

Abstract

Intro: The utility of the Pediatric Sleep Questionnaire (PSQ) to screen for sleep apnea in the pediatric cleft population has not been studied. **Objectives:** Determine how the PSQ can guide further workup and treatment of sleep apnea in the cleft lip/palate population. **Methods:** Retrospective chart review. **Results:** Mean PSQ score was 4.2. PSQ score >9 was more likely to be referred for sleep clinic, sleep study, or surgery. There was no association between PSQ score and AHI. **Conclusion:** A higher PSQ score and higher number of positive responses in Q1-16 of the PSQ was associated with intervention.

Introduction

- Children with cleft lip/palate may be at greater risk for sleep apnea^{1,2,3}
- The PSQ is a validated tool to screen for sleep apnea in the general pediatric population⁴, however it has not been validated for cleft lip/palate
- Children with cleft lip/palate present similarly for sleep disordered breathing compared to their counterparts in the general pediatric population^{2,3}, the PSQ can be used to screen for symptoms to prompt further investigation⁵
- Questions 1-16 of the PSQ attempt to characterize snoring and sleepiness while questions 17-22 focus on behavioral, inattention, and hyperactivity symptoms⁴
- It is unclear which question items on the PSQ have the greatest clinical utility for screening children with cleft lip/palate

Methods

- Retrospective chart review of 707 pediatric patients that were treated at a multidisciplinary cleft lip and palate care center from 1/2014-12/2018 and completed a PSQ
- PSQ responses and relevant clinical and demographic data were recorded
- Chi square tests were used for statistical analysis

Discussion/Conclusion

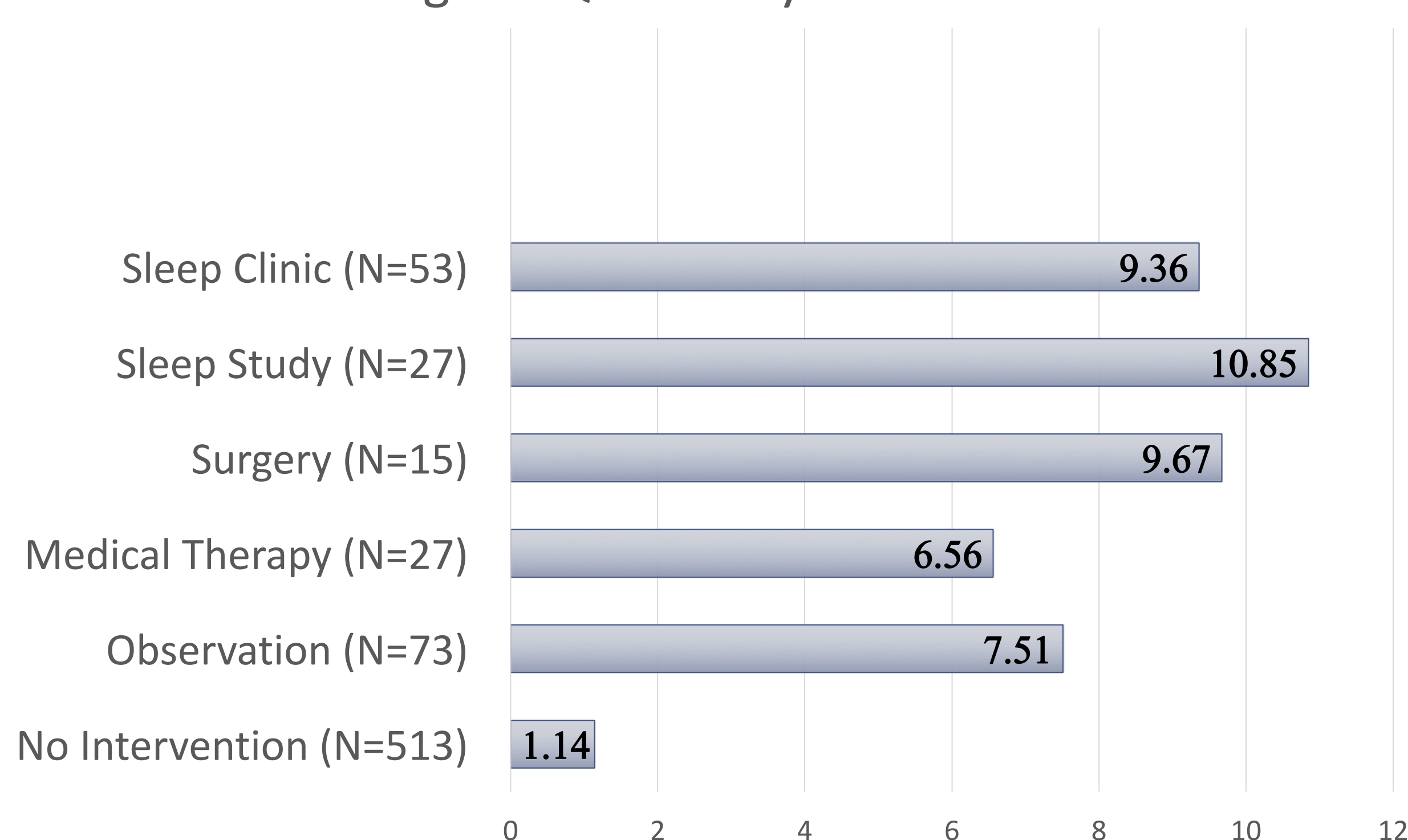
On previous analysis of our data, a higher score on the PSQ and a higher number of positive responses in questions 1-16 were associated with further investigation for sleep apnea. Certain sections of the PSQ may be more predictive than others. This may be because of the preclusion of behavioral-type questions from the PSQ which are assessed in questions 17-22. Furthermore, certain clinical factors correlated with higher PSQ scores and/or AHI more than others, such as presence of ADHD. Intervention with respect to clinical factors showed that subjects with small tonsils and with ADHD were more likely to be recommended sleep clinic or sleep study. Future directions include further analysis based on age and question groups.

