

PRIHS: Partnership for Research and Innovation in the Health System

FUNDING AWARDS



Don't Misuse My Blood: Reducing Avoidable Blood Tests and Avoidable Blood Transfusions in Patients admitted to Critical Care and High-risk Surgical Units in Alberta

PROJECT FAST FACTS

LEAD: Daniel Niven

INSTITUTION: University of Calgary

PRIHS AWARD: \$751K

THE PROBLEM

Severely ill patients admitted to intensive care units or having major surgery commonly have large volumes of blood sent for routine testing and are commonly provided blood transfusions. When clinically justified, these are appropriate. However, when not justified, these are unnecessary sources of pain and disruption for patients, transfusion-related risk, and unnecessary healthcare spending. Alberta data suggests many blood tests and transfusions are avoidable.

THE SOLUTION

This project aims to reduce avoidable daily blood tests and transfusions among severely ill patients admitted to intensive care units and following major surgery in Alberta and will be done through 4 linked research steps.

GOAL

The project's main focus will be the reduction of blood tests and transfusions. The first step is the use of electronic health data to determine baseline use of daily blood tests and blood transfusions and determine factors associated with abnormal daily blood tests. The second step will develop consensus guidelines to define avoidable blood tests (guidelines already existing for blood transfusions). Step 3 will use surveys to assess factors that increase or decrease the likelihood of appropriate blood testing and transfusion. Step 4 will use information gained from Steps 1-3 to implement interventions to reduce avoidable daily blood tests and transfusions.

The project aims for a 30% reduction in daily blood tests and transfusions, freeing up costly healthcare system capacity and resources valued at \$10.0M annually, while simultaneously reducing potential harms experienced by patients, improving the patient experience, and respecting the precious gift of blood donation.

PROJECT OBJECTIVES:

- To implement interventions to reduce avoidable daily blood tests and transfusions.
- Use electronic health data to determine baseline use of daily blood tests and blood transfusions and determine factors associated with abnormal daily blood tests.
- Develop consensus guidelines to define avoidable blood tests.
- Analyze surveys, which will assess factors that increase or decrease the likelihood of appropriate blood testing and transfusion.

ABOUT PRIHS

The PRIHS program is designed to align the knowledge production efforts of researchers with the evidence needs of the health system. This is achieved by providing opportunities for researchers to propose solutions to priority health system challenges and access support from SCNs and other expertise within AHS to administer implementation studies. These implementation studies will help AHS identify and advance solutions that improve health care quality, health outcomes and value for Albertans.

VALUE & TERM

Combined pool of funds available: \$7 million. Individual award's period of support: up to three years.

FOCUS AREAS

PRIHS V provides a streamlined process for connecting Alberta's academic institutions with Strategic Clinical Networks™ (SCNs), patients, providers and leaders in AHS to:

- Translate research evidence into testable solutions that address priority health system challenges in Alberta as articulated by the SCNs; and
- Generate the evidence needed to identify and accelerate the spread and/or scale of solutions that foster more efficient and/or effective use of health care resources.

Learn how

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