Management of the Postoperative Patient with Glucose Dysregulation in Ambulatory Care Settings: A Policy Proposal

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Background Information: Dysglycemia is linked to adverse outcomes, such as hypoglycemia, infections, and increased mortality. Hyperglycemia affects 20-40% of surgery patients, with 35% lacking a diabetes diagnosis. There is a safety gap in surgical outpatients with glucose levels outside the target range (<70 mg/dL and >140 mg/dL) and those who received insulin in the perioperative period not receiving final glucose checks before discharge. Underestimation of hypoglycemic events is common. Checking blood glucose levels before discharging patients with dysglycemia from ambulatory care will benefit many by ensuring insulin's peak effect has subsided while monitoring for continued dysglycemia.

Objectives of Project: The objective is to develop and implement a comprehensive policy addressing postoperative glucose management for patients undergoing outpatient surgical procedures across a large hospital system. This involves adding a glucose check before discharge for outpatients receiving insulin perioperatively. Additionally, it will assess the impact on length of stay and nurse workload.

Process of Implementation: Using the CDC's Policy Analytical Framework, the problem was identified and a literature review conducted to determine the optimal glucose level and timing of glucose monitoring in the ambulatory care setting. The system's policy was revised to include pre-discharge blood glucose checks and guidance on consulting a provider for treatment and/or admission. Chart audits were conducted to evaluate the prevalence of dysglycemia, frequency of pre-discharge glucose monitoring, and patient length of stay. Stakeholders met at least monthly until an agreement was reached on the new policy, which was submitted through a multi-layered approval process.

Statement of Successful Practice: This project demonstrated successful leadership strategies to progress toward a system-wide process improvement in peri-anesthesia nursing care. The stakeholder group comprised Clinical Practice Support, hospitalists, surgeons, anesthesiologists, diabetes educators, pharmacists, Quality and Patient Safety officer, nurse managers, PACU and short-stay nurses system-wide. This successful and robust interdisciplinary collaboration has shown promise to improve glucose management and patient safety for ambulatory surgery patients. Nurse workload perceptions will be gauged through post-policy implementation surveys.

Implications for Advancing the Practice of Perianesthesia Nursing: The policy intends to enhance patient care and safety by identifying persistent dysglycemia in the ambulatory postoperative setting and preventing adverse events. The data collected enables ongoing evaluation and process improvement to meet evolving patient and system needs.