Results

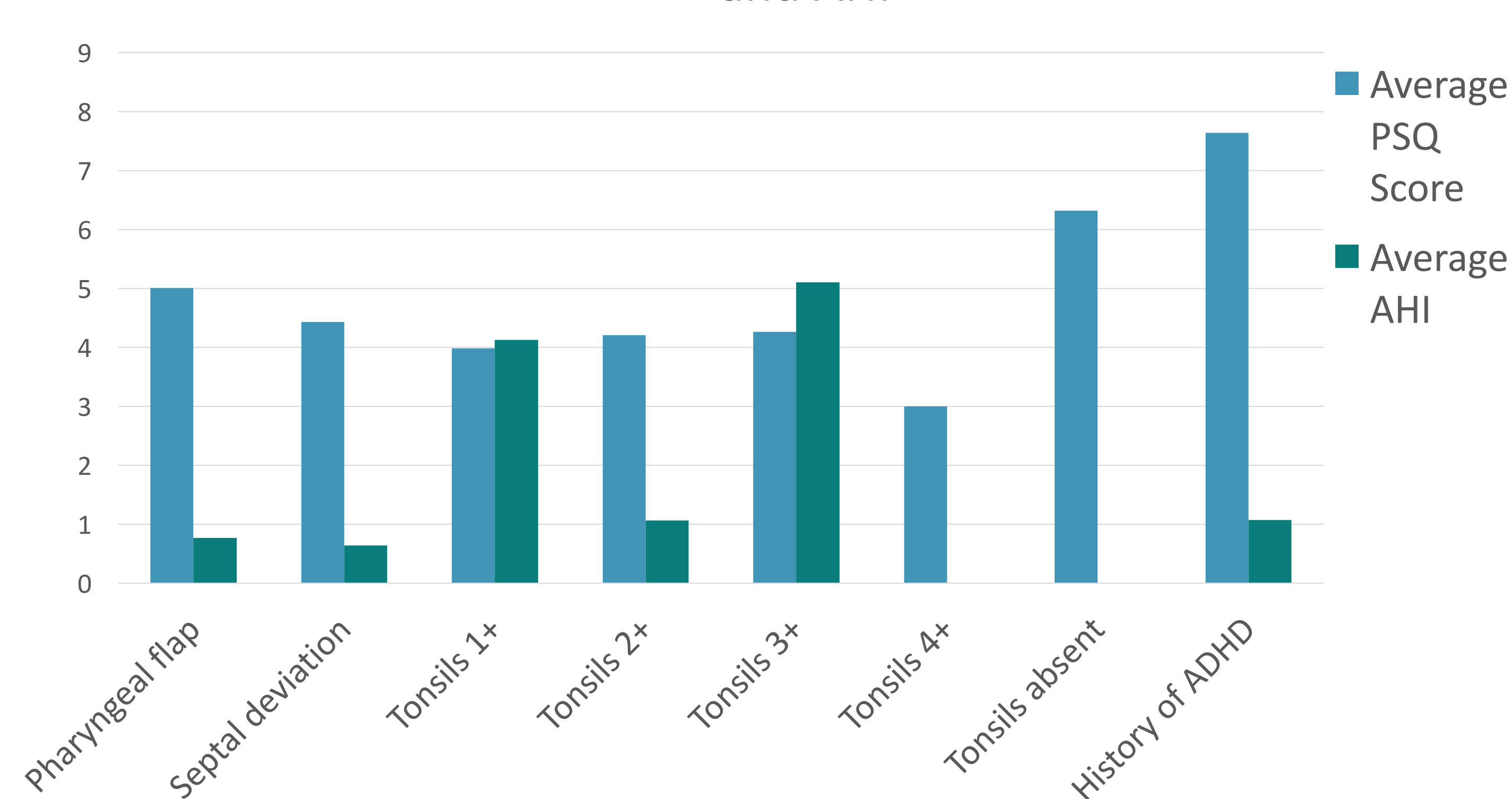
Demographics

Factor	Value
Average age	6.5 years
Male	56%
Pierre Robin Sequence	11%
Syndrome	16%
Race	
Caucasian	73%
African-American	7%
Asian	12%

