Improving Postoperative Outcomes for Patients with Obstructive Sleep Apnea (OSA)

Team Leader: Pamela Windle, MS, RN, NE-BC, CPAN, CAPA, FAAN
St. Luke’s Episcopal Hospital, Houston, TX
Team Members: Emilie Ramos, BSN, RN, CCRN, CPAN; Ann Fairchild, BSN, RN, CPAN, CAPA; Tessie Santiago, BSN, RN, CPAN; Lea Villadiego, RN-BC, CLNC

An increasing number of patients with obstructive sleep apnea (OSA) patients developed post-operative complications in the Post Anesthesia Care Unit (PACU). Evidence based practice (EBP) recommendations showed the initiation of continuous positive air pressure (CPAP), a device that provides positive pressure in the upper airway overcoming potential tissue collapse, maintaining a patent airway and preventing subsequent obstruction, could minimize the incidence of respiratory complications, especially in the PACU. PACU nurses noted that OSA patients do not frequently bring their CPAP machine prior to their surgery. The staff realized that having early initiation of CPAP in the PACU can be beneficial for patients exhibiting hypoxemia, apnea and frequent severe airway obstruction.

PACU staff collaborated with other departments such as Preadmission testing center, Anesthesia staff, Day Surgery, and Clinical Engineering in the preparation of these patients prior to their surgical experience. A new innovative practice change was initiated for early identification of diagnosed OSA patients prior to their surgery date and daily communication to the departments provided an efficient and timely process in the preparation of these OSA patients.

An algorithm of this intervention was developed to guide perianesthesia nursing staff, to include staff in-service on the cautious use of opioid analgesics, advocating the use of peripheral blocks, prompt initiation of epidural medications, non-opioid analgesics and non-pharmacological interventions. This successful practice showed an improvement of the whole process implementation, staff’s increase awareness and knowledge-base and better outcomes of these patients.