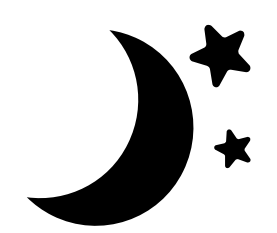


Obstructive Sleep Apnea Screening and Referral in Outpatient Psychiatric Populations

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INTRODUCTION

- ❖ There are approximately 54 million cases of obstructive sleep apnea (OSA) in the USA¹, and almost 80% are undiagnosed and untreated²
- ❖ Psychiatric populations are rarely screened for OSA³
- ❖ Prevalence of OSA among individuals with psychiatric comorbidities:
 - ❖ Depression, up to 48.1%⁴
 - ❖ Post-traumatic stress disorder, up to 42.7%⁴
 - ❖ Schizophrenia, up to 57.1%⁵
- ❖ Suicidal ideation and suicide are more common when individuals have both psychiatric illness and OSA⁶⁻⁷
 - ❖ Individuals with major depressive disorder and OSA are 27% more likely to have suicidal ideation or attempt suicide⁷
- ❖ No OSA screening tool has been validated in psychiatric populations, but the STOP-Bang questionnaire has been validated in more diverse populations than any other tool⁸



OBJECTIVES

Goal

Develop and implement an OSA screening and referral protocol using the STOP-Bang questionnaire screening tool and a sleep specialist referral process at an outpatient psychiatric office

Aims

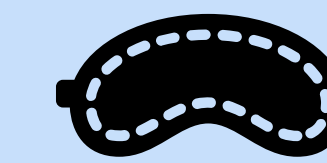
1. Develop an OSA screening and referral process
2. Evaluate completed screenings and referrals
3. Recommendations for scaling and sustainability

METHODS

This DNP Project used a quality improvement design to implement OSA screening and sleep specialist referral into medication management appointments at an outpatient community mental health clinic in the Southern United States

Aim 1: Develop an OSA screening and referral process for an outpatient psychiatric population

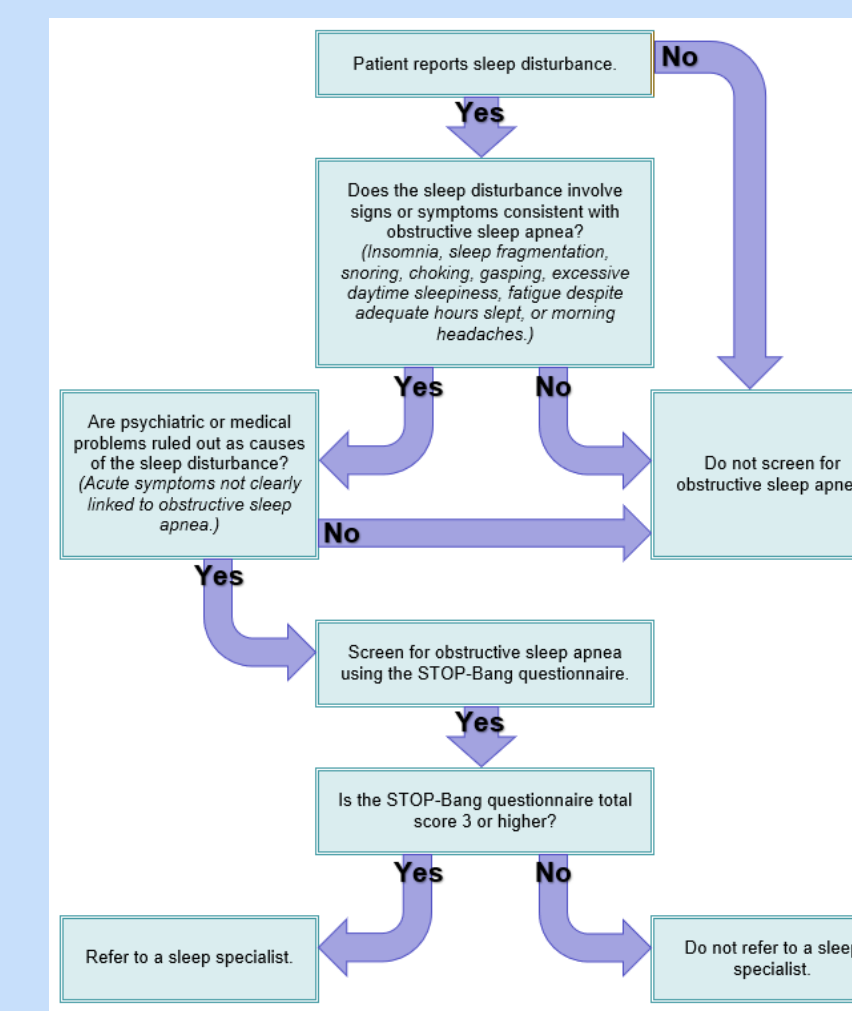
- ❖ Comprehensive literature review completed to determine need
- ❖ Protocol created to assess individuals for sleep disturbance, screen when symptomatic, and refer to sleep specialist with positive screenings



