

## **IMPLEMENTING MICROSTREAM END TIDAL CO<sub>2</sub> IN THE PACU**

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Approval was given to purchase new monitors with Microstream end tidal CO<sub>2</sub> for the PACU, Phase I Postanesthesia, as recommended by The Joint Commission and Standards for Basic Anesthetic Monitoring (ASA). All staff were educated on quantitative monitoring utilization of end tidal CO<sub>2</sub> to ensure improved safe quality care of Phase I patients. However, after several months of implementation, the usage of end tidal CO<sub>2</sub> was minimal. Therefore a taskforce was engaged to identify barriers on lack of usage with the objective to increase utilization of end tidal CO<sub>2</sub> as a performance improvement project.

A pre-survey assessed basic knowledge of capnometry monitoring as well as identify barriers to all PACU staff. It was identified that re-education would be of a great benefit, as well as collaborating with the hospital-wide taskforce on initiating capnometry monitoring with all patients on PCA therapy.

Re-education on capnometry monitoring was completed. The PACU Journal Club supplemented education with recent literature reviews to reinforce knowledge. Respiratory Therapy addressed Obstructive Sleep Apnea (OSA) as well the high percentage of undiagnosed OSA patients. The Hospital implemented a Hospital-wide policy on CO<sub>2</sub> monitoring with all PCA therapy, as well as Hospital-wide education.

A post-survey concluded that the staff was more comfortable as well as initiated capnometry on patients who they suspect have OSA. In addition, with this successful practice implementation, there were several patients identified during observation with respiratory changes prior to the pulse oximetry alarms, visual observation, or clinical signs. Therefore concluding, the implementation of end tidal CO<sub>2</sub> monitoring in Phase I Postanesthesia advances the practice of perianesthesia nursing for safe patient care.