

Why Patients with OSA Fall Through the System

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Patients with obstructive sleep apnea (OSA) fall out of care at four predictable stages: Delayed or missed diagnosis, barriers to treatment initiation, therapy drop-off due to adherence challenges, and the absence of pathways back into care once treatment stops. This is not primarily a clinical failure, it is a structural one.

Diagnostic tools for OSA are well established, effective therapies exist, and clinical guidelines are clear.¹ Yet large numbers of patients remain undiagnosed, untreated, or disengaged from care.^{1,2} This reflects not clinical limitations but structural gaps in how sleep disorders are identified, managed, and supported over time. The patient journey in OSA is characterized by fragmentation, discontinuity, and lack of long-term support. At each stage, there is significant risk of drop-off and limited opportunity for re-engagement once care is interrupted. This is not primarily a clinical problem. It is a structural one.

A patient pathway with multiple points of loss

The typical OSA journey follows a recurring sequence. Symptoms emerge but are often unrecognized or dismissed for years. Diagnosis may be delayed or never occur at all.^{1,2} When treatment is initiated, most commonly through positive airway pressure (PAP) therapy,² long-term adherence frequently declines over time, and many patients eventually disengage from care altogether.³

At each stage, care can rely heavily on patient initiative rather than structured pathways. Although guidelines recommend ongoing follow-up, systematic approaches to identification, long-term support, and

re-engagement after treatment interruption are not consistently embedded in real-world care.⁴

The first gap: Underdiagnosis and delayed detection

OSA remains significantly underdiagnosed across major health systems, with estimates suggesting that a large majority of cases remain unidentified.⁵

Primary care continues to play a limited role in systematic detection. Significant gaps and variations remain in screening adults at high risk for OSA, including individuals with obesity, hypertension, cardiovascular disease, or type 2 diabetes.⁶ As a result, diagnosis remains largely opportunistic rather than systematic.

This creates the first major loss point in the pathway: Many patients never formally enter the healthcare system at all.

The second gap: From diagnosis to sustained treatment

Even when OSA is diagnosed, access to treatment is not always straightforward. Referral pathways can be complex, waiting times for sleep services can delay

care, and patients may face healthcare navigation, resource, and insurance barriers to testing and therapy access.⁷

Where treatment is initiated, it is frequently framed as a technical intervention rather than part of a broader chronic care pathway. Patients are prescribed a PAP device, but not always provided with the structured education, behavioral support, or follow-up needed to sustain long-term engagement.⁸

This distinction matters. PAP therapy is not a one-time intervention, but an ongoing treatment requiring adjustment, support, and monitoring over time.⁸

The third gap: Adherence and therapy drop-off

Sustained engagement with PAP therapy remains one of the most significant challenges in OSA management.

Across health systems, a substantial proportion of patients discontinue therapy within the first one to three years.³ This reflects a combination of factors, including comfort, mask fit, perceived benefit, patient support, and follow-up quality.⁸

However, the way health systems respond to this drop-off is equally important.

In some reimbursement systems, continued coverage is directly linked to short-term adherence thresholds. Patients who fail to meet these thresholds may lose reimbursement eligibility. Rather than triggering additional support or alternative treatment pathways, these policies can create another barrier to continued treatment.⁹

Adherence remains difficult to sustain. A 2024 long-term continuous positive airway pressure (CPAP) study found that only 38% of patients were fully adherent at 24 months, using the conventional threshold of at least four hours per night on at least 70% of days.¹⁰

The fourth gap: The absence of re-engagement pathways

Perhaps the most significant structural weakness in OSA care is the absence of formal re-engagement pathways.

Patients who discontinue treatment may not be followed up in a systematic way. Standard mechanisms to reassess symptoms, restart therapy, provide alternative treatment options, or reintegrate patients into care pathways are not consistently embedded in OSA care.⁴

In contrast, other chronic conditions routinely include mechanisms for re-engagement. Patients with diabetes, for example, are regularly followed up even after periods of disengagement. Equivalent systems rarely exist for OSA.⁴

The result is a one-directional pathway: Once patients exit the system, they are unlikely to return.

A system built around episodes rather than continuity

The underlying issue is that OSA is still not broadly integrated into chronic disease management frameworks across most health systems.

Care models remain structured around diagnosis as a discrete event, treatment as a technical intervention, and adherence as a short-term metric. What is often missing is a framework for continuous, long-term care.⁴

Without integration into chronic disease structures, many systems lack:

- Patient registries
- Systematic follow-up cycles
- Coordinated primary care management
- Incentives for long-term engagement and re-entry into care

The result is a care model that manages OSA in episodes rather than across the full trajectory of the disease.

The hidden cost of fragmented care

For patients, this results in delayed diagnosis, inconsistent support, and high rates of treatment discontinuation, with limited opportunity to re-enter care once they have disengaged. Many individuals fall out of the system despite the chronic nature of the condition and the availability of effective treatment.^{3,4}

For health systems, the consequences are equally significant. Untreated or poorly managed OSA is associated with substantial cardiovascular disease burden,¹¹ and discontinuation of CPAP has been associated with increased mortality.¹² PAP treatment has also been associated with reductions in mortality and hospitalization in real-world data.¹³ Evidence further suggests that sustained adherence to CPAP is associated with improved cardiovascular outcomes in patients with OSA and established cardiovascular disease.¹⁴ Yet current system design often fails to support long-term engagement and continuity of care.⁴

| What needs to change

Treating OSA as a long-term condition means replacing the current episodic model with three interlocking elements.

First, the shift from episodic to continuous care. OSA is a long-term condition. The current model — a diagnostic appointment, a device prescription, a 90-day adherence check — produces a system that loses patients at every transition. A chronic disease model replaces that with systematic identification of at-risk populations, structured pathways from diagnosis through to long-term care, regular follow-up, and formal mechanisms for re-engagement after treatment interruption.^{4,6}

Second, why this is achievable. The infrastructure to support more continuous care is increasingly available. Telemonitoring can enable remote tracking of PAP usage and other treatment data, while digital tools can help identify problems with adherence and support targeted follow-up.^{4,8} Primary care screening and structured follow-up mechanisms also offer opportunities to identify high-risk patients and maintain engagement over time.⁶ The question is not simply whether the tools exist. It is whether OSA is recognized as the kind of chronic condition that warrants using them systematically.

Third, the choice ahead. Health systems can continue to manage OSA episodically, with coverage in some systems tied to short-term adherence thresholds and limited mechanisms for patients who disengage to re-enter care.⁹ That approach risks perpetuating the same points of loss: Patients who remain undiagnosed, patients who struggle to sustain treatment, and patients who discontinue therapy without a structured pathway back into care.^{3,4,6}

Or health systems can recognize OSA for what it is: a chronic condition requiring continuous management, with systematic identification, follow-up, treatment support, and opportunities for re-engagement.^{4,8} The tools to support greater continuity exist. What remains is the challenge of embedding them consistently into OSA care.

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