

## Obstructive Sleep Apnea Non-Surgical Treatment

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Developed By: Medical Necessity Criteria Committee

### I. Description

Airway obstruction during sleep is a commonly recognized problem. Obstructive sleep apnea (OSA) is the most common breathing related sleep disorder. OSA is characterized by repetitive episodes of airway obstruction due to the collapse and obstruction of the upper airway during sleep. In patients with OSA, the normal pharyngeal narrowing is accentuated by anatomic factors, such as a short neck, elongated palate and uvula, large tonsils and redundant lateral pharyngeal wall mucosa. The hallmark symptom of OSA is excessive snoring with related apneic episodes, resulting in excessive daytime sleepiness affecting the patient's Activities of Daily Living. The incidence of OSA in obese patients is considerably higher than in non-obese individuals.

### II. Criteria: Diagnosis of Sleep Apnea

- A. **A sleep study is indicated** if the patient meets **ANY** of the following criteria for signs and symptoms of obstructive sleep apnea (OSA). *(see criteria below for the specific type of sleep study to be performed)*
- a. Epworth Sleepiness Scale greater than 10
  - b. Observed apneic episodes
  - c. Excessive daytime sleepiness and one of the following;
    - i. BMI greater than 30
    - ii. Excessive sleepiness while driving
    - iii. Loud intense snoring
- B. For patients meeting the criteria for a sleep study, a **home sleep study** will be covered **UNLESS** the patient has **ANY** of the following:
- a. Age less than 18
  - b. COPD
  - c. CHF – NYHA class III or IV, or LVEF <45%
  - d. Chronic opioid medication use
  - e. Super obesity – BMI >45
  - f. Obesity hypoventilation syndrome (1 of the following):
    - i. BMI >35 plus PFT show ABG PCO<sup>2</sup> >45
    - ii. BMI >35 plus inability to lie flat in bed

- g. Neuromuscular disorder – Parkinson’s disease, spina bifida, myotonic dystrophy, ALS
  - h. Stroke with residual respiratory effects
  - i. Epilepsy
  - j. Central sleep apnea or Complex sleep apnea
  - k. Parasomnias
  - l. Periodic limb movement disorder (involuntary jerking movements of the legs during sleep causing fragmented sleep)
  - m. Severe insomnia
  - n. Narcolepsy
  - o. Member lacks the mobility or dexterity to use home sleep study equipment
- C. Moda Health will cover a home sleep study that is performed on Type II, Type III, or Type IVA device, capable of measuring airflow and at least 2 channels, and provides measurement of apnea-hypopnea index (AHI) or respiratory disturbance index (RDI), and
- a. The home study is interpreted by a Board-Certified Sleep Medicine Specialist
- D. Moda Health will **NOT** cover home sleep studies that are performed on devices that do not provide standard measurement of AHI/RDI and oxygen saturation. These devices do not provide sufficient information to prescribe treatment. (Examples include Biancamed SleepMinder, SNAP testing with fewer than 3 channels, and SleepImage Sleep Quality Screener)
- E. Moda Health considers a **full-channel split-night polysomnography** (*first half of the study is for diagnosis while the second half is for CPAP titration – CPT Code 95811*) the preferred medically indicated test when **ALL** of the following criteria are met: **(CWQI HCS-0083)**
- a. The polysomnography is performed in an American Academy of Sleep Medicine accredited sleep center.
  - b. The patient has documented signs and symptoms of OSA as noted in section A above.
  - c. The in-lab sleep study must be supervised and interpreted by a Board-Certified Sleep Medicine Specialist.
  - d. CPAP titration will be performed if the patient demonstrates an AHI of greater than or equal to 15 during the first 2 hours of the study.
  - e. The patient has **1 or more** of following indications:
    - i. The patient has had a positive home sleep study with an AHI or RDI greater than or equal to 30 or above
    - ii. The patient has a contraindication that prevents a home study from being performed.
    - iii. The patient has failed a trial of AutoPAP after a home study
    - iv. The patient has a negative or technically inadequate home study
- F. An attended **full-channel full-night polysomnography** (95810) is medically indicated for **1 or more** of the following: **(CWQI HCS-0081)**
- a. If CPAP titration during a split-night polysomnography (95811) was not performed due to lack of time or because the AHI was less than 15, the study can be converted to a full-night polysomnography (95810)