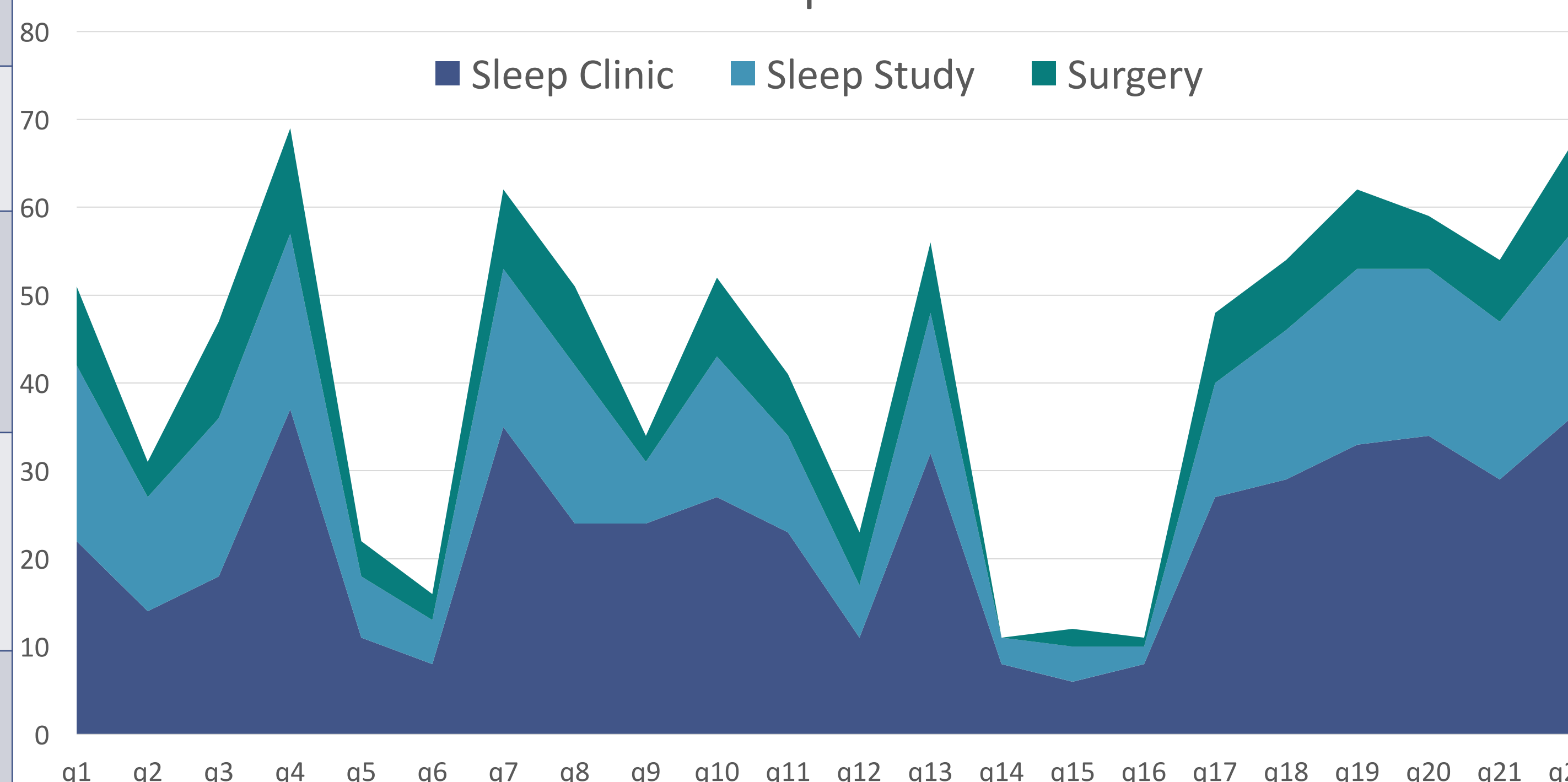
Average PSQ Score by Intervention



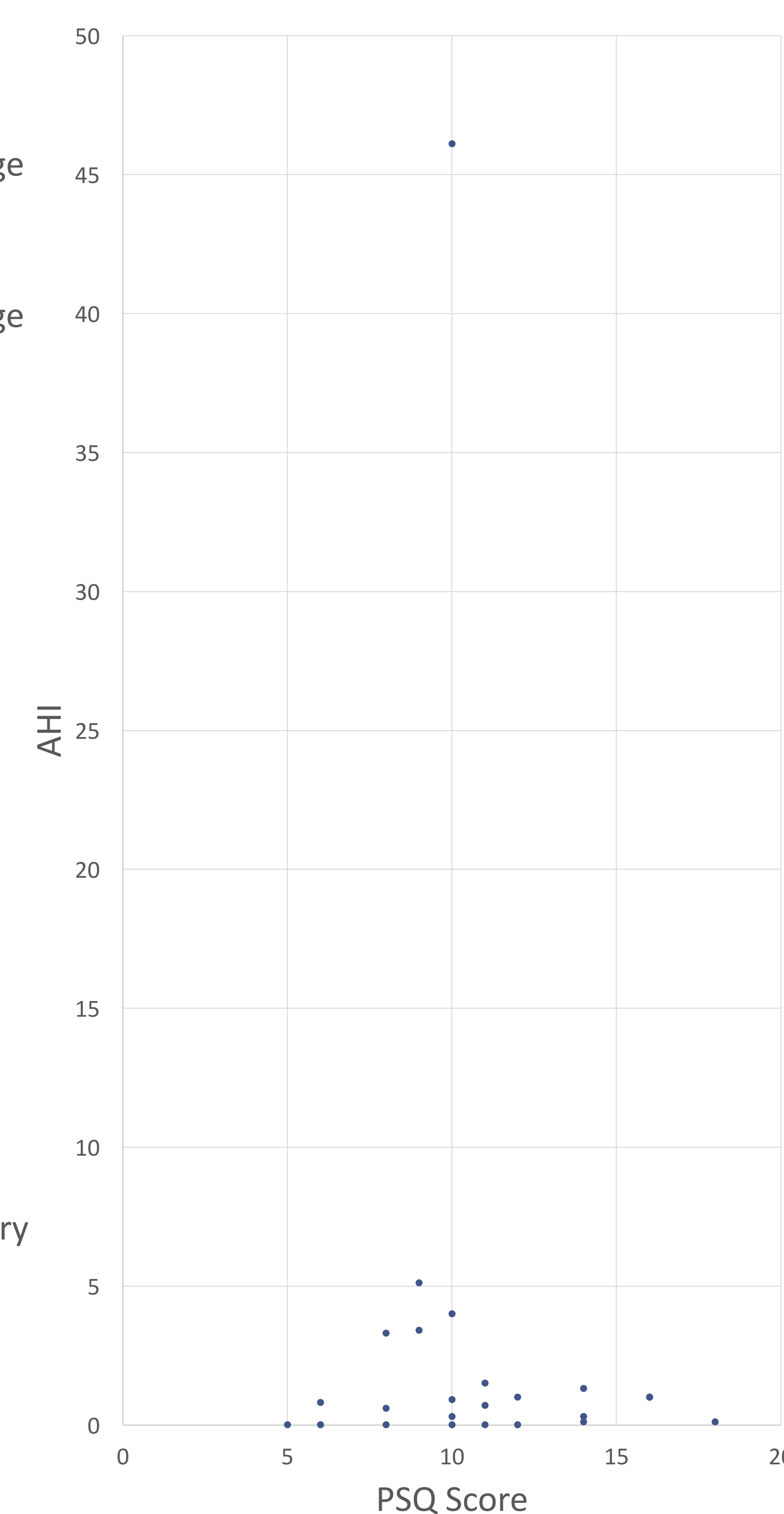
