

Background

- Sleep apnea causes people to stop breathing briefly during sleep, which can harm health and quality of life.
- CPAP machines help but can be hard to use. Dentists offer an alternative, oral appliances that move the jaw to keep airways open.
- This study looks at how different ways of adjusting these devices affect sleep, comfort, and satisfaction, with the goal of improving care.

Methods

- 10 dental clinics from STOHN will recruit a total of 60 patients (6 patients per clinic)
- Custom oral appliances will be given to patients during visit 1b and titrated at future visits.
- Patients will be treated either with Standard Signs & Symptoms methods or Enhanced Multi-Method Positioning method
- Surveys will be completed at each study visit, including a FOSQ-10, ESS, and PSQ-18

Discussion

- This study will provide a new understanding on how dentists diagnose and treat obstructive sleep apnea by effectively using oral appliance therapy.
- Utilization of the DentiTrac[®] (implanted within the oral device to track compliance) and NightOwl[™] (at home sleep test) systems allows accurate and effective data collection throughout the study.

Future Direction

- The study team is currently recruiting eligible dentists.
- If effective, the study findings could **improve dental care**, helping more patients effectively use their oral devices successfully. Future studies may include longer follow-up or new devices for dentists.
- Results will help identify whether combining data & patient input leads to better health outcomes.

Understanding how different ways of adjusting oral appliances for **sleep apnea** can impact *treatment quality, patient comfort, and real-world success* in dental care.



DentiTrac Micro-Recorder

DentiLink[®] & DentiTrac[®] Devices



NightOwl[™] at Home Sleep Test Device

PAOSA Study Timeline:

Participant Enrollment: A total of 60 patients diagnosed with Obstructive Sleep Apnea will be recruited from 10 STOHN dentists.

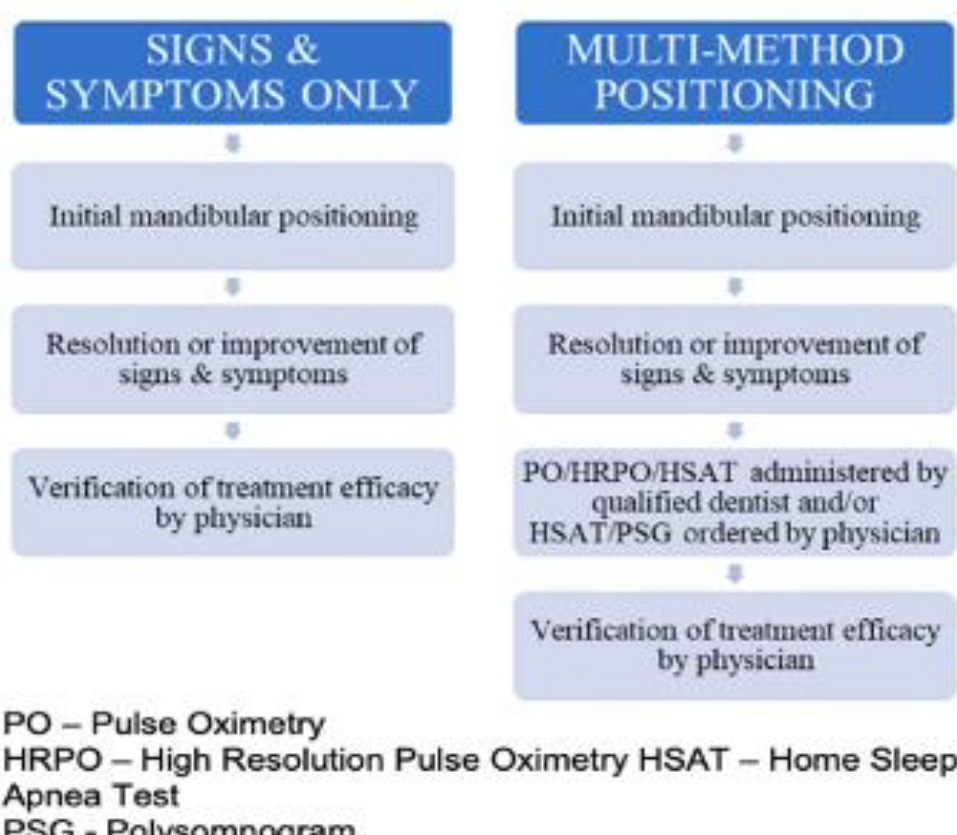
Visit 1a (Participant Screening): Screening, eligibility, and consent form completed; Device selected and ordered.

Visit 1b (Baseline - Appliance Delivery): Device delivery and instructions given; Night 1 with no NightOwl[™], Night 2&3 with NightOwl[™].

Visit 2: 4 weeks after baseline, device titration and required surveys completed.

Visit 3 (Final Evaluation): 8 weeks after baseline, final device titration and surveys completed.

Figure 1: AADS Recommended Framework for Methods for Positioning Oral Appliance



Dentists, when diagnosing and treating Obstructive Sleep Apnea, utilize either the Signs and Symptoms Method (input from patients and medical history) or Multi-Method Positioning (oral appliances, etc.) as shown above.