- b. A full-channel full-night polysomnography (95810) is being requested in conjunction with a multiple sleep latency study (CPT 95805) for patients with suspected narcolepsy versus idiopathic hypersomnia.
- G. Moda Health considers a **second full-channel split night polysomnography (95811)** that is supervised and interpreted by a Board-Certified Sleep Medicine Specialist medically indicated when **1 or more** of the following criteria are met: **(CWQI HCS-0081)**
- a. The patient was diagnosed with OSA during the first study, however, submitted documentation supports that there was insufficient time to perform the CPAP titration
  - b. The patient failed a trial of AutoPAP after an initial in-lab split night study.
  - c. The patient is less than 18 years of age and had a positive split night study, and a second in-lab split-night study is needed for CPAP titration
- H. **Multiple Sleep Latency Test (95805)** for suspected narcolepsy is medically necessary immediately following a full-channel full night polysomnography (95810) if the patient has at least **1 or more** of the following indications: **(CWQI: HCS-0053)**
- a. The patient has tried CPAP or AutoPAP with documented compliance and continues to have excessive daytime sleepiness; or
  - b. Requested test is part of an evaluation of a patient with excessive daytime sleepiness for suspected narcolepsy versus idiopathic hypersomnia following a normal polysomnogram; and
    - i. The patient has **1 or more** of the following symptoms:
      - 1. Cataplexy (*i.e, sudden weakness or loss of muscle tone not accompanied by loss of consciousness*); or
      - 2. Disturbed or fragmented sleep; or
      - 3. Sleep paralysis
- I. Moda Health will cover **repeat sleep studies** for **ALL** of the following indications:
- a. The patient has an established diagnosis of OSA and a qualified home study and a repeat sleep study is requested for **1 or more** of the following to:
    - i. Assess efficacy of surgery (including tonsillectomy or upper airway) or oral appliances/devices with a change in symptoms; OR
    - ii. Re-evaluate the diagnosis of OSA and need for continued CPAP if there is a significant weight loss (defined as 10% of body weight) since the most recent sleep study; OR
    - iii. There is a significant change in the patient's symptoms or risk factors (*e.g. worsening heart failure, weight gain greater than 20%*) despite documented compliance with ordered treatment

### III. Criteria: Non-surgical Treatment of Obstructive Sleep Apnea:

If a patient has symptoms of sleep apnea or diagnosis of sleep apnea, lifestyle changes should be recommended (*weight loss, avoidance of alcohol or sedative medications, and sleep hygiene recommendations*). If a patient has documented Obstructive Sleep Apnea, an AutoPAP, CPAP, BiPAP or oral appliance may be considered.

