



## Sleep Apnea: Diagnosis

### **I. Policy**

University Health Alliance (UHA) will reimburse for polysomnography (sleep study) for the diagnosis of Sleep Apnea when it is determined to be medically necessary and when it meets the medical criteria guidelines (subject to limitations and exclusions) indicated below.

### **II. Criteria/Guidelines**

- A. Polysomnography/sleep study is covered (subject to Limitations/Exclusions and Administrative Guidelines) when the following criteria are met:
1. Patient is 18 years of age or older
  2. The patient has had a face-to-face clinical evaluation by the treating physician prior to the study to assess for sleep related breathing disorder. The evaluation should include, at a minimum, the following:
    - a. Physical examination that includes the respiratory, cardiovascular, and neurologic systems, and
    - b. Signs and symptoms of sleep disordered breathing; and
    - c. Comorbid conditions, (e.g., hypertension, heart disease, stroke); and
  3. The patient is at increased risk of moderate to severe OSA as indicated by the presence of excessive daytime sleepiness and at least two of the following three criteria:
    - a. Habitual loud snoring.
    - b. Witnessed apnea or gasping or choking.
    - c. Diagnosed hypertension; OR
  4. The patient has observed sleep apnea during sleep or has had at least two of the following indications:
    - a. Habitual and disruptive snoring
    - b. Unexplained pathological daytime sleepiness and/or nonrestorative sleep.
    - c. Gasping or choking episodes during sleep
    - d. Obesity with BMI of 30 or more
    - e. Craniofacial abnormality or upper airway soft tissue abnormalities e.g., adenotonsillar hypertrophy, lateral peritonsillar narrowing, high arched/narrow hard palate, retrognathia, macroglossia, increased neck circumference (17 inches in men, 16 inches in women), modified Mallampati score of 3 or 4, nasal abnormalities, e.g., polyps, deviation, valve abnormalities, turbinate hypertrophy
    - f. At least two of the following:
      - i. Unexplained pulmonary hypertension
      - ii. Stroke

- iii. Coronary artery disease
- iv. Congestive heart failure
- v. Unexplained cor pulmonale
- vi. Polycythemia
- vii. Hypertension
- viii. Hypothyroidism

5. For children (age 18 or younger) who don't meet the above criteria, one of the following indications is met

- a. Attention deficit disorder with hyperactivity
- b. Nocturnal enuresis
- c. Hypertrophy of tonsils and/or adenoids
- d. Downs syndrome
- e. Prader-Willi syndrome
- f. Neuromuscular disorder
- g. Duchenne Muscular Dystrophy
- h. Chiari malformations
- i. Myelomeningocele
- j. Craniofacial abnormality or upper airway, soft tissue abnormalities, e.g., Pierre Robin, Treacher-Collins, Goldenhar

6. Polysomnogram/sleep study is performed in a hospital-based sleep laboratory or free-standing sleep laboratory meeting the following requirements:

- a. Hospital-based sleep laboratory falls within the purview of The Joint Commission accreditation for its institution;
- b. Free-standing sleep laboratory is fully and currently accredited by the American Association of Sleep Medicine (AASM) ([aasm.org](http://aasm.org)).

7. Polysomnogram/sleep study is interpreted by a sleep medicine specialist who is board certified by American Board of Sleep Medicine (ABSM) or the American Board of Medical Specialties (ABMS).

B. UHA 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 service. Polysomnography/sleep study should be performed with the intent to complete the study with titration of positive airway pressure (PAP). CPT code 95810 is only allowable when the sleep study does not demonstrate events consistent with sleep apnea or PAP titration cannot be completed for unforeseen reasons as documented in the polysomnography report. Examples include, but are not limited to, the following:

- 1. Insufficient total sleep time;
- 2. Criteria for obstructive sleep apnea met late in study with insufficient sleep time left for positive airway pressure (PAP) titration;
- 3. PAP trial attempted but not tolerated by patient.

