

# RATIONALE: Critical Care Optimization of Albumin Ordering

RATIONALE: Critical Care Optimization of Albumin Ordering is a provincial quality improvement initiative within critical care. Led by Dr. Daniel Niven, in collaboration with the Physician Learning Program (PLP) and the Critical Care Strategic Clinical Network (CC SCN), the project received grant funding by the Canadian Institutes of Health Research (CIHR).

## Goal

RATIONALE's goal is to align clinical practice for albumin fluid replacement with current science. The initiative focuses on optimizing fluid replacement by reducing unnecessary use of albumin in Alberta intensive care units (ICUs), especially when there is a lack of benefit to the patient.

Albumin is a protein made by the liver and voluntarily donated by members of the public (blood product). It may be given intravenously to patients suffering from low body fluid levels such as in severe infection or burn. It also helps keep fluid in the bloodstream, so it doesn't leak into other tissues, and carries various substances throughout your body, including hormones, vitamins, and enzymes. Low albumin levels can indicate a problem with the liver or kidneys.

## Bringing Evidence into Practice

Strong evidence indicates that for most patients, albumin fluid replacement is not beneficial, and alternatives (such as normal saline or ringer's lactate) can be used with **less risk to the patient and less cost to the healthcare system while producing similar outcomes.**

