Utilization of STOP-BANG to Identify OSA Prior to Upper Endoscopy

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Background

Obstructive Sleep Apnea-most prevalent sleep related disorder

- Global health risk-linked to obesity, age >50
- 10% adult cis-Females, 25% adult cis-Males
- >60% of surgical population
- Underdiagnosed, untreated-> atrial fibrillation, stroke, uncontrolled HTN
 & sudden death.
- Exasperated by anesthetics & sedatives
- Failure to quantify OSA risk factors ->incomplete assessment

Resulting in \uparrow risk of intra & post-procedural adverse events, delayed discharge, & \uparrow resource utilization.

OSA risk stratification with the reliable/validated screening tool (STOP-BANG) is supported by Anesthesiology & Sleep Medicine

Purpose and Aims

Purpose: This quality improvement initiative addressed a gap in practice and incorporated the standardized pre-anesthetic screening for OSA in adults scheduled for elective EGDs (upper endoscopies).

Aims:

- 1. Assess RN's OSA/STOP-BANG knowledge pre & post education
- Assess CRNA/MD's OSA/STOP-BANG knowledge pre & post education
- 3. Identify OSA risk level of EGD patients, notify individuals & PCPs
- 4. Assess CRNA/MD perception of efficiency of OSA screening process.

Methods

Design: Pre/Post test intervention design over 12 weeks **Setting:** Free-standing ambulatory surgery center in the Mid-Atlantic

Sample: Aim 1: Perioperative RNs; Aims 2&4: CRNA/MD

Aim 3: Adult elective upper endoscopy patients

Measures: Aims 1,2: Clinician OSA Knowledge Assessment scores

Aim 3: Pre-anesthetic OSA risk level

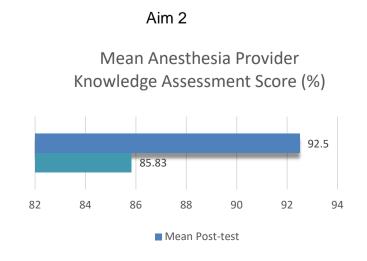
Aim 4: CRNA/MD feed-back via anonymous survey. **Analysis:** Wilcoxon signed-rank, Descriptive statistics

Results

Aim 3

Baseline characteristics of upper endoscopy patients		
screened for OSA via STOP-BANG tool		
Demographic characteristics		n = 116
missing		5 (4.2%)
Age, mean (SD)		66.7 (11.7)
Sex, n (%	6)	
Male		28 (23.1%)
Female	e	88 (72.7%)
ASA statu	ıs	
	healthy	1 (0.8%)
- 0	mild systemic dis.	69 (57%)
- 00	multiple systemic dis.	46 (38%)
IV	constant threat to life	0
V	gravely ill	0
Diag. HTI	N	
Yes		57 (47.1%)
No		59 (48.8%)
BMI >35		
Yes		9 (7.4%)
No		107 (88.4%)
	IG score (OSA risk)	
0-2 (mild)		64 (52.9%)
3-4 (moderate)		40 (33.1%)
5-8 (high)		12 (9.9%)
SD=standard deviation		
ASA= Anesthesiology Physical classification		
HTN= Hypertension		
ппи– пу	perterision	

Aim 1 Mean RN Knowledge Assessment Score (%) 95.91 91.82 Post-test Pre-test 89 90 91 92 93 94 95 96 9



Discussion

- 22 RNs received the intervention-> clinically significant increase in mean scores on post-test OSA knowledge assessments.
- 12 CRNAs & MDs received the intervention->clinically significant increase in mean scores on post-test OSA knowledge assessments.
- 52 patients were identified as moderate-severe risk for OSA-notified & referred to PCP.
- **Equal** prevalence **(22.4%)** of moderate-severe OSA risk among individuals with mild-moderate chronic disorders.
- 23 Anesthesia provider surveys were completed->90% supported STOP-BANG use.

Strengths: Easily administered, patients & clinicians receptive

Limitations: Site visitation policy impeded reports of apnea from companions & site lacks electronic health records

Conclusion

- Undiagnosed OSA threatens patient safety
- Consistent pre-anesthetic OSA risk stratification allows providers to: identify, inform, & implement appropriate anesthetic plans
- Updated patient pre-procedural electronic forms will now include self-administered STOP-BANG questionnaire

References

