

SLEEP SOLUTION

AIM Insights

Protecting sleep health: *The cost when Americans ignore sleep disorder treatment*

How AIM is leveraging data to identify gaps in clinical care and reduce health care spending on patients with obstructive sleep apnea

The quest for a good night's sleep is a serious public health problem that weighs heavily on those of us trying to offer the best treatment options for the **more than 29.4 million Americans — about 12 percent of the population — who suffer from *obstructive sleep apnea (OSA)***, a chronic disease that is rising in prevalence. I want to share with you some insights about what happens when treatment and diagnosis are ignored, which I presented earlier this year in Denver at SLEEP 2016, the largest scientific meeting dedicated exclusively to sleep medicine and research.

Sleep disorder patients ignoring treatment

A frightening number of the patients who suffer from OSA are largely ignoring lifesaving treatment. The short-term implications of OSA include a higher incidence of motor vehicle accidents and reduced workplace performance. More significantly, untreated OSA has been linked to increased cardiovascular morbidity and mortality.

At AIM Specialty Health® (AIM), our Sleep Solution is one of the largest and most comprehensive in the industry, supporting more than 19.5 million members today. This puts us in a unique position to leverage our data to identify gaps in clinical care and offer recommendations that can ultimately reduce health care spending on your members with sleep disorders. In a recent study with HeathCore, also a subsidiary of our parent firm, Anthem, Inc., we identified diagnostic and management care gaps in patients with OSA. Our findings included the following:

- Almost one-fourth (23.9 percent) of patients approved for diagnostic sleep testing on the basis of suspected OSA failed to undergo the recommended testing
- Among the almost 20,000 patients authorized for positive airway pressure (PAP) therapy, 12 percent did not initiate treatment
- Nearly 50 percent of OSA patients treated with PAP therapy became noncompliant after nine months
- Of the almost 40,000 patients who initiated PAP therapy, almost 14 percent quit by three months, 35 percent by six months, and 47 percent by nine months

Identifying patients who do not comply with diagnostic testing, treatment initiation, or ongoing PAP therapy is the first step in correcting the problem. It is our intention to share this data with disease management teams who are well-positioned to arrange outreach and education regarding the risks of such noncompliance. Aside from the adverse clinical outcomes, there are significant downstream cost-of-care implications for these high-risk members. We are attempting to identify the specific barriers of compliance in the hope of being able to remove these in the future.

To understand the impact, it is important to understand why follow-up treatment for sleep disorders is so essential — and why it is so harmful when treatment is ignored.

When patients do not obtain appropriate medical services, they are missing the net clinical benefit (total benefit minus total risk) and are not receiving appropriate care. The American College of Cardiology offered this perspective in the 2013 publication of its *Appropriate Use Criteria Task Force*:

“*An appropriate diagnostic or therapeutic procedure is one in which the expected clinical benefit exceeds the risks of the procedure by a sufficiently wide margin such that the procedure is generally considered acceptable or reasonable care.*”

When OSA sufferers ignore testing, and subsequently treatment, they leave themselves at risk for escalating symptoms and serious health consequences.

The short-term symptoms—and long-term effects—of OSA

Short-term symptoms of OSA include daytime drowsiness, morning headaches, decreased libido, and decreased workplace productivity. Of more concern are the long-term effects of OSA: *studies* have shown that untreated OSA is associated with a long list of conditions, including the following:

- hypertension
- coronary artery disease
- arrhythmias
- heart failure
- stroke
- diabetes
- epilepsy
- dementia

Treatment of OSA can help reduce symptoms and offset further complications.

When patients ignore treatment, failure to treat it is much more costly, experts agree

A Harvard Medical School study, *“The Price of Fatigue,”* revealed that **the hidden economic cost of unmanaged moderate-severe OSA in the U.S. is estimated to be between \$65 billion and \$165 billion.**

Furthermore, there is little doubt that OSA is a marker for higher downstream costs of care. In the evaluation and management of patients with suspected or established OSA, the net benefit of appropriate services is significant. When such services are not provided, the patient misses out on that benefit and is not receiving reasonable care. **The increased downstream costs (both clinical and economic) of these missed opportunities are borne by the patient, the payer, and society in general.**

The origins and method of the AIM and HealthCore study

Because of the comprehensiveness and size of our Sleep Solution, AIM is uniquely positioned to measure the frequency with which sleep services deemed to be appropriate are not performed. On a daily basis, we review over 2,500 requests to ensure sleep services meet clinical appropriateness guidelines.

Study method

For the study, we matched preauthorization data with claims data to calculate the proportion of approved services that were not rendered. The analysis was limited to three services types:

- Diagnostic sleep studies
- Initiation of PAP therapy
- Persistence with PAP therapy at three, six, and nine months

Noncompliance was defined as absence of a claim in the 90 days (the duration of validity of the authorization) following authorization of a service.

Study results

- Of the 61,430 patients approved for diagnostic testing, 23.9 percent failed to have the test performed
- Of the 19,968 patients authorized for initiation of PAP therapy, 12.1 percent did not initiate it
- Among the 39,075 members who initiated PAP therapy, cumulative discontinuation at three, six, and nine months was 13.8 percent, 34.8 percent, and 46.8 percent respectively
- Of every 100 patients for whom PAP therapy was approved, only 48 were using it nine months later

What this means for you

A decision on the part of the patient to forgo appropriate medical services results in below-standard care. **Because patients, payers, and providers are adversely impacted when appropriate services are not rendered, this issue of untreated sleep disorders has significant ramifications for our nation's health and deserves more attention.**

For patients: The net benefit missed by making such a decision has both clinical and economic ramifications. Patients who do not obtain these appropriate medical services are not receiving reasonable care. This escalates their risk of developing complications, which can vary in significance from insomnia and daytime fatigue to more serious consequences, such as hypertension, coronary artery disease, heart failure, and stroke.

For payers and providers: Payers, who can identify such members from administrative data (as described above), should collaborate with providers to **educate noncompliant patients and redirect them to pursue appropriate care. The reasons underlying the patient's decision not seek services should be explored and potentially corrected.** Out-of-pocket costs, inconvenience of testing, lack of appreciation of the consequences of untreated OSA, and preconceptions of the level of discomfort are all potential determinants of noncompliance that could be addressed.

How AIM can help

At AIM we are focused on ensuring appropriate, safe, and affordable care. Our Sleep Solution helps drive appropriate testing, enhances member access to high-value providers, supports therapy compliance, and promotes affordable and effective care for sleep disorders through:

- Clinical appropriateness review for testing (home versus lab facility)

- Clinical appropriateness review for therapy (automatic positive airway pressure versus continuous positive airway pressure)
- Monitoring and managing patient treatment compliance via data verification directly from a patient's devices before supplies are dispensed

We have the data to identify missed clinical and cost of care opportunities in OSA patients. This study should serve as a call to action—so let's act. If you have questions about this study or our Sleep Solution, please [contact me](#).

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