

MANAGEMENT OF ORAL ANTIHYPERGLYCEMIC MEDICATIONS DURING GENERAL HOSPITAL ADMISSION

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Continuation of home oral antihyperglycemic medications (OAM) puts patients at increased risk for experiencing glycemic events during hospital admission. Hypoglycemia rates of 30-40% have been observed in patients continuing home OAM during hospital admission. Current clinical practice guidelines do not address continuation or discontinuation of home OAM upon hospital admission. The current practice at the study institution is to discontinue home OAM, unless reasonable to continue per clinician's judgement. This study investigates glycemic safety in relation to home OAM continuation or discontinuation.

The primary objective is composite occurrence of glycemic events, within the first 48 hours of hospital admission, while patients were receiving home OAM. Glycemic events include both hypoglycemia and hyperglycemia, as defined by the American Diabetes Association and the NICE Sugar Trial. The secondary objectives are as follows: occurrence of hyperglycemia, occurrence of hypoglycemia, use of sliding scale insulin, and use of hypoglycemia rescue medications.

A chart review was performed to assess whether home OAM were continued or discontinued upon hospital admission, as well as occurrence of glycemic events, and information needed for the secondary objectives. 125 patients were needed in each group in order to achieve a 90% powered with predicted glycemic event rate of 50%. Alpha was set at 0.05. A Neiman Fisher test was used to test the primary objective. This study was approved by Mercy IRB on January 15,2020.

Results of this study will help guide policy on continuation and discontinuation of home OAM upon admission and will allow pharmacy to impact patient safety.

Learning Objective:

- Recognize the impact of continuation or discontinuation of home oral antihyperglycemic medications on inpatient glycemic management.