

- **Project Title:** Comparison of 3 methods to diagnose obstructive sleep apnea

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**Department:** Respiratory Care

**Project Summary:**

Obstructive sleep apnea (OSA) affects 2% of the adult female population and 4% of the adult male population. A report provided to the Agency for Healthcare Research and Quality estimated that 80-90% of this population remains undiagnosed and therefore untreated. The consequences of OSA range from excessive daytime sleepiness to sudden death and patients experiencing sleep apnea are at an increased risk of drowsy driving and motor vehicle accidents. There are several tools, subjective and objective, available to assist with the diagnosis of OSA. The Berlin questionnaire is a subjective assessment tool that evaluates the risk for OSA based on age, appearance of snoring, and BMI. Research is available but questionable on the reliability of such subjective devices. The development of portable or home-based devices, e.g. Stadurst II, to diagnose OSA has made objective assessment of sleep issues more accessible. To date research is lacking in the assessment of such devices as an objective diagnostic tool. The objectives of the project include (1) determine if a subjective evaluation of obstructive sleep apnea can accurately and reliably screen for the presence of obstructive sleep apnea, and (2) determine if a portable home-based device can accurately and reliably predict the presence of obstructive sleep apnea compared to overnight, laboratory-based polysomnography.

**Presentations:**

- 1.) A portion of this project was presented at the 2008 Texas Society for Respiratory Care 37th annual Convention and Exhibition. The title of the presentation was:  
Prevalence of Sleep Disturbances among Collegiate Football Players.