

Implementation of Obstructive Sleep Apnea Screening in an Outpatient Cardiology Practice

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Background

- Obstructive sleep apnea (OSA) is underrecognized and undertreated in cardiovascular practice despite its high prevalence
- In patients with coronary artery disease (CAD) and heart failure, OSA prevalence is as high as **40% to 80%**
- The American Heart Association **supports OSA screening** in all patients with resistant/poorly controlled hypertension and recurrent atrial fibrillation
- The STOP-Bang Questionnaire is a validated screening tool for OSA with a **sensitivity of 90% and specificity of 77% for detecting severe OSA**
- At this outpatient cardiology practice, **0% of patients** underwent OSA screening prior to project implementation

Aim of the Project

- **Purpose:** To determine whether implementing an OSA screening tool in a cardiology practice improves the identification and treatment of patients with OSA.
- **Process Goal:** To screen 100% of eligible patients using the STOP-Bang Questionnaire
- **Outcome Goal:** To refer 100% of eligible patients with a STOP-Bang score greater than three for polysomnography

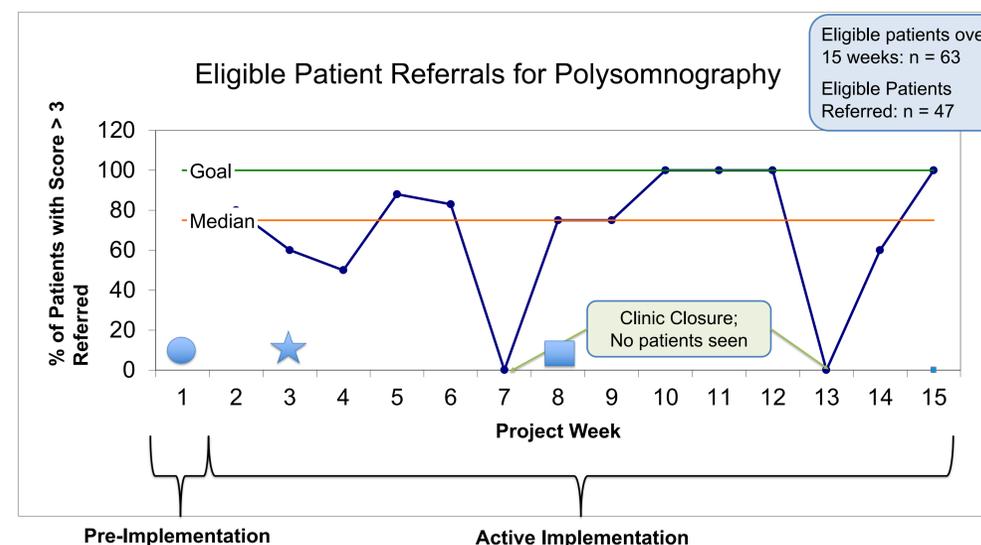
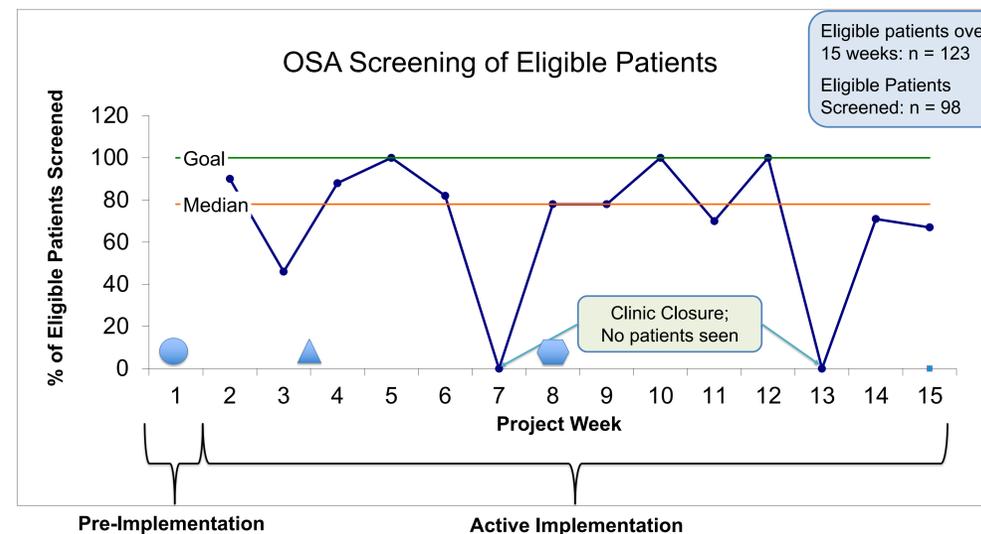
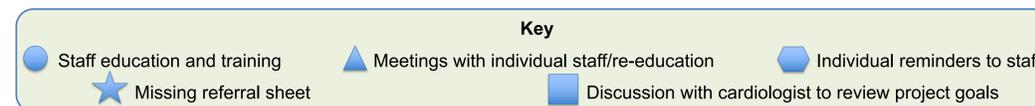
Methods

- **Setting:** Outpatient cardiology clinic caring for adults 18 years old and older
- **Population:** All clinic patients were considered eligible unless they had a history or prior diagnosis of OSA
- **Intervention:** Use of the STOP-Bang Questionnaire during patient intake for all eligible patients
- **Implementation Strategies:** Staff education, identification of project champion, frequent education sessions and reminders, completion of chart audits, obtaining frequent staff feedback



STOP-Bang Questionnaire

Results



• Total Eligible Patients: 123
• Total Eligible Patients Screened: 98
OSA Screening Rate: 80%

• Total Patients Eligible for Referral: 63
• Total Eligible Patients Referred: 47
Polysomnography Referral Rate: 75%

Conclusion

- Implementation of the STOP-Bang Questionnaire for OSA screening improved rates of polysomnography referral for eligible patients (n = 47).
- Although the proposed goals of screening 100% of eligible patients and referring 100% of eligible patients were under-achieved, 80% of eligible patients were screened and 75% of referral-eligible patients were referred for polysomnography.

Implications for Practice:

- The implementation of the STOP-Bang Questionnaire did result in greater provider awareness of the problem as well as the importance of OSA screening in patients with cardiovascular disease.

Limitations:

- Compliance with screening was inconsistent and variable due to individual staff despite various re-education attempts
- Missing referral sheet during weeks 3 and 4 resulted in fewer referrals

Next Steps:

- Continue to identify barriers to implementation and provide solutions

Lessons Learned

Sustainability would be enhanced via integration into a practice electronic health record (EHR) and continuing education

- EHR may include visible alerts for screening gaps
- Continuing education may be provided to onboarding/oncoming staff and may be provided during orientation

References

Scan QR Code for Project References

