

Why the OSA Journey Needs Long-Term, Adaptive Treatment Models

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OSA is chronic and affects nearly a billion people, yet care remains rigid and binary. It's time for a model that's flexible and supports long-term care.

Obstructive sleep apnea (OSA) affects nearly one billion people globally.^{1,2} But despite its chronic nature, it is still treated in many health systems as an acute condition with a binary outcome: therapy success or failure. A myriad of structural forces contribute to this pattern, including health policy, reimbursement constraints, clinical guidelines and insurance requirements. The result is a rigid system that leaves millions of patients behind.

| Reframing OSA as a chronic disease

OSA is a chronic disease yet is not managed via a framework akin to those for diabetes or hypertension, which have similar epidemiology and comorbidity burden. OSA does not resolve with one intervention, and its severity may shift due to weight gain, aging, menopause or comorbid conditions. A patient who declines positive airway pressure (PAP) therapy today may need it urgently after a cardiovascular event in five years.^{3,4} Others may cycle through therapy options as life circumstances and clinical risks change.

To meet this reality, healthcare systems must establish care pathways that support long-term monitoring, therapy adjustment and re-initiation.

Most national guidelines today still classify OSA episodically, despite longitudinal data confirming its

chronic progression. Few payers currently reimburse for retesting or follow-up, though comparable chronic disease programs mandate it over fixed periods or following significant clinical events such as cardiovascular events.

Changes are essential to transforming recognition into action and moving care away from acute-style models toward truly chronic management structures.

| The cost of binary thinking

Rigid success metrics, such as the 90-day PAP adherence rule in the U.S. Medicare program (requiring 4+ hours of nightly use on 70% of nights), creates unnecessary drop-off. Patients who fail to meet these thresholds are frequently cut off from therapy and follow-up support.

This pattern has clinical, economic and ethical consequences. Untreated OSA is associated with increased risk of hypertension, stroke, coronary artery disease, diabetes, cognitive decline, accidents and premature death.⁵⁻⁹

Evidence also suggests that even partial adherence to PAP delivers benefits, including reduced hospitalizations and emergency room visits, and improved sleepiness symptoms.¹⁰⁻¹²

| Why retrying therapy matters

When patients discontinue therapy, they're often labeled as non-compliant, discharged from care and effectively written off. Yet, many patients can re-engage later and experience significant benefits.

A landmark study analyzed over 100,000 patients with a first continuous positive airway pressure (CPAP) therapy termination. It found that 26% resumed CPAP within 12 months, and of those, 65% remained adherent one year later. Patients who resumed and stayed on CPAP had a 38% lower risk of all-cause mortality than those who discontinued again.¹³ These data demonstrate the clinical value of a second attempt and challenge the notion that early dropout predicts long-term failure.

| Transforming OSA care delivery through system redesign

Adaptive, long-term OSA care is not yet standard practice. Achieving it depends on structural alignment across reimbursement, data infrastructure and clinical guidance.

| Reimbursement reform

Across most markets, reimbursement frameworks still reward short-term compliance rather than sustained engagement. Payers must reform OSA reimbursement in ways that align financial incentives with chronic disease management goals.

By contrast, France's national telemonitoring and reimbursement structure, the *liste de activités de télésurveillance médicale (LATM)*, aligns OSA care with chronic disease management. It enables CPAP homecare providers to monitor patients remotely and receive performance-based payments. The model rewards ongoing patient support by offering higher weekly fees when nightly CPAP usage improves. As of 2023, an estimated 97% of CPAP-treated patients in France were enrolled in telemonitoring.¹⁴

French national data shows that this approach is effective. When combined with a pay-for-performance model, telemonitoring directed provider attention toward lower-adherence patients. This was associated with overall improved adherence and a higher proportion of patients achieving >4 hours of nightly CPAP use.¹⁴

| Digital engagement infrastructure

Effective chronic disease management at scale relies on connected, data-driven systems. Virtual care has demonstrated equivalence to in-person consultation for improving sleepiness in CPAP-treated OSA patients.¹⁵

England's National Institute for Health and Care Excellence (NICE) established 12-month remote monitoring as the standard for CPAP therapy in 2021, enabling providers to detect and address drop-off early. NICE further recommends extending telemonitoring beyond the first year, signaling a shift toward sustained, longitudinal engagement.¹⁶ Japan introduced a similar model in 2018, reimbursing CPAP remote monitoring under its national medical fee schedule.¹⁷

Beyond device tracking, integrated digital platforms connecting primary and specialty care are needed to enable long-term follow-up and longitudinal patient data collection.

| Guideline and program evolution

Clinical guidelines largely continue to frame OSA episodically, even though longitudinal evidence confirms its chronic course. Embedding long-term management principles including treatment transitions, periodic retesting and ongoing monitoring would mirror the structures already standard in diabetes or heart-failure care.

Parallel integration of OSA into chronic disease programs where comorbidity risk is high has produced tangible results. In the UK, pilot projects within the

National Diabetes Prevention Programme introduced routine OSA testing for patients with suboptimal glycemic control. This led to a 23% increase in OSA diagnoses and measurable improvements in HbA1c levels following treatment.¹⁸

Similarly, in the United States, the Kaiser Permanente health system embedded OSA screening into its cardiovascular disease management protocol, resulting in a 17% reduction in heart failure-related hospital readmissions.¹⁸

These models demonstrate how integrating OSA care into broader chronic disease strategies improves clinical outcomes while enabling more efficient use of health system resources.

Expanding reimbursable therapies

Long-term management also depends on therapy diversity. CPAP remains the first-line treatment and is life-changing for many patients, but alternative, reimbursable modalities expand reach and sustainability.

In 2021, Germany's Federal Joint Committee expanded statutory coverage to include mandibular advancement devices (MADs), formally recognizing that effective OSA care requires multiple therapeutic

options tailored to individual needs. This policy shift reflects a broader principle: systems must support therapy diversification to match individual needs and improve long-term adherence.

In 2024, the United States FDA approved the pharmaceutical tirzepatide (brand name Zepbound®) for the treatment of moderate-to-severe OSA in adults with obesity. It is the first approval for medication specifically for OSA.

No one debates the need for long-term care in diabetes or heart disease. The same evidence base now applies to OSA. The tools exist, the data are clear, and global precedents are already in motion. The remaining gap lies in policy alignment with chronic disease realities. Such an evolution will determine whether systems close or widen the current inequity in sleep health outcomes.

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