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GLP-1s, PAP and the Future of Multimodal Sleep Therapy: OSA Care Requires Clearer Clinical Guidance

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GLP-1/GIP therapies are reshaping OSA care, but their arrival has exposed a critical guideline gap. Current guidelines lack operational direction on reassessment, multimodal sequencing and therapy discontinuation, risking unverified disease resolution assumptions and unsafe therapy abandonment.

Glucagon-like peptide-1 (GLP-1) and glucose-dependent insulinotropic polypeptide (GIP) receptor agonists have created a new inflection point in obstructive sleep apnea (OSA) care.

They deliver sustained, double-digit weight loss and clinically meaningful reductions in apnea–hypopnea index (AHI) for many adults with obesity and moderate-to-severe OSA and are to be used alongside a reduced-calorie diet and increased physical activity.[1,2]

GLP-1/GIP therapies arrived, however, in a landscape where current guidelines provide no operational clarity on how to sequence, reassess or discontinue OSA therapies. Their success makes that gap more consequential. Even with meaningful weight loss, improved symptoms and decreased AHI, patients often have residual OSA and cardiovascular risk that current pathways are not built to detect or manage.

In the absence of these clear clinical guidelines, practice will drift. Weight loss may be treated as a proxy for remission and symptom improvement may be mistaken for disease resolution. Moreover, administrative or local care pathways may begin to define standards that should instead be anchored in objective clinical outcomes.

Emerging risks: Remission assumptions and therapy drift

Even after substantial weight loss, patients with residual OSA continue to experience higher rates of cardiovascular events than similar patients without OSA.[3] Without objective reassessment of OSA severity or structured evaluation of residual symptoms and cardiometabolic risk, patients who discontinue prescribed therapy, such as positive airway pressure (PAP), may unknowingly be putting themselves at risk.

Other downstream consequences of this guidance gap are foreseeable. Without clinical protocols to anchor coverage decisions, administrative policies will fill the vacuum. Coding and coverage decisions may begin to treat weight-loss–mediated AHI improvement as equivalent to disease resolution, not because the evidence supports this conclusion, but because the field has not provided a better framework.

The case for multimodal, coordinated OSA care

Randomized data show that GLP-1–based weight loss and PAP are not interchangeable. For instance,

data indicate that consistent continuous positive airway pressure (CPAP) use improves markers of early cardiovascular disease in patients with mild to moderate OSA, whereas current evidence is insufficient to demonstrate that GLP-1–mediated weight loss alone produces comparable effects.[4]

Even in the SURMOUNT-OSA program, which formed the basis for tirzepatide's approval in OSA, only about half of treated patients met criteria for remission or mild, asymptomatic disease, leaving a substantial proportion with residual OSA.[1] This underscores that metabolic therapy modifies but does not uniformly resolve disease biology.

Signals across randomized studies of GLP-1 therapies suggest that the greatest improvements in AHI, blood pressure and other cardiometabolic markers often occur when pharmacologic weight loss is combined with CPAP,[5] rather than used as a replacement strategy.

If combination-therapy principles are not explicitly codified, "GLP-1 pathways" and "sleep pathways" are likely to evolve in parallel, each with different endpoints, documentation standards and quality metrics. And weight loss success may be recorded and rewarded even as residual OSA may remain untreated in many patients.

At the same time, mandibular advancement devices (MADs) and other non-PAP therapies remain important components of OSA care. The European Respiratory Society (ERS) publications emphasize that heterogeneity in OSA pathophysiology and variable CPAP tolerance mean that anatomy-directed and alternative approaches play a meaningful role for selected patients, underscoring the importance of personalized, coordinated treatment pathways rather than binary therapy choices.[6,7]

Taken together, current data supports a multimodal care model within a single, longitudinal framework, but guidelines must operationalize it.

Where societies are already leading

Major professional societies have already begun to respond constructively to GLP-1–driven inflection in OSA care, consistently framing these therapies as important additions to multidisciplinary care rather than automatic replacements for PAP or other established therapies. Programming from the World Sleep Society (WSS), discussions at European Respiratory Society (ERS) and European Sleep Research Society (ESRS) meetings, and communications from the American Academy of Sleep Medicine (AASM) following tirzepatide's approval all emphasize both the promise of pharmacologic weight loss and the continued need for sleep-specialist involvement and individualized modality selection.[8,9]

Importantly, guideline bodies are not starting from zero. ERS's non CPAP guideline and existing PAP treatment recommendations already provide a scaffold for multimodal decision-making, even if they predate most GLP 1 OSA trials.[5]

Ongoing and planned guideline updates in Europe and North America represent a critical opportunity to create actionable direction around reassessment, multimodal sequencing and therapy deescalation/discontinuation, and have also embed emerging metabolic evidence into these frameworks.

