sentara nurse

Increasing Use of Glucommander to Prevent Hypoglycemic Events

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Background

Hypoglycemic events often result from an over aggressive therapeutic regimen, whether it be by oral agents and/or insulin administration. If left untreated, hypoglycemia can lead to unconsciousness, seizure, coma and in extreme cases death (ADA, 2015). Many factors contribute to hypoglycemic events including but not limited to steroid administration and tapering, increase/decrease in oral intake, and time of anti-diabetic medication administration.

Aims/Goals/Objectives

- Decrease incidence of hypoglycemia
- Maintain Sentara Virginia Beach General Hospital (SVBGH) goal hypoglycemic rate of 2.42% or less consistently.
- Increase competency with Glucommander software amongst Registered Nurses.
- Increase competency with Glucommander software amongst Physicians, Physicians' Assistants and Nurse Practitioners.

Problem

The Intermediate Care Unit (IMCU) at Sentara Virginia Beach General Hospital (SVBGH) was experiencing high rates of hypoglycemic events entering into 2017. With a goal of 2.42%, by March there was an increase in hypoglycemic events of 3.28%.

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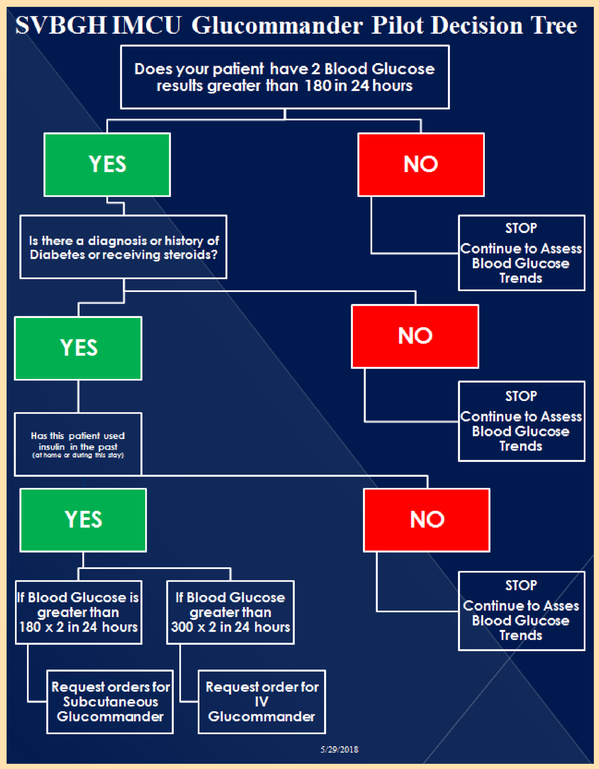
Method

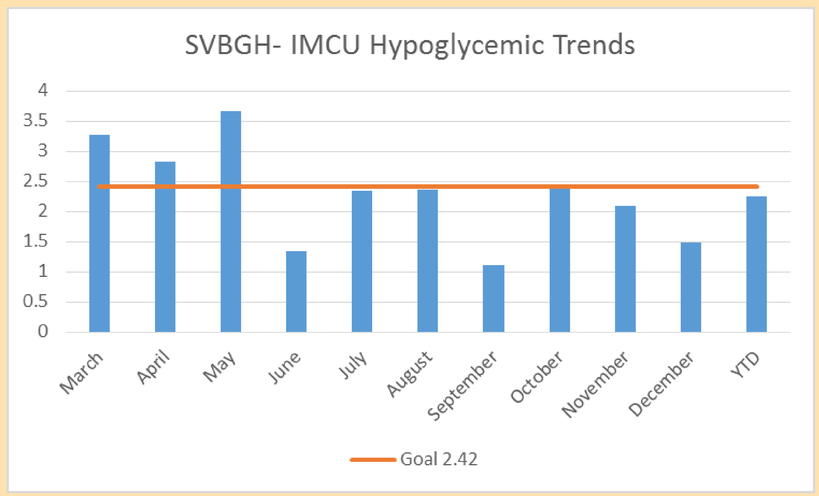
Using a Plan-Do-Study-Act methodology, a Glucommander taskforce was created. This was a multi-disciplinary group involving bedside nurses, the IMCU Manager and Director, the Director of Quality Management, Nurse Clinicians, the Diabetic Education Team, Physicians, Pharmacy, and the dietary department. The taskforce served to identify the current process, highlight barriers, and formulate a new process to implement Glucommander with specific patient populations.

Results

In March of 2017, education was provided to the bedside nursing staff via PowerPoint presentation, handouts, an educational bulletin board located on the unit, staff being provided with hands on training utilizing the "Glucommander Playground", along with re-education provided to nursing staff in May 2017 to improve compliance and competencies. A criterion was formulated to target the specific patient population, charts were audited daily by the bedside nurses and the Diabetic Education Team, and patients who met criteria were placed on Glucommander.



Results



Conclusion

The use of Glucommander with specific populations proved to be a successful strategy in decreasing hypoglycemia. In March of 2017, IMCU at SVBGH experienced a hypoglycemic rate of 3.28%. Since implementing the Glucommander Pilot, IMCU was able to sustain 2.25% YTD (goal: 2.42%) and have proven that patients on Glucommander are at less risk for hypoglycemic events. Decreasing rates of hypoglycemia not only decreases neurological impairment and improves cardiovascular outcomes, but also aids in economic costs for both the patient and the healthcare facility (Unger, 2012).

References

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