



# Improving CPAP Utilization to Reduce PACU Length of Stay in OSA Patients: A Quality Improvement Initiative

MAGNET  
RECOGNIZED

AMERICAN NURSES  
CREDENTIALING CENTER

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## Background

- Obstructive Sleep Apnea (OSA) increases risk for postoperative respiratory complications
- OSA can delay recovery and prolong length of stay (LOS) in the post-anesthesia care unit (PACU)
- Early and proper use of continuous positive airway pressure (CPAP) therapy in the PACU is a recommended therapy to reduce respiratory events and support more efficient recovery
- A retrospective chart review revealed 20% of veterans with known OSA received CPAP therapy in the PACU postoperatively

## Purpose

- Increase CPAP utilization in the PACU for patients with diagnosed OSA and regular home CPAP use

## Methods

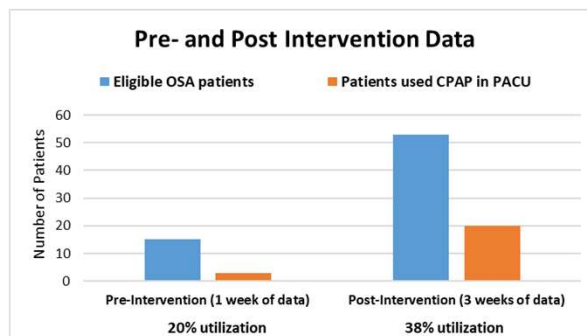
- Baseline data collected through retrospective chart reviews to assess CPAP utilization rates and PACU LOS among general anesthesia patients
- Standardized workflow developed with interdisciplinary team
- Educational sessions provided to PACU RNs on current CPAP guidelines, hands-on CPAP training, and the new workflow were provided
- Post-intervention data collected 3 months after initiation of process change

## Intervention / Standardized Workflow

- Identifying patients with OSA who use CPAP regularly during chart review the day prior to surgery
  - Marking the surgical schedule and patient magnets for eligible OSA patients requiring CPAPs
  - Communicating the CPAP needs with Respiratory Therapy (RT) via the Teams channel the day prior to surgery
  - Preparing CPAP loaners with CPAP settings by night shift RTs
- Delivering hospital CPAP loaners on the day of surgery by day shift RTs

## Results

- CPAP utilization in the PACU increased from **20% to 38%**
- The average PACU LOS for OSA patients decreased from **90 minutes to 78 minutes**



## Discussion

- The project demonstrated successful adoption of the standardized workflow
- Practice change demonstrated measurable benefits to Veterans
  - 12-minute reduction in PACU LOS
  - More efficient recovery
  - Earlier reunification with family
  - Faster resumption of nutrition
- PACU staff benefited
  - Reduced resource utilization
  - Decreased time spent managing delays or inconsistencies in CPAP application
  - Improved overall PACU flow and efficiency

## Conclusion

Implementation of a standardized CPAP workflow and enhanced interdisciplinary communication significantly improved CPAP utilization and reduced PACU length of stay, supporting more efficient and safer postoperative recovery for patients with OSA.

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- Questions: email [Alena.Pugacheva@va.gov](mailto:Alena.Pugacheva@va.gov)
- References available upon request

*The views expressed are those of the author(s) and do not reflect the official policy of the Veterans Health Administration or the U.S. Government.*