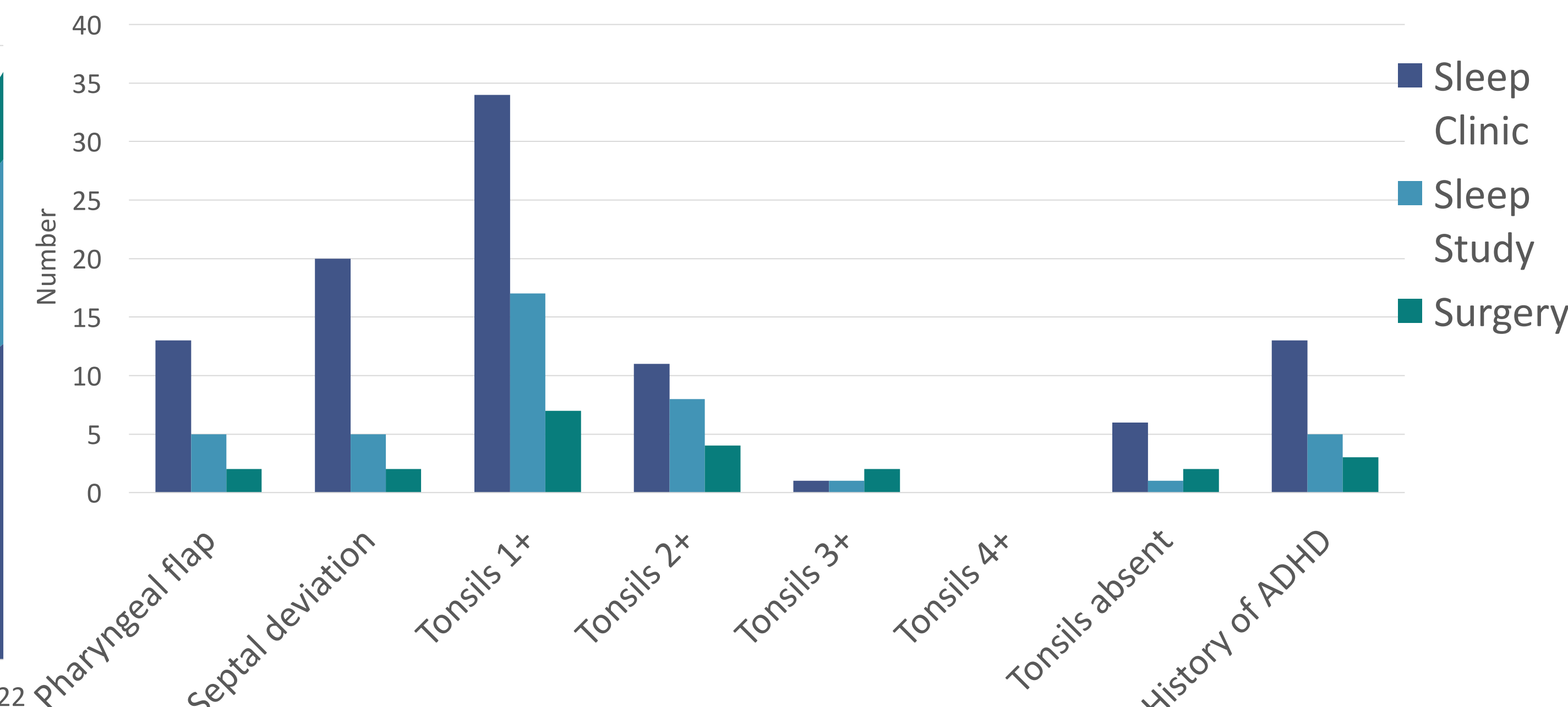
Association of Clinical Factors with Average PSQ Score and AHI



Recommended Intervention by Positive Question Response



Association of Clinical Factors with Recommended Intervention



References

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