Snoring Do you snore loudly? (Loud enough to be heard through closed doors? Loud enough your bedpartner elbows you for snoring at night?)	Yes	No
Reported by: <input type="checkbox"/> Patient <input type="checkbox"/> Bedpartner		
Tired Do you often feel tired, fatigued, or sleepy during the daytime? (Do you ever fall asleep while driving or talking to someone?)	Yes	No
Observed Has anyone observed you stop breathing or choke/gasp in your sleep?	Yes	No
Pressure Do you have or are you being treated for high blood pressure?	Yes	No
Body Mass Is your body mass index (BMI) more than 35?	Yes	No
Age Are you older than 50?	Yes	No
Neck Size Is your neck size larger than 16 inches? Measured by: <input type="checkbox"/> Tape measure <input type="checkbox"/> Observation <input type="checkbox"/> Self-measure <input type="checkbox"/> Shirt size	Yes	No
Gender Are you male sex?	Yes	No

5a:
Low risk for obstructive sleep apnea: "Yes" to 0 - 2 questions
Intermediate risk for obstructive sleep apnea: "Yes" to 3 - 4 questions
High risk for obstructive sleep apnea: "Yes" to 5 - 8 questions

STOP-Bang Questionnaire



DNP Project Protocol

Aim 2: Evaluate completed screenings and referrals over a 10-week period

- ❖ Completed education and training for 4 nurse practitioners, 1 psychiatrist, and 1 licensed practical nurse
- ❖ Implemented protocol for 10 weeks
- ❖ Monitored screenings and referrals weekly



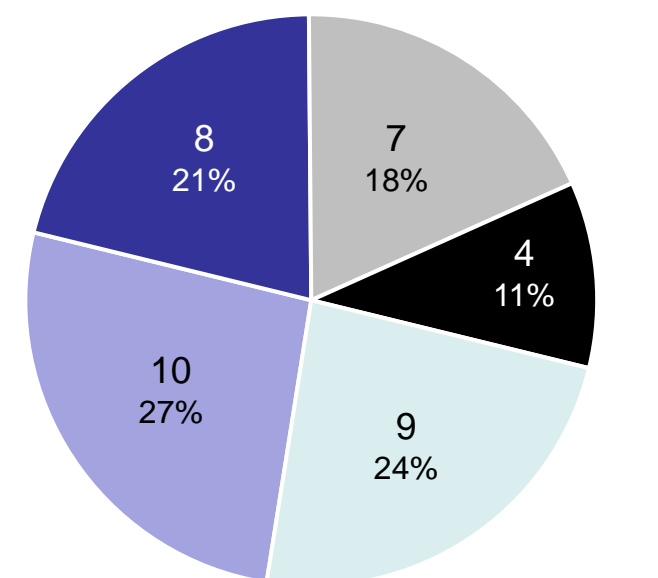
Aim 3: Make recommendations for scaling and sustainability based on results

