



# Effective Health Care

## Treatment of Sleep Apnea

### Nomination Summary Document

#### Results of Topic Selection Process & Next Steps

- Sleep apnea treatment will go forward for refinement as a comparative effectiveness or effectiveness review. The scope of this topic, including populations, interventions, comparators, and outcomes, will be further developed in the refinement phase.
- When key questions have been drafted, they will be posted on the AHRQ Web site and open for public comment. To sign up for notification when this and other Effective Health Care Program topics are posted for public comment, please go to <http://effectivehealthcare.ahrq.gov/index.cfm/join-the-email-list1/>.

#### Topic Description

**Nominators:** 2 public payers, 1 health care professional association

**Nomination Summary:** This topic represents nominations, respectively, by three nominating groups. The treatments for sleep apnea covered in these nominations include continuous positive airway pressure (CPAP), oral appliances, uvulopalatopharyngoplasty (UPPP), radiofrequency ablation (RFA), bariatric surgery, counseling, and lifestyle modifications. In addition, one nominator expressed interest in patients with comorbidities (including pulmonary hypertension and heart failure). Outcome measures include mortality reduction, quality of life (objectively measured), functional improvement, and reduction in comorbid conditions or resolution of these conditions.

**Key Questions from Nominators:** Nominator 1 (public payer):  
For each of the treatment options for obstructive sleep apnea (CPAP, oral appliances, UPPP, and RFA), we ask the following questions:

1. Does the technology improve quality of life and function, and if so, to what extent and at what cost?
2. For which presenting symptoms of obstructive sleep apnea (OSA) does the technology result in an improvement, and if so, to what extent and at what cost?
3. Does the technology prevent or reduce comorbidities associated with OSA, and if so, to what extent and at what cost?
4. Does the technology prevent or reduce mortality, and if so, to what extent and at what cost?

Nominator 2 (public payer):

1. What other modalities of treatment, including weight loss, surgery, and oral appliances, would be better tolerated and more efficacious than CPAP?

Nominator 3 (health care professional association):

1. What is the evidence to support alternate treatment modalities including CPAP, surgery, and oral appliances?
2. What is the value of lifestyle modification (e.g., weight loss)?
3. Are there any differences in management for central vs. peripheral sleep apnea (and are these distinctions still valid)?

## Considerations

- The topic meets all EHC Program selection criteria. (For more information, see <http://effectivehealthcare.ahrq.gov/index.cfm/submit-a-suggestion-for-research/how-are-research-topics-chosen/>.)
- CPAP is considered first-line therapy for the treatment of sleep apnea in adults. The nominating agencies for this topic have expressed interest in many second-line therapies for sleep apnea and their effectiveness or comparative effectiveness to CPAP. While there is consistent evidence on the efficacy of CPAP and its use as a first-line therapy, no comparative effectiveness reviews comparing all of the second-line therapies (specified by the nominators) compared to CPAP were identified during the topic selection evaluation.