Clinical Review Criteria
Uvulopalatopharyngoplasty (UPPP)

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Criteria
For Medicare Members
The LCD is retired.

For Non-Medicare Members
Kaiser Permanente has elected to use the MCG* Uvulopalatopharyngoplasty (KP-0245) for medical necessity determinations.

MCG* are proprietary and cannot be published and/or distributed. However, on an individual member basis, Kaiser Permanente can share a copy of the specific criteria document used to make a utilization management decision. If one of your patients is being reviewed using these criteria, you may request a copy of the criteria by calling the Kaiser Permanente Clinical Review staff at 1-800-289-1363.

If requesting this service, please send the following documentation to support medical necessity:
- Last 12 months of clinical notes from requesting provider and/or specialist (pulmonary, ENT)
- Most recent sleep study results

The following information was used in the development of this document and is provided as background only. It is not to be used as coverage criteria. Please only refer to the criteria listed above for coverage determinations.

Background
Sleep-disordered breathing includes a spectrum of disorders ranging from primary snoring to obstructive sleep apnea (OSA). Obstructive Sleep Apnea Syndrome (OSAS) is defined as an apnea-hypopnea index of more than five events per hour, and often also have mental or physical effects such as excessive daytime sleepiness. Potential health consequences of OSAS are cardiovascular diseases, neuropsychiatric problems, injuries and increased mortality. Obstructive sleep apnea results from a combination of a structurally small upper airway and a loss of upper airway muscle tone.

Methods of treating OSA include weight loss, nasal continuous positive airway pressure (CPAP), surgical or laser resection of the uvula, tonsils or soft palate, or tracheostomy when all other treatments fail. Surgical treatment approach varies, and the results are affected by age, cause of obstruction, and severity of the disease. The best method of treatment remains controversial.

Uvulopalatopharyngoplasty (UPPP) is a surgical procedure used to treat sleep apnea or snoring. It removes excess tissue in the throat in an attempt to widen the airway. The soft tissue removed may include the uvula, tonsils, adenoids, tongue or roof of the month. It takes 2 to 3 weeks to recover from the surgery.

Medical Technology Assessment Committee (MTAC)
1997 Literature Serach

Articles: Based on the literature below there is limited evidence of the value of LAUP or UPPP in the treatment of OSAS (Obstructive Sleep Apnea Syndrome). While there is strong evidence supporting the value of CPAP in the treatment of OSAS, compliance in the use of the CPAP device remains a problem. Anand-V-K, Ferguson-P-W, Schoen-I-S, Obstructive sleep apnea: comparison of continuous positive airway pressure and surgical treatment, Otolaryngology-Head-Neck Surgery. Sept: 105(3) 382-90. Retrospective review, 400 cases of patients diagnosed
with OSA (Obstructive Sleep Apnea). A comparative analysis with polysomnography revealed superior cures with CPAP, although long term compliance remains problematic. Conclusion was use of CPAP as initial therapy in-patients with no clinically apparent causes for obstruction: nasal polyps, deviated nasal septum, or obstructive tonsillar hypertrophy. Mickelson, SA., Laser-Assisted Uvulopalatoplasty for Obstructive Sleep Apnea, Laryngoscope: 106(I Pt 1): 10-3, 1996 Jan. Study Size 34, Consecutive prospective patients; Improved RDI by at least 50% in 53.8% of the study group. Snoring was reduced by 92.3%. Conclusion: Results suggest that LAUP MAY be efficacious in management of OSAS. Vaidya AM. Petruzelli GJ., McGee D., Gopalsami C., Identifying obstructive sleep apnea in patients presenting for laser-assisted uvulopalatoplasty, Laryngoscope: 106(4): 431-7 1996 Apr. 850 patients with snoring evaluated. While body mass index, falling asleep while driving, snoring every night, and stopping breathing during sleep were found to correlate strongly with increasing RDI (Respiratory Disease Index), it was strongly recommended that a referral for PSG (polysomnography Study) be initiated if there is any suspicion of OSAS. Walker RP. Grigg-Damberger MM. Gopalsami C, Totten MC., Laser-assisted uvulopalatoplasty for snoring and obstructive sleep apnea: results in 170 patients, Laryngoscope. 105(9 Pt 1): 938-43, 1995 Sept July 1993 - December 1994, 541 consecutive patients referred for treatment of snoring. 274 had LAUP treatments. As of January 1995 LAUP treatment courses were completed for 170 patients.105 had diagnosis of snoring and 65 had diagnosis of OSAS based on preoperative polysomnography. Of the 65 OSAS patients 16 cases achieved success as measured on post-op polysomnography. Conclusion: LAUP may be a viable surgical option for patients with snoring and mild sleep apnea. Schechtman KB. Sher AE., Piccirillo JF., Methodological and statistical problems in sleep apnea research: the literature on Uvulopalatopharyngoplasty. Sleep 18(8): 659-66 1995 Oct. A comprehensive review of the literature on surgical treatment of sleep apnea found 37 appropriate papers (total n = 992) on UPPP. Problems identified: 1) There were no randomized studies and few (n=4) with control groups. 2) Median sample size was only 21.5; thus statistical power was low and clinically important associations were routinely classified as "not statistically significant". 3) Only one paper presented the confidence bounds that might distinguish between statistical and clinical significance. 4) Because of short follow-up times and infrequent repeat follow-ups, little is known about whether UPPP results deteriorate in time. 5) In at least 15 papers, bias caused by retrospective designs and nonrandom loss to follow-up raised questions about generalizability of results. 6) Few papers associated polysomnography data with patient-based quality of life measures. 7) Missing data and inconsistent definitions were common. 8) Baseline measures were often biased because the same assessment was inappropriately but routinely used for both screening and baseline. LU SJ, Chang SY., Shiao GM., Comparison between short-term and long-term post-operative evaluation of sleep apnea after Uvulopalatopharyngoplasty. Journal of Laryngology & Otology. 109(4): 308-12 1995 Apr. Sample 15 OSAS patients who had UPPP with pre-operative, initial post-operative and long-term post-operative polysomnography studies (more than 5 years after surgery). The subjective improvement after operation is not adequately correlated to the PSG results. Suggestion that long-term follow-up for patients after UPPP is necessary. Watson, Robert K., Thompson, A. Siobhan: Treatment Outcome of Sleep Apnea, CONN Med. 56: 125-129, 1992. 101 patients. Interviewed over 12-24 month period. CPAP most often treatment used with results of improved daytime alertness (84%). Patients with moderate OSA often had surgery which led to 85% improved daytime sleepiness, and patients with mild OSA were treated with sleep position change and weight loss with 64 - 66% improved daytime alertness.

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MPC Medical Director Clinical Review and Policy Committee

MPC Medical Policy Committee

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