Postdischarge Nausea and Vomiting Risk Assessment in Breast and Gynecological Surgical Patients

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Introduction: Postdischarge nausea, vomiting or retching (PDNV) occurs after the time of discharge from the post anesthesia care unit (PACU) for patients who have undergone out-patient surgeries. Consequences include increased healthcare costs, rehospitalizations, and decreased patient satisfaction.

Identification of the Problem: At a large mid-Atlantic academic hospital, 40% of gynecological out-patient surgical patients had PDNV as identified by a separate quality improvement project.

EBP Question/Purpose: The PICO question guiding the project was: In out-patient surgical populations, does the implementation of a PDNV risk assessment tool improve early identification of patients at risk for PDNV? Databases utilized included PubMed, Ovid MEDLINE and CINAHL. The purpose of this quality improvement project was to implement and evaluate the effectiveness of and staff compliance with the Apfel Postdischarge Nausea and Vomiting Risk Assessment tool in order to improve PDNV screening in the PACU.

Methods/Evidence: As part of Lewin's Change Theory, key stakeholders and unit champions, were recruited. All PACU registered nurses received education on the risk assessment protocol utilizing the Apfel risk assessment tool. The Apfel risk assessment tool is validated to identify five independent risk factors for PDNV in out-patient ambulatory surgical populations. Implementation of the tool with data collection occurred over eight weeks on all scheduled out-patient breast and gynecological surgical patients. Staff compliance was measured throughout implementation.

Significance of Findings/Outcomes: In patients with at least three risk factors present, the Apfel tool correctly identified the risk for PDNV in 68% of patients. In patients with four and five risk factors present, the tool correctly identified the risk for PDNV in 88% and 100% of patients respectively. Compliance of the tool was high with the average compliance rate of 92% over the eight-week data collection period. Additional outcomes included improved follow up phone call completion rate, and increased administration of preventative pharmacological interventions in patients at high risk for PDNV.

Implication for Perianesthesia Nurses and Future Research: The Apfel tool adequately predicted the risk for PDNV in out-patient surgical breast and gynecological patients. Lewin's change theory was successful in maintaining a high compliance rate throughout implementation. Efforts toward sustainment include expansion to all out-patient surgical populations and implementation of a PDNV prevention and management guideline.