- A. **Moda Health will cover AutoPAP, CPAP and BiPAP** for patients that meet the diagnosis criteria for OSA and **1 or more** of the following:
- a. The patient has positive sleep study (home or in-lab study) interpreted by a Board-Certified Sleep Medicine Specialist and Apnea-Hypopnea Index (AHI) or Respiratory Disturbance Index (RDI) of equal to 15/hour- or greater, with a minimum of 30 events
  - b. The patient has positive sleep study (home or in-lab study) interpreted by a Board Certified Sleep Medicine Specialist and an Apnea-Hypopnea Index (AHI) or Respiratory Disturbance Index (RDI) greater than or equal to 5 and less than 15/hour with a minimum of 10 events and at least **1 or more** of the following:
    - i. Excessive daytime sleepiness with an Epworth Sleepiness Scale score greater than 10
    - ii. Impaired cognition
    - iii. Mood disorders
    - iv. Insomnia
    - v. Documented HTN (systolic blood pressure greater than 140 mm Hg and/or diastolic blood pressure greater than 90 mm Hg)
    - vi. Ischemic heart disease,
    - vii. History of stroke
    - viii. Greater than 20 episodes of oxygen desaturation to less than 85% during a full night sleep study
    - ix. At least 1 episode of oxygen desaturation to less than 70% during a full night study
  - c. For a patient receiving therapy for OSA with a CPAP/AutoPAP/BIPAP unit, **continued authorization** is contingent on demonstrating compliance within the first 3 months of use as demonstrated by **ALL** of the following:
    - i. Compliance reports from the provider with **1 or more** of the following:
      1. Compliance is demonstrated at 70% of usage greater than 4 hours per day over 30 days; or
      2. Face-to-face clinical re-evaluation by the treating physician determined that adjustments to the CPAP/AutoPAP/BIPAP trial are needed to address failure to respond to PAP therapy.
- B. Moda Health will cover **tongue retaining** devices or Mandibular advancement (custom fitted and prefabricated) oral appliances to reduce upper airway collapsibility devices (e.g. the Thornton Adjustable Positioner (TAP) or a Hybridized Positive Airway Pressure System (HPAP)), for members who meet at least **one** of the following criteria. (*Oral appliances for OSA that are available over-the-counter without a prescription are not covered*).
- i. The member has a positive home or in lab sleep study interpreted by a Board-Certified Sleep Medicine Specialist and an Apnea Hypopnea Index (AHI) or Respiratory Disturbance Index (RDI) of greater than or equal to 15/hour with a minimum of 30 events
  - ii. The member has a positive home or in lab sleep study interpreted by a Board-Certified Index (RDI) of greater than or equal to 5 and less than 15 events/hour with a minimum of 10 events and at least one of the following (1-8):
    1. Excessive daytime sleepiness with an Epworth Sleepiness Scale score of greater than or equal to 10 or Multiple Sleep Latency test (MSLT) less than 6

2. Insomnia
  3. Impaired cognition
  4. Documented hypertension (systolic blood pressure greater than 140 mm Hg and/or diastolic blood pressure greater than 90 mm Hg)
  5. Ischemic heart disease, significant arrhythmia, etc.
  6. History of stroke
  7. Greater than 20 episodes of oxygen desaturation (less than 85%) during a full night sleep study
  8. 1 episode of oxygen desaturation of less than 70% during a full night sleep study
- iii. If the AHI or RDI is greater than 30 and meets either one of the following:
    1. Member is not able to tolerate a PAP device
    2. The use of PAP is contraindicated
  - iv. Oral appliances to reduce upper airway collapsibility for indications other than OSA are considered experimental or investigational.
  - v. Convenience items or duplicated equipment are considered NOT medically necessary. These include but are not limited to cleaning supplies, cleaning machines, batteries, travel CPAPs etc
  - vi. Oral appliances for treatment of upper airway resistance syndrome (UARS) are considered experimental and investigational
  - vii. Oral appliances for snoring (e.g., Snore Guard) are considered not medically necessary for treatment of disease, as snoring is not considered a disease
  - viii. Oral appliance is **NOT** covered if requested for convenience purposes and OSA is well controlled with CPAP/PAP device
- b. Advanced imaging studies are **NOT** covered for oral appliances. These include but are not limited to:
    - i. CT scan of the head, face, and/or neck
    - ii. MRI of the head, face and/or neck
  - c. Acoustic Pharyngometry is **NOT** covered for oral appliance fitting
- C. Replacement of oral appliances/AutoPap/CPAP/BiPAP is considered medically necessary at the end of the device's 5-year reasonable useful lifetime (RUL). Replacement of these items is considered medically necessary prior to the end of the 5-year RUL due to a change in the member's condition. Replacement needed due to misuse or abuse is not covered.
- D. The following treatments are considered medically necessary in **children** with habitual snoring and an apnea index of greater than one (>1) on a nocturnal polysomnography and **1 or more** of the following:
- a. Adenotonsillectomy
  - b. CPAP in children for OSA when **ANY** of the following criteria are met:
    - i. Adenotonsillectomy is contraindicated
    - ii. Adenotonsillectomy is delayed
    - iii. Adenotonsillectomy is unsuccessful in relieving symptoms of OSA
    - iv. Palate expansion (maxillary distraction)

