

solution (COTS; in this study, Fitbit). The purposes of this platform are to 1) help primary care managers (PCMs) assess sleep complaints, 2) empower patients and PCMs to make evidence-based sleep treatment decisions, 3) deliver evidence-based behavioral sleep treatments via mobile devices, and 4) connect patients with sleep specialists in virtual or physical sleep centers. Participants were recruited from the Internal Medicine clinic and the Sleep Disorders Center at Walter Reed National Military Medical Center (WRNMMC). Inclusion criteria included ages of 18-75 years and self or provider referral for sleep problems, including insufficient sleep duration. In addition to wearing the COTS sleep tracker, participants completed a baseline assessment and 2x/daily diaries for ten days, and a brief satisfaction survey.

**Results:** Participants included 35 patients (57% female, mean age=44.7 years). One hundred percent of participants wore the COTS sleep tracker and completed the post-monitoring assessment. Satisfaction survey results indicated that 96.7% of participants found completing the 10-day continuous sleep monitoring assessments to be “easy” or “very easy,” and 96.7% of those who completed the monitoring expressed a preference for app-based sleep treatment either alone or in conjunction with virtual or in person care. Finally, participants offered suggestions to optimize the app and platform for pending clinical implementation.

**Conclusion:** Results of this pilot study demonstrate high levels of patient engagement with the sleep telehealth platform. Given the large number of patients seeking treatment and the shortage of trained specialist providers, sleep telehealth is a promising pathway to increase access to evidence-based care.

**Support (If Any):** This research was supported by an investigator-initiated research award from the Department of Defense (via the Medical Technology Enterprise Consortium) to the University of Maryland, Baltimore (PI: EMW).

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### OPTIMIZING OBSTRUCTIVE SLEEP APNEA SCREENING AND EDUCATION IN UNDERSERVED COMMUNITY

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**Introduction:** Obstructive sleep apnea (OSA) is the most common sleep-related breathing disorder. There are many conditions associated with OSA, including obesity hypoventilation syndrome, congestive heart failure, atrial fibrillation, pulmonary hypertension and pulmonary diseases. Majority of patients endorse daytime sleepiness, but family often report snoring and apneas. There are multiple screening tools, including the STOP-BANG. Scores 5 or above are high risk for OSA. Untreated OSA worsens comorbidities and increases risk of myocardial infarction and stroke. We provided physicians with this screening tool to help risk stratify, thus providing better patient education and treatment.

**Methods:** Physicians educated on OSA, STOP-BANG and documentation in didactic sessions. Patients ages 18 and older provided with questionnaire. Physicians measured neck circumference and BMI. Questionnaire reviewed with patient and education given. If

high risk, sleep medicine referral recommended. Physicians documented in charts about discussion, risk category and referral status. **Results:** Total of 407 patients completed the questionnaire, but 67 patients were excluded for no neck circumference. Remaining 340 patients stratified by STOP-BANG scores: 128 Low, 142 Intermediate, 70 High Risk. From High Risk category, 20 patients referred to Sleep Medicine. Only 18 charts from the 50 not referred explained why, which included patient declining, already on CPAP, referral already in, and because outpatient sleep study was ordered instead. Data stratified for age, gender, BMI and neck circumference. Age range from the 340 total was 19-87-years-old. From High Risk, 39 were male and 31 female. BMI range for total was 17-61, while High Risk was 22-61. Neck circumference range for total was 12-21 inches, while High Risk was 12.5-17.5 inches.

**Conclusion:** The goal was not only to provide a validated screening tool, but also provide better OSA education for physicians and patients. Results indicate many patients were intermediate or high risk. Majority of patients had multiple comorbidities, including obesity, hypertension and diabetes. This study highlights the prevalence of OSA in an inner-city primary care clinic and challenges involved in screening all at risk patients. Further investigations could include the effect of more education, continued screening and effect of lifestyle changes in this vulnerable population.

**Support (If Any):**