

Strategic Clinical Networks

Inhaled Nitric Oxide

The Project

Inhaled Nitric Oxide (iNO) therapy is a treatment for patients with extremely low blood oxygen levels or severe heart failure. Understanding the appropriate use of iNO and when to use alternative forms of treatment, such as Flolan®, is critical to consistent patient care. The iNO project is creating provincial standards to guide staff on the appropriate use of iNO and Flolan® at hospitals across the province.

Since 2005 AHS has seen a cost increase in the use of inhaled nitric oxide (iNO) of 1,366%. Evidence shows a more cost effective alternative would be appropriate in some clinical conditions.

The Process

The iNO project is implementing standards for iNO and Flolan® use through a phased in approach while receiving feedback from front-line staff throughout the process. This enables hospitals to understand and implement a change of practice by identifying the appropriate use of iNO and Flolan®.

Three intensive care units (ICU) at the University of Alberta and the Royal Alexandra Hospitals participated in the first phase of the iNO project. In fall of 2014 this spread to ICU's at Foothills Medical Centre and Peter Lougheed Centre. A provincial-wide roll out happened in Spring, 2015.

The Success

Comparing the same six week period from 2013 to 2014 (after the new standards have been implemented), the two units who used iNO during this time, showed a significant reduction in the number of hours iNO was used and cost savings.

Site	2013 iNO hours	2014 iNO hours	Savings
University of Alberta Hospital - General Systems Intensive Care Unit	186	0	\$20,460
University of Alberta Cardiovascular Intensive Care Unit	340.9	151	\$18,624

The Team

This project is lead by the Critical Care Strategic Clinical Network (SCN) with the support of Zone operational teams.

