Reduction in Post-operative Nausea and Vomiting (PONV) Using Nurse Led Initiatives Primary Investigator: Donna Dolezal MSN RN CPAN CAPA University of Iowa Hospital and Clinics, Iowa City, Iowa Co-Investigators: Marilyn Wurth BSN RN CAPA, Jennifer Lalonde BSN RN CAPA, Aimee Cusic BSN RN CAPA, Jess Berding-Wheat MSN RN, Kalista Socarras RN Jodi Heth BSN RN CAPA

Introduction: In 2020 the fourth consensus guidelines for the management of postoperative nausea and vomiting (PONV) were published by experts from the American Society of Enhanced Recovery (ERAS) and the Society for Ambulatory Anesthesia after reviewing the literature. The guidelines offered recommendations for PONV risk assessment, prophylaxis and managing PONV with multimodal medications.

Identification of the problem: Anesthesia, fasting and procedures can trigger PONV. The preoperative and post-operative nurses want to utilize the best approaches to impact PONV, including nurse led, non-pharmacological interventions. Nurses often would select interventions based on anecdotal information rather than EBP interventions.

EBP Question/Purpose: PICO question. Databases utilized. Do nurse led bundled EBP strategies to decrease PONV in ambulatory surgery patients affect patient PONV?

Methods/Evidence: The fourth consensus guidelines were based on reviewed literature through September 2019 with recommendations for PONV risk assessment, reducing PONV using multimodal analgesia, and a combination of antiemetic therapy. (Gan, 2020) Further literature review, supported the implementation of nurse led measures including risk assessment using APFEL scoring, aromatherapy including alcohol in PACU, limiting preop fasting/encouraging preop carbohydrate (sports) drink, gum chewing postop, PC6 acupressure bands as well as assuring nurses are educated to assess hydration of patients and use of multimodal antiemetic medications. Implementation strategies include forming a team of unit change champions, nursing education, pre and post chart audits and visual reminders while piloting the changes.

Significance of Findings/Outcomes: Evaluation included nurse process and knowledge pre and post assessments and chart audits. Nurse knowledge of evidence-based strategies increased from 67% pre to 81% post with a small increase in nurse confidence in the process. Chart audits show small incremental increase in use of bands, aromatherapy and gum, while patient nausea rates remained essentially stable. Additional reinfusion includes a logo, nurse reminders in patient folders and chart audits.

Implications for perianesthesia nurses and future research: Perioperative nurses are in a unique position to advocate for PONV interventions based on evidence. Using evidence-based strategies system wide are proven to reduce PONV rather than individual based anecdotal strategies. Reinfusion and use of additional strategies to change practice habits, competing with distractions and other priorities and promoting adoption of evidence based practices are an ongoing effort.