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SLEEP DISORDERS DIAGNOSIS AND TREATMENT
Corporate Medical Policy

File Name: Sleep Disorders Diagnosis and Treatment
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Summary

Obstructive sleep apnea (OSA) syndrome is characterized by repetitive episodes of upper airway obstruction due to the collapse of the upper airway during sleep. Polysomnography and portable sleep apnea testing (with sensors for respiratory effort, airflow, and oxygen saturation, or alternatively with peripheral arterial tone (PAT), actigraphy, and oxygen saturation are established methods for diagnosing OSA. Other proposed methods of diagnosing OSA include limited channel home sleep monitors. Conventional medical management of OSA includes weight loss, avoidance of stimulants, body position adjustment, oral appliances, and use of positive airway pressure (CPAP/APAP/BIPAP) during sleep. Novel treatments include nasal expiratory positive airway pressure and oral pressure therapy.

Diagnosis

For individuals who have suspected OSA who receive home sleep apnea testing with at least three recording channels, the evidence includes randomized controlled trials (RCTs). The relevant outcomes are test accuracy, symptoms, functional outcomes, and resource utilization. RCTs have reported that home sleep apnea testing (with sensors for respiratory effort, airflow, and oxygen saturation, or alternatively with PAT, actigraphy and oxygen saturation) is noninferior to testing in the sleep lab for adults with a high pretest probability of OSA and absence of comorbid conditions as determined by clinical evaluation. A positive portable monitoring study with channels that include arterial oxygen saturation, airflow, and respiratory effort or alternatively PAT, actigraphy and oxygen saturation has a high positive predictive value for OSA and can be used as the basis for a CPAP/APAP trial to determine the efficacy of treatment. A negative home sleep apnea test cannot be used to rule out OSA. Patients who have a negative result from portable monitoring or have a positive study but do not respond to CPAP/APAP should undergo further evaluation. The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome.

For individuals who have suspected OSA who receive limited channel home sleep apnea testing, the evidence includes studies on diagnostic accuracy. The relevant outcomes are test accuracy, symptoms, functional outcomes, and resource utilization. The ability to detect clinically significant OSA without sensors for respiratory effort, airflow, and oxygen saturation, or alternatively without PAT, actigraphy, and oxygen saturation, lacks support in the literature. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals who have suspected hypersomnia who receive PSG, the evidence includes a systematic review on diagnostic accuracy. Relevant outcomes are test accuracy, symptoms, functional outcomes, and quality of life (QOL). The evidence has suggested that PSG followed by the multiple sleep latency test is associated with moderate sensitivity and high specificity in support of the diagnosis of narcolepsy. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

Treatment

For individuals who have OSA who receive positive airway pressure devices or oral appliances, the evidence includes RCTs and systematic reviews of RCTs. The relevant outcomes are symptoms, functional outcomes, and quality of life. Conventional medical management of OSA includes weight loss, avoidance of stimulants, body position adjustment, oral appliances, and use of CPAP during sleep. A diagnostic sleep study may be followed by a trial of auto- adjusting positive airway pressure to evaluate the efficacy and adjust pressure. Bilevel positive airway pressure may also be indicated if the patient is intolerant of CPAP/APAP. The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome.

The policy statements focus on criteria for the diagnosis and treatment of sleep apnea for procedures considered standard of care and are based in part on evidence-based practice guidelines. In addition, clinical input was obtained in 2014, 2010, and 2009 to assess, among other items, the sensors required for portable monitors, diagnosis and treatment of OSA in children, and screening of patients scheduled to undergo bariatric surgery. Informed by clinical input and clinical practice guidelines, testing is indicated for patients who are suspected of OSA, prior to bariatric surgery, for certain pediatric patients, and with type 4 monitors under certain circumstances.

For individuals who have OSA who receive novel OSA treatments (eg, palate expansion, expiratory positive airway pressure, oral pressure therapy), the evidence includes an RCT and a meta-analysis of case series. The relevant outcomes are symptoms, functional outcomes, and quality of life. The evidence on palate and mandible expansion devices includes a few small series. Further study with well-designed trials is needed to evaluate this treatment. The evidence on expiratory positive airway pressure devices in patients with OSA has been reported in prospective case series, an industry sponsored RCT, and a systematic review that did not include the RCT. The main finding of the RCT was a decrease in the Apnea/Hypopnea Index, with minor impact on oxygenation, and a decrease in Epworth Sleepiness Scale score. One comparative trial with historical controls used a positive airway pressure nap to study patients with complex insomnia resistant to CPAP titration or use. Additional study is needed to evaluate with greater certainty the efficacy

of this intervention. No evidence was identified on the use of the oral therapy device. The evidence is insufficient to determine the effects of the technology on health outcomes.

Coding Information

Click the links below for attachments, coding tables & instructions.

