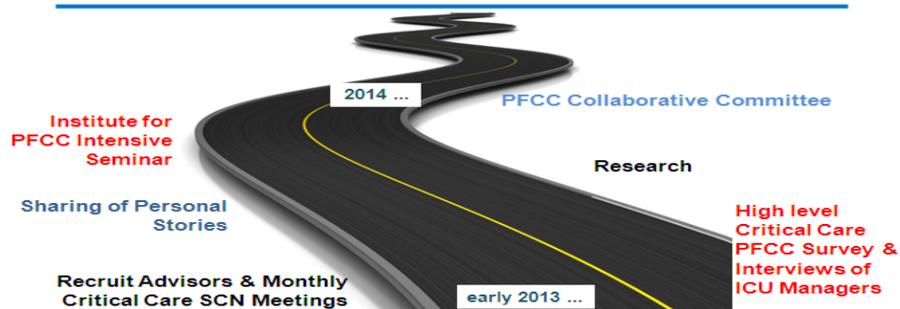
### **Institute for Patient and Family Centered Care (IPFCC) Intensive Seminar—April 2014**

A six person team representing Critical Care (physician, bedside nurse, social worker, patient care manager, SCN executive, family advisor) participated in this 4-day seminar with 400 people from across the world. This group found taking part a fascinating mixture of being exciting, inspiring, a little overwhelming and a wonderful team-building environment.

The three key learnings included:

1. Fundamentals of PFCC needs to be throughout the organization
2. Leadership, staff buy-in and organization support from all levels is very important
3. PFCC is a *Journey*, not a destination.

#### Critical Care SCN's PFCC Journey ...



## **NEXT STEPS**

### **Critical Care PFCC Collaborative Committee**

1. Confirm the PFCC Collaborative Committee membership and regular meetings
2. Establish current state assessment with all critical care units
3. Identify top 3 priorities (potentially—family presence, support establishment of PFCC committees for all units, Palliative & End-of-Life Care)
4. Establish provincial working groups to support the PFCC Collaborative Committee and priorities
5. Create PFCC Community of Practice

If you have any questions about the Critical Care SCNs PFCC Journey, please don't hesitate to contact:

Patty Wickson—Executive Director, Critical Care SCN @ [patty.wickson@albertahealthservices.ca](mailto:patty.wickson@albertahealthservices.ca)

Peter Oxland—Family Advisor, Critical Care SCN @ [peter.oxland@albertahealthservices.ca](mailto:peter.oxland@albertahealthservices.ca)

# Inhaled Nitric Oxide (iNO) Project Critical Care Strategic Clinical Network

## Overview

The main objective of the iNO project is to establish the appropriate clinical use of iNO. To support this objective the iNO project has established clinically appropriate use of comparators (ie. Flolan®) when available.

Across Alberta critical care units there is a lack of both (i) provincial standardization of clinical practice for the use of iNO; and (ii) consistent and standard monitoring, tracking and auditing of the use of iNO.

This project will develop Clinical Standards of Practice for the use of iNO for adult and pediatric patient populations and Flolan for adult populations.

Operational tools will be developed to assist critical care units in understanding their inhaled pulmonary vasodilator usage, clinical impact, patient outcomes, and costs.

The project will leverage the work of eCritical TRACER group to support and develop web based reports featuring specific outcome measures.

## Approach

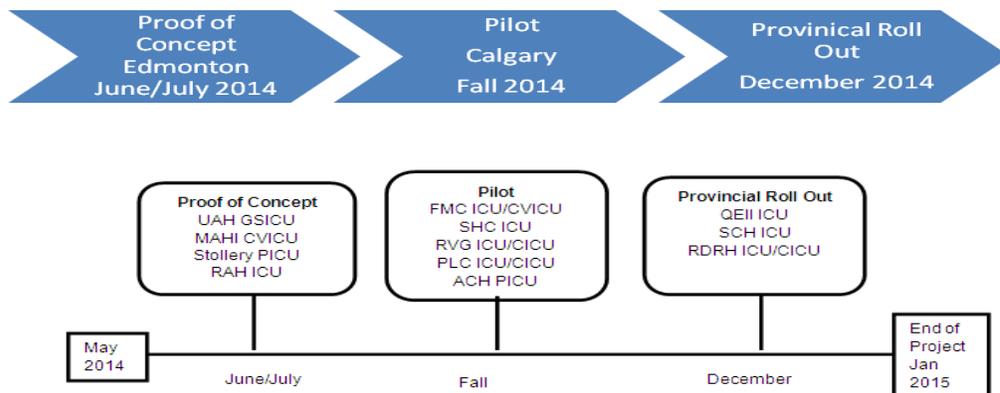
The Critical Care SCN believes that a formalized change management approach is required to effect the practice change of clinically appropriate use of iNO and Flolan across Alberta Critical Care where limited evidence exists regarding clinical effectiveness to support its use.

An evaluation in the form of a data measurement plan and survey will be conducted to inform provincial implementation. An Implementation Plan will be developed to guide provincial “roll out”.

## Benefits Realized

The development of Standards of Practice for the use of iNO and Flolan in adult and pediatric patient populations in Alberta Critical Care units will support consistency in the practice through an evidence-informed framework.

The development of the proposed Standard seeks to provide consistent high quality and cost-effective care for critically ill patients across the province.



Contact Us: [criticalcare.clinicalnetwork@albertahealthservices.ca](mailto:criticalcare.clinicalnetwork@albertahealthservices.ca)

We want to hear  
from YOU and tell  
YOUR stories!

Please  
Contact Us today...

# Café Scientifique

## How would YOU improve life-saving care in Alberta?

A panel of esteemed experts will discuss research priorities to help improve life-saving care in Intensive Care Units in Alberta. What do YOU think?

Panelists: Dr. Chip Doig, Dr. Sean Bagshaw, Dr. Daren Heyland and Peter Oxland.

Moderators: Dr. Tom Steffox and Dr. David Zygun.

When: Thursday, June 5, 2014, from 6:00 - 8:00 PM

Where: The Palomino Smokehouse, 109 - 7th Avenue SW

Register (optional): [tinyurl.com/n3ywkd6](http://tinyurl.com/n3ywkd6) or  
[iph.ucalgary.ca](http://iph.ucalgary.ca)

Café Scientifiques are informal discussions between scientists and the public to ask and answer important health questions.