4. NOTE: Routinely performing repeat services (two night studies when a single split-night study is indicated) is not medically necessary, and providers must have persuasive documentation to justify the necessity of repeat tests. Payment for repeat services will be adjusted in the absence of adequate documentation.
- C. A facility based PSG for PAP titration following a home study that is diagnostic for OSA is covered for the following indications:
1. There is significant nocturnal oxygen desaturation during a home diagnostic sleep study as indicated by ANY of the following results of the initial sleep study:
    - a. Oxygen saturation is less than 80 percent for greater than one percent of recording or sleep time
    - b. Oxygen saturation is less than 90 percent for greater than 22 percent of recording or sleep time
  2. A comorbid or alternative sleep disorder is suspected e.g., central sleep apnea, obesity hypoventilation syndrome (OHS)
  3. There is lack of resolution of sleep-related symptoms after a 12-week trial of auto-titrating CPAP
  4. Respiratory Disturbance Index (RDI) or Apnea Hypopnea Index (AHI) is greater than 30 per hour
- D. A home/portable sleep study is covered when the following criteria are met (subject to Limitations/Exclusions and Administrative Guidelines):
1. Patient is 18 years of age or older
  2. Criteria in **II.A.1** and **2** above for facility-based PSG are met
  3. There is no evidence by history or physical examination of a health condition that might alter ventilation or require alternative treatment, including the following:
    - a. Congestive heart failure Class III or IV; or LVEF less than 45%
    - b. Chronic Obstructive Pulmonary Disease (COPD) GOLD stage 2 (Moderate severity, FEV 50-79%) or higher
    - c. Asthma requiring supplemental oxygen use or with documented hypercapnia (i.e., pCO<sub>2</sub> > 45 mmHg)
    - d. Severe obesity (BMI greater than or equal to 40)
    - e. Neuromuscular/neurodegenerative disorder causing restrictive lung disease, e.g., kyphoscoliosis, Myasthenia Gravis, amyotrophic lateral sclerosis (ALS), polymyositis, Guillian Barre syndrome, Parkinson's disease, myotonic dystrophy
    - f. A sleep disorder other than suspected obstructive sleep apnea, as suggested by history, physical exam, or prior documentation, e.g., central sleep apnea, obesity hypoventilation syndrome, periodic limb movement disorder, parasomnias, narcolepsy, REM behavior sleep disorder;
    - g. Environmental or personal factors that preclude the adequate acquisition and interpretation of data from HSAT. For example:
      1. Severe mental illness.
      2. Intellectual disability.
      3. Lack of an appropriate living situation.
      4. Alcohol abuse OR

4. Patient has one of the above contraindications for a home/portable study but a facility-based PSG is not possible because of immobility, critical illness, or inability to achieve adequate sleep time during a facility-based PSG
  5. At a minimum, the home monitoring device must measure oxygen saturation, respiratory effort, airflow, and ECG or heart rate.
  6. Home/portable sleep study is performed under the supervision (i.e., review of the sleep study request form or see the member in consultation) of a board certified sleep specialist who is associated with the AASM-accredited or JCAHO-accredited sleep center located in the same state where the member is being tested.
  7. Home/portable sleep study is provided by a facility that meets the requirements under **II.A.4.**
  8. Home/portable sleep study is interpreted by a board certified sleep specialist located in the same state where the member is being tested.
  9. PAP titration will be done using auto-titrating PAP in the home setting when the diagnostic study demonstrates OSA and there are no contraindications to home titration as noted elsewhere in this policy. Home titration using auto-titrating PAP is appropriate when the following criteria are met:
    - a. A facility-based polysomnography or home/portable sleep study demonstrates an Apnea Hypopnea Index (AHI) or Respiratory Disturbance Index (RDI) greater than 5 per hour
    - b. There is no evidence of central sleep apnea syndrome, or other sleep disorder
    - c. There is no evidence of significant nocturnal oxygen desaturations caused by a condition other than OSA e.g., obesity hypoventilation syndrome, as indicated by ANY of the following results of the initial sleep study:
      - i.  $SaO_2 < 90\%$  for  $\geq 12\%$  of recording time.
      - ii. Mean nocturnal  $SaO_2 < 93\%$ .
      - iii. Lowest  $SaO_2 \leq 78\%$ .
  10. Facility-based PSG should be performed in cases where a home sleep study is technically inadequate or fails to establish the diagnosis of OSA in patients for whom a suspicion for OSA persists.
- E. One polysomnogram/sleep study will be covered every five years unless there is a significant change in patient status. A repeat polysomnogram before five years will be covered for the following indications:
1. Weight loss of ten percent of body weight when there is a clinical indication for a repeat study, e.g., to ascertain whether PAP is still needed at the previously titrated pressure.
  2. Weight gain of at least ten percent of body weight when there is a clinical indication for a repeat study, e.g., patient is again symptomatic despite continued use of PAP to ascertain whether pressure adjustments are needed or the patient is suspected to have moderate to severe OSA and prior sleep study was negative for OSA;
  3. After upper airway surgery or oral appliance treatment of patients with moderate to severe OSA to confirm therapeutic benefit;
  4. When clinical response is insufficient or when symptoms return despite a good initial response to treatment with PAP device in the context of current compliant PAP usage.
  5. Follow-up PAP titration study when indicated and split-night sleep study could not be completed
    - a. If PAP titration was not tolerated, any problems related to use of the device and interface must be resolved prior to repeat testing. Documentation is required.

