Background
• Apfel Simplified Risk Score (SRS) has been widely used in predicting postoperative nausea and vomiting (PONV) on patients receiving general anesthesia (Apfel et al., 1999)
• The study by Alejo et al. in 2019 agreed to Apfel Risk Scores effectiveness and implied if patient’s risk for developing PONV is known, the perioperative team would be guided in managing this undesired side effect of anesthesia and patient care will improve
• The Fourth Consensus Guidelines for the Management of PONV provided a comprehensive and up-to-date, evidence-based guidance to perioperative practitioners for care of PONV starting from identifying patients’ risk to prevention and treatment of PONV (Gan et al., 2020)
• However, use of Apfel SRS was not yet adapted in DSU and not all caregivers were aware of patient’s PONV risk and no standard care was being used to those who were at risk

Purpose
The study aims to make the perioperative team aware of patient’s PONV risk through Apfel scoring and find out if there’s a change in the practice among caregivers in the management of preventing PONV according to the recommendations set by the recent guidelines.

Methods
A second study was conducted from March 9th – June 7th, 2021 in DSU utilizing the same criteria and forms to compare results from the study done in 2019. Apfel scores were displayed in front of the chart to make it visible to every caregiver. Results between the two studies were tabulated to determine if there was improvement in PONV incidence and management.

Results /Discussion
• There were 474 and 419 patients included in the 2019 and 2021 studies. Overall, PONV incidence decreased 8% from 2019 to 2021, with a marked decline in Apfel 4, 26%.
• Apfel 2 has the most patients in both 2019 and 2021 studies.
• Apfel 3 has the highest rate of PONV in 2021
• In decreasing baseline PONV risks, kinds of anesthesia, and opioids/non-opioids use were compared.
• The administration of either volatile gases and total IV anesthesia (TIVA) by itself decreased 9% and 24%.
• However, the use of both in combination went up 29%.

Results
• Use of PONV prophylaxis for those at risk yielded an overall increase in the use of Zofran 18%, Dexamethasone 7%, Haldol 4% and Versed 5% between the two studies.
• A new and effective prophylaxis Apprepitant was sparingly used 0.5% in 2021 study.
• Timing of prophylaxis given and hydrations status of the patient was not studied
• Nerve blocks used decreased 4%.
• Opioids and non-opioids use increased 18% and 19%.

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Implications for Practice
The study supported awareness of patients’ Apfel scores slightly decrease PONV incidence. PONV management was improved, but caregivers did not adhere properly to latest PONV guidelines and recommendations
• Due to more complicated surgeries in DSU, PONV risks are increasing. Therefore, there’s a greater need to comply with the latest PONV guidelines.
• As nurses, we should, advocate for educating the perioperative team of the latest guidelines and ensure compliance to its recommendations for increased patient satisfaction and decreased length of stay resulting in a cost-effective use of resources.

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