Screening for Obstructive Sleep Apnea

In this issue of JAMA, the US Preventive Services Task Force (USPSTF) has published recommendations on screening for obstructive sleep apnea in adults.

What Is Obstructive Sleep Apnea?
Obstructive sleep apnea (OSA) is a condition in which breathing during sleep is abnormal. People with obstructive sleep apnea may stop breathing for short periods during sleep, or have decreased airflow while sleeping, due to a temporary blockage in the airway. Risk factors for OSA include male sex, obesity, older age, and certain anatomical features such as a large tongue or large tonsils. Common symptoms of obstructive sleep apnea are loud snoring, gasping, or choking while sleeping, and daytime sleepiness. Sometimes people who have these symptoms do not recognize them as being a problem.

The primary treatment for OSA is use of a continuous positive airway pressure (CPAP) device. An alternative therapy is a mouthpiece that moves the lower jaw forward while sleeping. Weight loss can help OSA symptoms in people who are overweight or obese.

What Tests Are Used to Screen for Obstructive Sleep Apnea?
Screening for OSA is performed using questionnaires that ask about OSA symptoms and sometimes include clinical factors such as body mass index, neck circumference, and blood pressure. Examples of screening questionnaires include the Epworth Sleepiness Scale, STOP questionnaire (snoring, tiredness, observed apnea, high blood pressure), STOP-Bang questionnaire (STOP questionnaire plus body mass index, age, neck circumference, gender), Berlin Questionnaire, Wisconsin Sleep Questionnaire, and the Multivariable Apnea Prediction tool. If the answers to a screening questionnaire are suggestive of OSA, a sleep study is typically done as a diagnostic test.

What Is the Patient Population Under Consideration for Screening for Obstructive Sleep Apnea?
This USPSTF recommendation applies to adults who have no symptoms of obstructive sleep apnea. It also applies to those who may have symptoms, but do not recognize them as a problem and do not report symptoms to their primary care physician. It does not apply to children, adolescents, or pregnant persons.

What Are the Potential Benefits and Harms of Screening for Obstructive Sleep Apnea?
While there is evidence that treating OSA can improve breathing during sleep and sleep-related quality of life, there is a lack of evidence on whether treating those detected by screening questionnaires (as opposed to those referred for sleep study testing by their doctors) has this same benefit. There is also not enough evidence on how accurate screening questionnaires are for detecting OSA.

Potential harms of screening include side effects from treatment, such as oral or nasal dryness, skin irritation, rash, and discomfort from CPAP devices or dental or jaw pain from mouthpieces. However, no studies have directly looked at harms of screening for OSA.

How Strong Is the Recommendation to Screen for Obstructive Sleep Apnea?
Currently, there is not enough evidence to say that the benefits of screening for OSA outweigh the harms.

How Does This Differ From Prior USPSTF Recommendations?
This recommendation is consistent with the 2017 USPSTF recommendation on screening for OSA.