- b. If there are no contraindications, PAP titration in the home setting with auto-titrating PAP is covered. Documentation of contraindications, if any, is required.
- 6. A facility based PSG is covered when being done in conjunction with Multiple Sleep Latency Testing (CPT code 95805) for the evaluation of patients with a suspected diagnosis of narcolepsy to confirm the diagnosis. Clear documentation of the following must be submitted:
  - a. Signs and symptoms consistent with cataplexy; AND/OR
  - b. Chronic daytime sleepiness; AND
  - c. Signs/symptoms typically associated with narcolepsy. For example:
  - d. Fragmented sleep and prone to fall asleep throughout the day, but do not sleep more than a healthy individual per 24-hour period.
  - e. Rapidly doses off without any warning (“sleep attacks”).
  - f. Restorative sleep.
  - g. Epworth Sleepiness Scale score > 15.
  - h. Hypnagogic hallucinations.
  - i. Sleep paralysis.
- 7. A facility-based PSG (95811; or if OSA has already been ruled out, 95810) is covered when performed in conjunction with multiple sleep latency test (MSLT) (95805) for the evaluation of patients with a suspected diagnosis of idiopathic hypersomnia to confirm the diagnosis. Clear documentation of the following must be submitted:
  - a. Chronic and disabling excessive daytime sleepiness; AND
  - b. Signs/symptoms typically associated with idiopathic hypersomnia. For example
    - 1. Unable to maintain wakefulness and alertness during the major waking episodes of the day, with sleep occurring unintentionally or at inappropriate times and interfering with function.
    - 2. Long and unrefreshing daytime naps.
    - 3. Difficulty arousing from nocturnal sleep periods or daytime naps.
    - 4. Absence of symptoms suggestive of other common causes of EDS such as insufficient sleep, depression, sedating medications, and sleep-related breathing disorders.
- 8. UHA considers the Multiple Sleep Latency Test (MSLT) and Maintenance of Wakefulness Test (MWT) medically necessary for either of the following two indications:
  - a. For evaluation of symptoms of narcolepsy, to confirm the diagnosis; or
  - b. For evaluation of persons with suspected idiopathic hypersomnia to help differentiate idiopathic hypersomnia from narcolepsy.

