

**ETCO₂ MONITORING IN HIGH RISK PATIENTS IN THE PACU:
A QUALITY IMPROVEMENT PROJECT**

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BACKGROUND INFORMATION:

Concerns regarding the many undiagnosed OSA patients that present for surgery daily

OBJECTIVES OF PROJECT:

This project examined the impact of measuring end tidal carbon dioxide (EtCO₂) by a capnography monitor on adult patients in the post-anesthesia recovery room (PACU).

PROCESS OF IMPLEMENTATION:

A quality improvement project conducted a two- week pilot that examined 30 patients who were assessed for risk of sleep apnea pre-operatively using the STOPBANG questionnaire. Patients identified at risk had a capnography placed in the PACU.

STATEMENT OF SUCCESSFUL PRACTICE:

Of the 21 patients identified at risk for sleep apnea, 71% were males with an average age of 57. General surgery (43%) was the most frequent surgical procedure followed by spine (38%) and other (19%).

95 % patients had abnormal EtCO₂ values

0 % of patient had abnormal SPO₂ values

81 % of patients had interventions noted

0% of patients had a Rapid Response Team call within 8 hours of PACU discharge

IMPLICATIONS FOR ADVANCING THE PRACTICE OF PERIANESTHESIA NURSING:

Identification of patients at risk for hypoventilation by capnography provides an opportunity for early intervention to mitigate adverse patient outcomes in adult patients in a PACU.

Future research should examine using the STOPBANG questionnaire routinely in the pre op setting.