

Alberta's Strategic Clinical Networks

Basal Bolus Insulin Therapy (BBIT)

The Goal

Almost a quarter of all adult patients in Alberta hospitals have diabetes and during their hospital stay, they often experience high and low blood sugar. This can be very harmful for patients. High blood sugar (hyperglycemia) is associated with an increase in complications such as infection and delayed wound healing, increase in length of hospital stay and an increase in re-admission and death.

Basal Bolus Insulin Therapy (BBIT) aims to improve blood sugar control for diabetic patients requiring insulin while in hospital. It customizes insulin regimens based on the unique needs of each patient, targeting a safe blood sugar range.



The Process

Building on and spreading great work being done in areas across the province, this initiative will help standardize diabetes care and support health care providers in the use of Basal Bolus Insulin Therapy.

Currently, a common practice for managing diabetes and high blood sugar in hospital is the use of Sliding Scale Insulin Therapy. This approach treats high blood sugar when it happens rather than preventing it in the first place.

The use of Basal Bolus Insulin Therapy is a proactive approach which allows clinicians to customize insulin use based on the unique needs of each patient targeting it within a safe range of 5-10 mmol/L, as recommended by the Canadian Diabetes Association.

The Outcome

Internationally, the use of BBIT has shown to decrease the amount of times a patient experiences high blood sugars in the hospital, without increasing episodes of low blood sugars.

Early data from the previous implementation in Calgary hospitals, suggests a significant increase in the number of days the patient spends in the recommended blood sugar target zone.

Shorter hospital stays, less complications, and reduced hospital readmissions improve patient care and save health care dollars.

The Team

This project is led by the Diabetes Obesity & Nutrition Strategic Clinic Network (DON SCN), in collaboration with Zone operations teams, provincial Pharmacy and provincial Nutrition & Food Services.