Screening for Risk of Postoperative Nausea & Vomiting (PONV) in Adults: Impact on Patient Outcomes & provider practices

Team Leader: Nancy DuBois, DNP, RN, CRNI
Cooper University Hospital, Camden, NJ

Objectives: A Simplified PONV Risk Assessment tool was implemented in a preoperative area with documentation and communication of each person’s risk for PONV to all clinicians involved in the clinical care of that patient. An assessment of the prophylactic antiemetic practices in the intraoperative phase of each person’s care was conducted. An evaluation of the relationship of communicating the level of PONV risk to the actual prophylactic antiemetic practices that were employed by anesthesia providers and the relationship of implementing a pre-op PONV risk assessment tool on organizational outcomes was completed.

Purpose: The purpose of this project was to explore the relationship of implementing a preoperative screening tool for the risk of PONV on patient outcomes and provider practices.

Background / Significance: PONV is a significant concern of surgical patients and a challenge to manage. The adverse effects of PONV range from patient related distress to postoperative morbidity. PONV associated with ambulatory surgery increases health care costs due to hospital readmissions.

Method: A prospective, longitudinal one group design was used to test feasibility of implementing a preoperative PONV risk factor assessment tool on provider practices and patient outcomes in women having ambulatory surgery breast and gynecology procedures.

Results: 58 patients were enrolled in this study with 39 patients completing all data collection points. 100% of patients received at least one antiemetic intraoperatively. 21% received two antiemetics, and 10% received three antiemetics. 82% of patients experienced no PONV, 18% experienced mild PONV, and 10% experienced post-discharge nausea. Of the patients who experienced PONV, at least 20 minutes additional time was spent in the PACU and at least 60 minutes additional time was spent in the SPU; delaying discharge.

Conclusions: PONV is still a concern in surgical patients. A PONV prophylaxis strategy should ideally be tailored to a patient’s baseline risk which can be determined by using a simplified risk score.

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