Optimizing Obstructive Sleep Apnea Screening and Education in Underserved Communities

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Introduction: Obstructive Sleep Apnea (OSA) is the most common sleep-related breathing disorder. The majority of individuals are underdiagnosed due to poor awareness and lack of access to testing and treatment. Improvements in resident physician education about proper OSA screening tools are hypothesized to result in better risk stratification and appropriately scheduled treatment. This study implemented use of STOP-BANG screening to increase referrals to sleep medicine, versus ordering polysomnogram (PSG) alone.

Methods: Family Medicine residents were educated on OSA and STOP-BANG and instructed to refer high risk patients to sleep medicine. Patients ages 18 and older were screened within a 3 month period. This was compared to data obtained for PSG and referrals ordered 3 months prior to study and 3 months after completion of study.

Results: The data (n=110) included number of sleep referrals and PSG ordered by PGY 1-3 and attendings for pre-study, during-study and post-study, and analyzed using chi square. Overall results were statistically significant ($x^2 = 81.892$ [30], p < 0.001). The Bonferroni post-hoc comparison indicated that PGY3s and ancillary staff ordered more PSGs in the pre-study group as compared to other groups in that time frame. During the study, PGY2s ordered significantly lower PSGs, while PGY3s had significantly higher rates of missing data.

Discussion: After providing the tool, there was a statistically significant increase in referrals. Referrals continued to increase even after the tool was removed. Residents attributed this continued referral process due to increased education about OSA and the importance of sleep medicine referrals. By providing the residents with increased education on OSA, they were able to educate their patients on the importance of its treatment and thus have more follow through with referrals.