

P11 - OPTIMAL REDUCTION IN HYPOGLYCEMIC EVENTS - A1C NEUTRAL: A CONTINUOUS QUALITY IMPROVEMENT INITIATIVE AT HILLSDALE ESTATES

Denis O'Donnell¹, Jenny Little², Mike Dickin², Cynthia Co³, Nataly Zilbershtein¹, Jennifer Walker², Doug McIntosh². ¹Medical Pharmacies Group Limited, ²Hillsdale Estates, ³University of Waterloo.

Contact: dodonnell@medicalpharmacies.com

Brief Description of Research or Project: The Canadian Diabetes Association's 2013 Clinical Practice Guidelines emphasize the importance of avoiding hypoglycemic events in the frail elderly. Strategies to avoid this potentially fatal outcome include the promotion of more conservative targets for glycemic control in this population. Between February and October 2012, Hillsdale Estates, a 300-bed long term care facility in the region of Durham, implemented various practice strategies focussed on reducing hypoglycemic events without adversely affecting blood glucose (BG) control. The purpose of the following continuous quality improvement (CQI) initiative was to evaluate the impact of these various clinical practice strategies around diabetes management. Specifically these strategies included educational sessions for physicians and nursing staff, interprofessional collaboration around insulin management as well as audit feedback reports. This CQI initiative involved a baseline and follow-up analysis of all diabetic residents currently on insulin therapy. The data was extracted from BG records three months prior to the clinical practice strategies (November 2011 to January 2012) and compared to three months of data extracted after the practice strategies were implemented (November 2012 to January 2013). During the three-month baseline period, 145 (2.7%) hypoglycemic episodes (BG <4mmol/L) were identified; 19 of them were considered severe (BS <2.8mmol/L). 82.1% of A1C results were less than 8%. In the follow-up analysis, there were 58 (1.1%) hypoglycemic episodes (BG < 4 mmol/L); 4 were considered severe. 86.7% of A1C measures were <8%. The practice strategies appear to have had a favourable impact on the number of hypoglycemic events without adversely affecting glycemic control. **Why is this research important to profile at the Research Day 2014?** This CQI initiatives offers some practical tools and tips for improving glycemic control in the frail elderly taking into account staffing and time constraints. The project supports key messages promoted in the recent 2013 CDA guidelines. It also provides a practical methodology for conducting future research initiatives focusing on diabetes.