- E. **Other Respiratory Assist Devices (RAD)** will be reviewed on a case-by-case basis by the Moda Health Medical Director for the patients with OSA. Respiratory assist devices (RAD) will be covered in appropriate cases with documentation supporting medical necessity such as but not limited to COPD, central apnea, complex apnea, or nocturnal hypoventilation.
- a. BiPAP-ST (spontaneous-timed), BiPAP Auto-SV, ASV, IVAPS or similar devices with a backup rated intended to counteract ventilator instability such as Cheyne-Stokes, Central Sleep Apnea, and Complex Sleep Apnea demonstrated by central apnea that emerges on CPAP or BiPAP therapy at a rate greater than 5 per hour on setting required for control of obstructive events.
  - b. BiPAP-ST, AVAPS, IVAPS or similar devices with a backup rate intended to provide non-invasive ventilation assistance during sleep in patient with co-morbid restrictive thoracic disorders or COPD that demonstrates 5 minutes or more of oxygen saturation at 88 percent or less despite correction of the AHI with CPAP/BiPAP.
  - c. Respiratory assist devices with back-up rate feature are not covered for OSA
- F. Non-covered procedure/devices:
- a. The Repose System, a minimally invasive technique involving tongue base suspension, is considered investigational.
  - b. Injection snoreplasty: injection of a sclerosing agent into the soft palate is considered investigational.
  - c. Cardiac atrial pacing for the treatment of sleep apnea is considered investigational.
  - d. Dental procedures (dentures, bridgework, etc.) as treatment for OSA are not covered benefits under Moda Health medical plans.

#### IV. Information Submitted with the Prior Authorization Request:

1. History and physical including Epworth Sleepiness Scale results
2. Sleep study interpretation for treatment of OSA.
3. CPAP compliance reports for continued authorization of CPAP
4. Medical records from treating physician documenting the requirements

#### V. CPT or HCPC codes covered when criteria requirements are met:

Codes	Description
95800	Sleep study, unattended, simultaneous recording; heart rate, oxygen saturation, respiratory analysis (e.g., by airflow or peripheral arterial tone), and sleep time
95801	Sleep study, unattended, simultaneous recording; minimum of heart rate, oxygen saturation, and respiratory analysis (e.g., by airflow or peripheral arterial tone)
95805	Multiple sleep latency or maintenance of wakefulness testing, recording, analysis and interpretation of physiological measurements of sleep during multiple trials to assess sleepiness
95806	Sleep study, unattended, simultaneous recording of, heart rate, oxygen saturation, respiratory airflow, and respiratory effort (e.g., thoracoabdominal movement)

G0398	Home sleep study test (HST) with type II portable monitor, unattended; minimum of 7 channels: EEG, EOG, EMG, ECG/heart rate, airflow, respiratory effort and oxygen saturation
G0399	Home sleep test (HST) with type III portable monitor, unattended; minimum of 4 channels: 2 respiratory movement/airflow, 1 ECG/heart rate and 1 oxygen saturation
G0400	Home sleep test (HST) with type IV portable monitor, unattended; minimum of 3 channels
95807	Sleep study, simultaneous recording of ventilation, respiratory effort, ECG or heart rate, and oxygen saturation, attended by a technologist
95810	Polysomnography; age 6 years or older, sleep staging with 4 or more additional parameters of sleep, attended by a technologist
95811	Polysomnography; age 6 years or older, sleep staging with 4 or more additional parameters of sleep, with initiation of continuous positive airway pressure therapy or bilevel ventilation, attended by a technologist
95782	Polysomnography; younger than 6 years, sleep staging with 4 or more additional parameters of sleep, attended by a technologist
95783	Polysomnography; younger than 6 years, sleep staging with 4 or more additional parameters of sleep, with initiation of continuous positive airway pressure therapy or bi-level ventilation, attended by a technologist
E0470	Respiratory assist device, bi-level pressure capability, without backup rate feature, used with noninvasive interface.
E0471	Respiratory assist device, bi-level pressure capability, with backup rate feature, used with noninvasive interface.
E0472	Respiratory assist device, bi-level pressure capability, with back-up rate feature, used with invasive.
E0485	Oral device/appliance used to reduce upper airway collapsibility, adjustable or nonadjustable, prefabricated, includes fitting and adjustment
E0486	Oral device/appliance used to reduce upper airway collapsibility, adjustable or nonadjustable, custom fabricated, includes fitting and adjustment

