## **Annals of Internal Medicine**

## **COMMENTS AND RESPONSES**

## **Diagnosis of Obstructive Sleep Apnea in Adults**

**TO THE EDITOR:** The American College of Physicians' (ACP's) clinical practice guideline about the diagnosis of obstructive sleep apnea (OSA) in adults (1) addresses a prevalent and serious medical illness that deserves the attention of internists. Although ACP's clinical guideline and that of the American Academy of Sleep Medicine (AASM) share some similarities, substantial differences are of concern to the AASM.

The ACP's recommendation to limit home sleep apnea testing to situations "when polysomnography [PSG] is not available for diagnostic testing" is overly restrictive and inconsistent with the AASM clinical guideline. Home sleep apnea testing interpreted by a sleep specialist in conjunction with a comprehensive sleep evaluation may be an equally viable diagnostic option in patients with a high pretest probability for at least moderate to severe OSA who do not have comorbid cardiopulmonary or neuromuscular disorders and in whom other sleep disorders are not a consideration (2). Under these conditions, a home sleep apnea test may be the most reasonable choice even when PSG is available. When these conditions are not met but sleep-disordered breathing is a consideration, we agree that PSG is the test of choice.

Furthermore, the ACP guideline places an inordinate emphasis on sleepiness as the main reason for evaluation with sleep testing. In the WSC (Wisconsin Sleep Cohort) study, only 37% of patients with severe OSA (apnea-hypopnea index ≥30 events per hour) reported daytime sleepiness, which is 1 of many symptoms that may suggest that OSA should be included in the differential diagnosis (3). Other symptoms include witnessed apnea, snoring, nocturnal gasping or choking, nonrefreshing or disturbed sleep, nocturia, morning headaches, impaired concentration, memory loss, and decreased libido (4). Concurrent risk factors, such as obesity, retrognathia on examination, hypertension, or type 2 diabetes, should prompt consideration for sleep apnea testing; however, some of the other causes of sleepiness do not require sleep apnea testing and respond to specific interventions. A report of excessive sleepiness should prompt a comprehensive review of the patient's sleep schedule, guestioning for auxiliary symptoms of narcolepsy, and consideration for sleep specialist referral if the cause is not apparent (5).

It is critical to advance high-value care of patients with a sleep illness, such as OSA. Physicians should inquire for symptoms of sleep disturbances and specifically look for sleep apnea in patients belonging to high-risk populations, including those who do not report sleepiness. The AASM recognizes that internists play an important role in the management of patients with OSA, and we believe that collaborative relationships between sleep specialists and internists will undergird our efforts to improve public health by promoting healthy sleep.

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**Disclosures:** Disclosures can be viewed at www.acponline.org /authors/icmje/ConflictOfInterestForms.do?msNum=L14-0594.

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My candle burns at both ends; It will not last the night; But ah, my foes, and oh, my friends– It gives a lovely light. –Edna St. Vincent Millay

**TO THE EDITOR:** We read with concern the ACP clinical guideline about the diagnosis of OSA (1). This guideline offers PSG as a solitary tool for sleep-related symptoms; the guideline's broad application could result in unnecessary testing and treatment.

Polysomnography performed with current technologies and scored using the criteria recommended by the AASM in 2012 will yield an average apnea-hypopnea index that is 3-fold higher than that obtained with the equipment and scoring criteria available at the time of most of the studies cited to support this guideline. Flow changes are currently graded using a pressure-transduced air flow monitor-which is far more sensitive than the thermistor used in prior studies-and the new AASM guideline does not require oxygen desaturation to be present for a breathing event to be scored (2). In fact, a recent trial showed that the prevalence of an apneahypopnea index of 5 or more events per hour using the current criteria was 94.6% in a population with a "mild-moderate" pretest probability of OSA (3). This condition exists on a spectrum, and apnea-hypopnea index cutoffs are largely arbitrary. Given the changes in diagnosis, are we measuring clinically meaningful disease? What are the costs of overdiagnosis?

Furthermore, the term "unexplained sleepiness" (which is pivotal in the guideline's first recommendation) is meaningful only when clinicians thoroughly understand the causes of sleepiness. The average physician receives approximately 2 hours of formal medical education on the evaluation of sleep disorders (4). This guideline fails to acknowledge that behaviorally induced insufficient sleep, insomnia, mood disorders,