

IMPLEMENTING NON-INVASIVE POSITIVE PRESSURE VENTILATION FOR KNOWN AND AT RISK OBSTRUCTIVE SLEEP APNEA SURGICAL PATIENTS

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BACKGROUND INFORMATION:

Screening patients post-operatively for OSA risk found 67% of the post-operative population was at high risk for OSA. Of those identified, 76% of patients did not have a diagnosis of OSA.

OBJECTIVES OF PROJECT:

To identify surgical patients at high risk for OSA who could benefit from Non-Invasive Positive Pressure Ventilation (NPPV) intervention.

PROCESS OF IMPLEMENTATION:

A multidisciplinary team created a NPPV policy. Preoperatively, all surgical patients are screened using the STOP BANG tool to determine level of OSA risk. The STOP BANG screening tool consists of four yes/no questions that address **S**noring, **T**iredness, **O**bserved apnea, and high blood **P**ressure (STOP) combined with **B**ody mass index (BMI), **A**ge, **N**eck size and **G**ender (STOP-BANG) to generate a score. Patients with history of OSA or STOP BANG score of five or greater were placed on capnography post-operatively in the PACU. Once PACU discharge criteria were met, patients were discharged to the appropriate level of care. Admitted patients were monitored with continuous capnography and received OSA education upon discharge. Patients transferred to Phase II recovery received OSA education upon discharge.

Patients with recurrent respiratory events were placed on Auto-Titrating Positive Airway Pressure (APAP) or their home CPAP unit.

STATEMENT OF SUCCESSFUL PRACTICE:

One month post NPPV implementation, 89.5 % of at risk patients were being monitored on capnography. Re-education of staff on the importance of completing the OSA screening tool was completed in Phase I and Phase II.

Three months after NPPV implementation, 94% of at risk patients were being monitored on capnography.

IMPLICATIONS FOR ADVANCING THE PRACTICE OF PERIANESTHESIA NURSING:

A program which identifies patients at risk for OSA and incorporates capnography shows promise for improved outcomes for surgical patients postoperatively.