Standardizing Process for Managing High Risk Diabetes Mellitus Patients in Perioperative Setting

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Background Information: Approximately 10% of the United States population is affected by Type 2 diabetes. Data from 2016 to 2020 shows over 35,000 oncology patients with diabetes mellitus received care at MD Anderson Cancer Center. There was no consistency in the ownership of care or process in managing these patients. Opportunities for improvement in pre, intra and post-operative management was identified.

Objectives of Project: To standardize the process of managing high risk diabetes patients in Operating Room (OR) and out of OR procedure areas with the aim of reducing non-compliance by 50% over the course of six months.

Process of Implementation: A Process Flow Chart (PFC) was created to streamline the process of glucose management for all Type1 diabetic patients with or without an insulin pump, and Type 2 diabetic patients with insulin pumps. The PFC included identifying high risk patients and developing a plan for appropriate interventions during pre, intra and post procures. An icon was created to identify diabetic patients on the status boards. Patients were contacted the day before surgery as reminder to bring their supplies to hospital. Smart phrases were developed for pre-op conversations, patient education, & discharge instructions. A High-Risk email group was created to notify upcoming high risk diabetic patients with recommendations of care from Endocrine. Staff education was initiated to improve awareness and chart audits were created to assess compliance. Noncompliance was addressed individually.

Statement of Successful Practice: The baseline data showed 62% non-compliance to the standard process for managing pre- and post-operative management of high-risk diabetes. The implementation of the pilot study resulted in the reduction of non-compliance from 62% to 7%, exceeding the goal of 31%. Creation of the diabetes icon in status boards and the group email increased early identification of high-risk patients. Endocrine recommendations and staff education improved awareness of the management of high-risk patients.

Implications for Advancing the Practice of Paranesthesia Nursing: Not having a standard process to identify and manage high-risk patients in perioperative settings can lead to postoperative hypo/ hyper glycemic crisis. The workflow developed to improve identification and management of high-risk patient can be generalized to similar settings.