**NOTE:**

*This UHA payment policy is a guide to coverage, the need for prior authorization and other administrative directives. It is not meant to provide instruction in the practice of medicine and it should not deter a provider from expressing his/her judgment.*

*Even though this payment policy may indicate that a particular service or supply is considered covered, specific provider contract terms and/or member's individual benefit plans may apply, and this policy is not a guarantee of payment. UHA reserves the right to apply this payment policy to all UHA companies and subsidiaries.*

*UHA understands that opinions about and approaches to clinical problems may vary. Questions concerning medical necessity (see Hawaii Revised Statutes §432E-1.4) are welcome. A provider may request that UHA reconsider the application of the medical necessity criteria in light of any supporting documentation.*

### **III. Limitations/Exclusions**

- A. A home PSG is not covered for children under the age of 18.
- B. A home/portable study is considered to be one study, whether performed during a single night or during two or more consecutive nights.
- C. Polysomnography and daytime multiple sleep latency testing (MSLT) are not indicated in the routine evaluation of chronic insomnia as it is not known to be effective in improving health outcomes.
- D. The use of SleepStrip or actigraphy for the diagnosis of OSA or other sleep disorders in an adult or child is not covered as it is not known to be effective in improving health outcomes.
- E. A split-night study (CPT 95811), in which obstructive sleep apnea (OSA) is documented during the first half of the study, followed by CPAP titration during the second half of the study, eliminates the need for a second polysomnogram to titrate CPAP.
  - 1. A split-night study would be appropriate for patients with a baseline apnea index or AHI of at least 15 events per hour or from 5 to 14 events per hour with documented symptoms of excessive daytime sleepiness, impaired cognition, mood disorders, or insomnia; or hypertension, ischemic heart disease, or history of stroke.
  - 2. Because CPT code 95811 includes the initiation of CPAP therapy, CPT code 94660 will not be paid separately.
- F. The Epworth sleepiness scale is considered medically appropriate as part of the evaluation of OSA, but is performed as part of the evaluation and management of the patient and will not be paid separately.
- G. UHA's global payment for polysomnography includes payment for the EEG, EOG and EMG. These services will not be paid separately.
- H. Other measurements performed during a sleep study (e.g., vital signs, muscular activity, oximetry, airflow, blood gases, penile tumescence, gastroesophageal reflux) are also integral to the service and will not be paid separately.
- I. CPT code 95810 and 95805 are only covered as noted in this policy. 95805 is not covered for maintenance of wakefulness testing (MWT) to assess response to therapy for employment purposes as its use is not for the purpose of diagnosing or treating a medical condition.
- J. Polysomnography/sleep studies are covered only once every five years except as noted elsewhere in this policy.
- K. PAP-NAP (daytime session for patients who are resistant to PAP therapy) is not covered as it is not known to be effective in improving health outcomes.

### **IV. Administrative Guidelines**

- A. Prior authorization is not required for an initial study. Documentation, including the physician's clinical notes that supports medical necessity should be legible, maintained in the patient's medical record and must be made available to UHA upon request. UHA reserves the right to perform retrospective review using the above criteria to validate if services rendered met payment determination criteria.
- B. Prior authorization is required for PAP titration study when the initial study demonstrates OSA and titration is not completed at the time of the initial study. The following documentation must be submitted:

1. Initial study report;
  2. Documentation supporting the reason why PAP titration could not be performed or completed at the time of the initial study.
  3. Payment for repeat services will be adjusted in the absence of adequate documentation.
- C. Prior authorization is required for a repeat polysomnogram within five years. Previous study report and documentation supporting a significant change in patient status must be submitted.
- D. To request prior authorization, please submit via UHA's online portal.

CPT Code	Description
94660	Continuous positive airway pressure, initiation and management
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
95800	Sleep study, unattended, simultaneous recording; heart rate, oxygen saturation, respiratory analysis (e.g., by a/irflow 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, simultaneous recording of ventilation, respiratory effort, ECG or heart rate, and oxygen saturation, unattended by a technologist
95807	Sleep study, simultaneous recording of ventilation, respiratory effort, EKG or heart rate, and oxygen saturation, attended by a technologist
95808	Polysomnography; sleep staging with 1-3 additional parameters of sleep, attended by a technologist
95810	Polysomnography; sleep staging with 4 or more additional parameters of sleep, attended by a technologist
95811	Polysomnography; 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

HCPCS Code	Description
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

## V. Policy History

**Policy Number:** MPP-0051-120301

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