Priorities for next-generation guidance

By clearly defining how metabolic therapies, PAP, MADs and other modalities should be sequenced, combined and reassessed over time, next-generation guidance can ensure that short-term metabolic gains do not come at the expense of long-term respiratory and cardiovascular outcomes. Without this clarity, fragmented care delivery risks becoming the de facto standard of care for OSA.

1. **At diagnosis: PAP as first-line for moderate-to-severe OSA**
   For newly diagnosed moderate-to-severe OSA, guidelines must specify that PAP remains first-line therapy regardless of concurrent interventions. GLP-1 initiation, bariatric referral and intensive lifestyle modification should be positioned as adjunctive strategies that may reduce disease severity over time, but do not replace the need for immediate airway stabilization during the acute phase.

2. **During treatment: Mandatory objective reassessment must precede treatment changes**
   Guidelines should mandate objective reassessment of OSA before changes are made to a PAP or other primary OSA therapy regimen, even when patients experience substantial reductions in weight, symptoms or comorbidities.

   At minimum, guidance should specify the disease markers that need to be reassessed before switching, discontinuing or adding to any active OSA therapy. These may include AHI or respiratory event index, excessive daytime sleepiness, oxygenation or hypoxic burden, blood pressure, cardiometabolic risk markers and patient-reported sleep quality and functioning.

   Reassessment should also be defined in terms of accepted modalities (polysomnography or home sleep apnea testing), and at set follow-up milestones (for example, around 6 and 12 months after therapy changes).

3. **Longitudinal management: Disease remission requires monitoring, not discharge**
   Even when OSA improves or meets remission criteria, guidelines should treat OSA as a chronic condition requiring longitudinal surveillance. Minimum reassessment intervals should be specified for patients in remission (for example, periodic testing every two years), alongside trigger-based reassessment for symptom recurrence, weight regain, changes to cardiovascular risk profile, advancing age or progression from mild to moderate-to-severe disease.

4. **Multimodal therapy sequencing**
   MADs and other non-PAP options should be embedded into combination frameworks, particularly for residual disease, PAP intolerance or heterogeneous pathophysiology. Guidelines should specify when to layer therapies, when to transition between them and how to assign accountability for ongoing OSA management when care spans multiple specialties.

From evidence to action: The need for clear, coordinated OSA guidance

GLP-1/GIP therapies can meaningfully reduce OSA severity for many patients with obesity, and in some cases may help patients reach remission thresholds. But their arrival has made a broader structural issue impossible to ignore. OSA care pathways lack sufficiently explicit protocols for preventing unverified remission, risky therapy abandonment and for managing patients successfully over time.

New guidelines must now close this gap by specifying when to reassess, when to continue, when to combine and when to discontinue OSA therapies. The evidence base already exists, and what is needed now, more than ever, is clear guidance to match it.

References

[1] Malhotra A, et al. *N Engl J Med*. 2024;391(13):1193–1205.

[2] U.S. Food and Drug Administration. Available at: https://www.fda.gov/news-events/press-announcements/fda-approves-first-medication-obstructive-sleep-apnea (Accessed December 2025).

[3] Dalmar A, et al. *Sleep*. 2018;41(5):zsy028.

[4] Chen Y, et al. *Clin Cardiol*. 2021; 44(8):1041–1049.

[5] Jiang W, et al. *Sleep Breath*. 2023;27(5):1687–1694.

[6] Randerath W, et al. *Eur Respir Rev*. 2021;30(162):210200.

[7] Verbraecken J, et al. *Eur Respir Rev*. 2025;65(4): 2402252.

[8] World Sleep Society. Available at: https://learn.worldsleepsociety.org/products/s-64-discussion-group-managing-patients-with-obstructive-sleep-apnea-and-obesity-with-glp-1-receptor-agonists (Accessed December 2025).

[9] Royal Australian College of General Practitioners. Available at: https://www1.racgp.org.au/newsgp/clinical/mounjaro-approved-to-treat-sleep-apnoea (Accessed December 2025).