

## **Aldrete Assessment: Decreasing Over-Sedation Post-Operatively**

Primary Investigators: Christina Valente MSN RN CNL, Camille Brownlee, MSN, RN, CNL  
Rush University Medical Center, Chicago, Illinois

**Introduction:** Post Anesthesia Care Unit (PACU) nurses are charged with the delicate task of providing adequate pain relief post-operatively while working to limit the adverse effects of opioids including low oxygenation, decreased mental status, and respiratory depression. Additionally, over-sedation post-operatively has the potential to increase the cost to both patient and organization as a result of increased length of hospital stay.

**Identification of the problem:** Previously, PACU staff utilized the Pasero Opioid-Induced Sedation Scale (POSS) to measure and assess the level of discharge readiness. Though the independent use of POSS limited discharge assessment to sedation only, and ineffective when used alone to assess discharge readiness, as shown in safety event reporting trends. Pre-implementation data collection found that of 105 total case of naloxone administration at time of inpatient admission, twenty-three occurred post-operatively secondary to over sedation following discharge from PACU.

**Quality Improvement Question/Purpose of the Study:** Will utilizing the Aldrete Discharge Readiness tool in addition to POSS sedation assessment decrease the number of safety events reported secondary to over-sedation post-operatively.

**Methods:** The quality improvement project began with implementing the use of the Aldrete Discharge Readiness Tool in addition to the POSS scale to assess for over-sedation prior to discharge from PACU. The Aldrete Discharge Readiness tool is a scoring system comprised of five criteria, each criterion worth two points; a minimum score of eight indicate readiness for discharge. A total of 48 Registered Nurses participated in the quality improvement project, incorporating the additional assessment in their discharge workflow. Expanding our discharge assessment to include the Aldrete tool required the clinician to perform a detailed sedation and discharge readiness assessment prior to discharge from PACU.

**Outcomes/Results:** Descriptive statistics found the use of the Aldrete Discharge Readiness Tool in addition to POSS, decreased the number of naloxone administration by 66%.

**Discussion:** Staff surveyed preferred the Aldrete tool used in combination with POSS when compared to utilizing POSS sedation scale independently; citing the addition of Aldrete assessment to be “more comprehensive” while gaining a “better picture of the patient”, and considers “hemodynamics.

**Conclusion:** The findings of this data analysis suggest utilizing Aldrete in addition to a sedation assessment tool prior to discharge from PACU will decrease the number of naloxone administrations, subsequently decreasing corresponding safety events, and ultimately increasing patient safety.

**Implications for perianesthesia nurses and future research:** The methods used in this quality improvement project may easily be reproduced in other Post Anesthesia Care Units who are experiencing trends of increased over-sedation post-operatively. Findings suggest

PeriAnesthesia clinicians should include Aldrete assessment prior to discharge as the standard, though larger studies should be conducted. Primary investigators acknowledge over-sedation is multifactorial, and vary with respect to comorbid conditions. Additionally, the advanced assessment has proven to be fiscally sound, helping to prevent lengthy hospitalization, providing mutual benefit to both patient and organization.