- ❖ Recommended permanent incorporation of the protocol
- ❖ Recommended expansion of the protocol to other outpatient sites

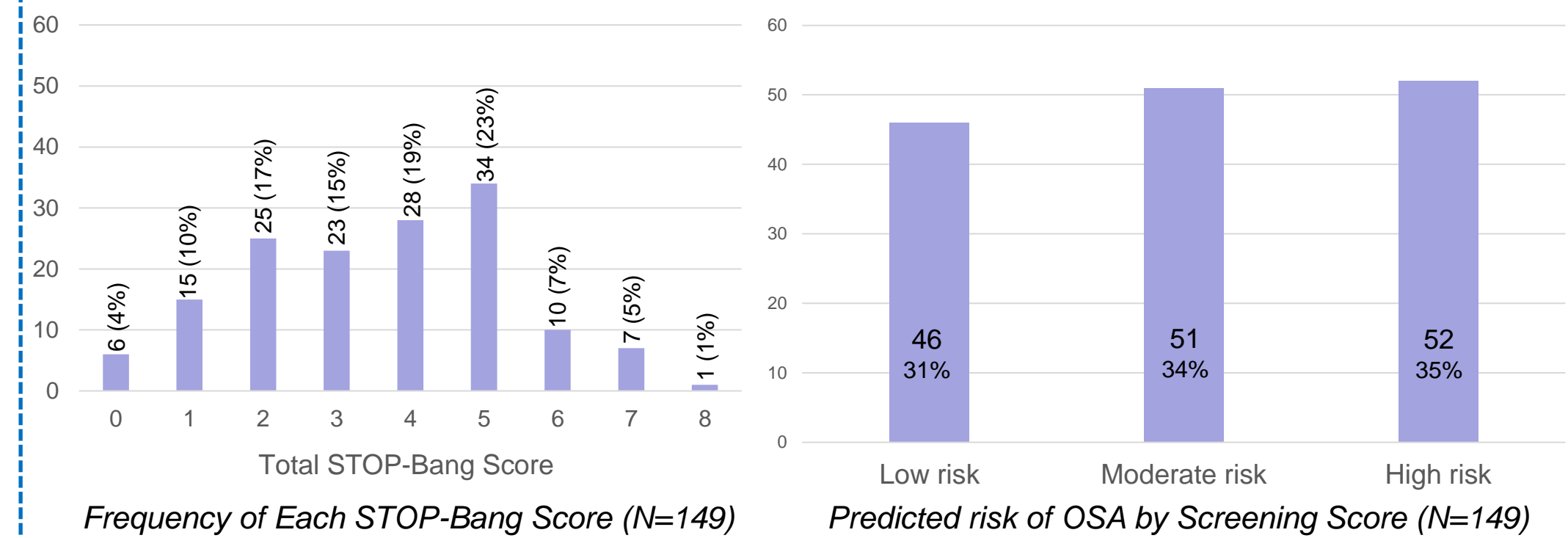


RESULTS

- ❖ 149 screenings completed
 - ❖ 103 positive (69.1%)
 - ❖ 46 negative (30.9%)
- ❖ 65 sleep specialist referrals completed
- ❖ 38 positive screenings declined or lacked referral
- ❖ Results consistent with literature that OSA occurs in high rates among psychiatric populations
- ❖ Mean STOP-Bang score was 5, indicating high OSA risk



Reasons Why Sleep Specialist Referral Not Completed After Positive Screening (N=38)



Implications

- ❖ Screening for OSA and referring to sleep specialists in psychiatric patient populations is feasible, efficient, and cost-effective in outpatient mental health
- ❖ Potential improvements include decreasing declined referrals, securing more provider interest, and following up on referral outcomes to confirm diagnosis of OSA
- ❖ Scalability could include expansion to inpatient locations

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