

**PREOPERATIVE SCREENING FOR OBSTRUCTIVE SLEEP APNEA:
ENHANCING PERIOPERATIVE SAFETY**

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Background Information: Nearly 25 million people in the United States suffer from obstructive sleep apnea (OSA). This serious under-recognized, under-diagnosed medical disorder is associated with significant comorbidities as well as increased perioperative risks. Therefore, preoperative screening for OSA using a validated OSA screening tool such as the STOP-Bang OSA screening questionnaire is imperative.

Objectives of Project: The purpose of this project was to introduce a preoperative OSA screening protocol to the community hospital where this author is employed. The program was initially executed on a trial basis. It was the intention of this author to collect evidence to support permanent adoption of the OSA screening program to optimize the perioperative well-being of patients with occult OSA. A fundamental goal of this project was to amplify clinician cognizance of the impact of OSA in the perioperative period with the intention of promoting patient safety.

Process of Implementation: This quality improvement project employed a quantitative methodology with a comparative design. With this methodology, this author observed for statistically significant differences in the proportion of postoperative hypoxemia between two sample groups. Group A (n=100) was comprised of adult (ages 18-75) general anesthesia elective surgery patients who were screened preoperatively for OSA on the STOP-Bang OSA screening instrument. Group B (n=100) was comprised of adult (ages 18-75) general anesthesia elective surgery patients who were not screened preoperatively for OSA on the STOP-Bang OSA screening instrument.

Statement of Successful Practice: The results of this DPI project revealed a decrease in the incidence of postoperative hypoxemia in the PACU in the STOP-Bang OSA screened group compared to the group not screened for OSA on the STOP-Bang questionnaire. These results highlight the practical importance of continuing the STOP-Bang OSA screening program at the site facility as an important patient safety initiative. Based on the recommendation of the Chief of Anesthesia at the site facility, hospital administrators unanimously decided to implement the OSA screening protocol introduced by this project on a permanent basis. That is a testimony to the success of this DPI project in leading to an important evidence-based clinical practice change designed to promote patient safety and well-being.

Implications for Advancing the Practice of Perianesthesia Nursing: Currently, most institutions lack OSA screening and management guidelines. A recommendation for future practice is the development of standardized evidence-based practice clinical perioperative OSA screening and management guidelines. Implementation of such guidelines could serve to promote safe, high quality, perioperative care delivery.