## VI. Annual Review History

Review Date	Revisions	Effective Date
01/2013	Annual Review: Added table with review date, revisions, and effective date. Revised criteria for diagnosis of sleep study and repeat sleep study. Added Dr. Engrav's signature instead of Dr. Mills.	01/23/2013
02/2013	Revised the criteria section IV for Split night polysomnography and added section V criteria for a second polysomnography. Removed second sentence from III. Revised number 4 under treatment for other RAD devices – removed DPAP/VPAP.	03/1/2013
04/2014	Annual review: Removed restless leg syndrome from indications, added change in symptoms for repeat sleep study, added limit of one oral appliance and advanced imaging not covered for oral appliance; added MSLT criteria, revised continuation of CPAP/AutoPAP to meet CMS guideline	04/25/2014

04/2015	Annual Review: Added MSLT criteria, revised continuation of CPAP/AutoPAP to meet CMS guideline, added criteria V.a and c for in-lab studies, added criteria VI.c for repeat study less than 18 y/o	04/30/2015
05/2016	Annual Review: No change	05/25/2016
09/2016	Added AutoPAP to criteria for in-lab study, clarified full night vs in-lab study	9/28/2016
08/2017	Annual Review: Minor format/wording changes, updated to new template	08/23/2017
12/2017	Updated to add criteria II.E.e.iv to allow in-lab split night sleep study after a negative home study with 2 or more risk factors for obstructive sleep apnea.	12/06/2017
11/2018	Annual Review: No change	11/28/2018
03/2019	Clarified the criteria related to oral appliances	04/01/2019
11/2019	Annual Review: <ul style="list-style-type: none"> <li>• Clarified general indications for a sleep study</li> <li>• Clarified contraindications for a home sleep study</li> <li>• Specified oral appliances that maybe considered for replacement after useful lifetime</li> <li>• Added no coverage is considered for convenience items/duplicated components for PAP devices</li> <li>• Added RAD with back up feature are not covered</li> </ul>	12/05/2019
08/2020	Annual Review: <ul style="list-style-type: none"> <li>• Added details to the requirements for AutoPAP, CPAP and BiPAP for clear and concise descriptions</li> <li>• Updated grammar for coverage requirements for tongue retaining devices/mandibular advancement oral appliances</li> </ul>	09/01/2020
08/2021	Annual Review: No changes	09/01/2021

## VII. References

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18. Physician Advisors

## Appendix 1 – Centers for Medicare and Medicaid Services (CMS)

Medicare coverage for outpatient (Part B) drugs is outlined in the Medicare Benefit Policy Manual (Pub. 100-2), Chapter 15, §50 Drugs and Biologicals. In addition, National Coverage Determination (NCD) and Local Coverage Determinations (LCDs) may exist and compliance with these policies is required where applicable. They can be found at: <http://www.cms.gov/medicare-coverage-database/search/advanced-search.aspx>. Additional indications may be covered at the discretion of the health plan.

Medicare Part B Covered Diagnosis Codes (applicable to existing NCD/LCD):

Jurisdiction(s): 5, 8	NCD/LCD Document (s):
Noridian Local Coverage Determination (LCD) Polysomnography and Other Sleep Studies (L34040)	

<https://med.noridianmedicare.com/documents/10546/6990983/Polysomnography+and+Other+Sleep+Studies+LCD/36c9280e-91ef-4110-82e9-84f1e4de73dd>

**NCD/LCD Document (s):**

**Medicare Part B Administrative Contractor (MAC) Jurisdictions**

Jurisdiction	Applicable State/US Territory	Contractor
F (2 & 3)	AK, WA, OR, ID, ND, SD, MT, WY, UT, AZ	Noridian Healthcare Solutions, LLC