Attachment I – CPT® Code List & Instructions

Attachment II- ICD-10-CM Code Table

Policy

Section A: Home Sleep Studies

When a service may be considered medically necessary for home sleep studies:

A single unattended (unsupervised) home sleep apnea test with a minimum of 3 recording channels with the following sensors: nasal pressure, chest and abdominal respiratory inductance plethysmography, and oximetry; or alternatively peripheral arterial tone
(PAT), oximetry and actigraphy may be considered **medically necessary** in adults with a high pretest probability of obstructive sleep apnea (OSA) and have no evidence of a health condition that might alter ventilation or require alternative treatment, ie, central sleep apnea, heart failure, chronic pulmonary disease, obesity hypoventilation syndrome, neuromuscular disorders with sleep-related symptoms, injurious or potentially injurious parasomnias, or narcolepsy. See Glossary below for definition of High Pretest Probability of OSA.

A single unattended (unsupervised) home sleep apnea test with a minimum of recording channels as described above, may be considered **medically necessary** as a screening tool in patients who are scheduled for bariatric surgery and have no evidence of a health condition that might alter ventilation or require alternative treatment.

NOTE: Unattended home sleep studies for adults (age >=18) do not require prior authorization.

Repeated unattended (unsupervised) home sleep apnea test with a minimum of 3 recording channels with the following sensors: nasal pressure, chest and abdominal respiratory inductance plethysmography, and oximetry; or alternatively PAT, oximetry and actigraphy, may be considered **medically necessary** in adults under the following circumstances:

1. To assess efficacy of surgery or oral appliances or devices; **OR**
2. To reevaluate the diagnosis of OSA and need for continuous positive airway pressure (CPAP/APAP/BPAP), eg, if there is a significant change in weight or change in symptoms suggesting that CPAP/APAP/BPAP should be re-titrated or possibly discontinued.

When a service is considered investigational for home sleep studies:

Unattended (unsupervised) home sleep studies in children under age 18 are considered investigational. Supervised or unattended home sleep apnea tests that do not meet the above criteria are considered **investigational**.

Section B: Attended Polysomnography (PSG) in a Sleep Laboratory:

In-laboratory attended (supervised) polysomnography is the preferred diagnostic study when OSA is suspected, and patients have medical comorbidities that increase the risk for additional or alternative sleep related breathing disorders.

When a service may be considered medically necessary for in-lab sleep study:

Attended polysomnography performed in a sleep laboratory may be considered **medically necessary** in patients with a high pretest probability of OSA in the following situations. See Glossary below for definition of High Pretest Probability of OSA.

1. Pediatric patients (ie, <18 years of age); **OR**
2. When patients do not meet criteria for an unattended home sleep apnea test as described above; **OR**
3. A previous home study failed to establish the diagnosis of OSA in a patient with a high pretest probability of OSA; **OR**
4. A previous home study demonstrated significant hypoxia (SpO_2 ≤88 percent for >5 minutes) for the purpose of CPAP/BIPAP titration; **OR**
5. A previous home study was technically inadequate and clinical suspicion for OSA remains; **OR**
6. Failure of resolution of symptoms or recurrence of symptoms during treatment; **OR**
7. When testing is done to rule out other sleep disorders such as central sleep apnea, injurious or potentially injurious parasomnias, or narcolepsy (See criteria below); **OR**
8. Prior to a planned multiple sleep latency test (MSLT) for the evaluation of narcolepsy or suspected idiopathic hypersomnia, and meets criteria below in MSLT section below; **OR**
9. Presence of a comorbidity that might alter ventilation or decrease the accuracy of a home sleep apnea test, including, but not limited to heart failure, neuromuscular disease, chronic pulmonary disease, or obesity hypoventilation syndrome.

A repeated, attended polysomnography performed in a sleep laboratory may be considered **medically necessary** in patients who meet the criteria above for an in-laboratory polysomnography and fall within one of the following circumstances:

1. To initiate and titrate CPAP in adults who have:
    a. An Apnea/Hypopnea Index (AHI) or Respiratory Disturbance Index (RDI) of at least 15 events per hour; **OR**
    b. An AHI or RDI of at least 5 events per hour in a patient with 1 or more signs or symptoms associated with OSA (eg, excessive daytime sleepiness, hypertension, cardiovascular heart disease, or stroke); **OR**
2. To initiate and titrate CPAP in children who have:
    a. An AHI or RDI of ≥ 5; **OR**
    b. An AHI or RDI ≥1.5 in a patient with excessive daytime sleepiness, behavioral

problems or hyperactivity; **OR**

3. To assess efficacy of surgery or oral appliance to address OSA, or when there has been significant weight loss.

A repeat attended in lab sleep study is considered **not medically necessary for all other indications.**

Split-Night Studies

American Academy of Sleep Medicine practice parameters (2005) have indicated that a split- night study (initial diagnostic PSG followed by CPAP titration during PSG on the same night) is an alternative to a full night of diagnostic PSG followed by a second night of titration if above criteria for an initial supervised PSG are met AND the following criteria are met:

1. An AHI of at least 40 events per hour is documented during a minimum of 2 hours of diagnostic PSG. Split-night studies may sometimes be considered at an AHI between 20 and 40 events per hour, based on clinical judgment (eg, if there are also repetitive long obstructions and major desaturations). However, at AHI values below 40, determination of CPAP-level requirements, based on split-night studies, may be less accurate than in full-night calibrations.
2. CPAP titration is carried out for more than 3 hours (because respiratory events can worsen as the night progresses).
3. PSG documents that CPAP eliminates or nearly eliminates the respiratory events during rapid eye movement (REM) and non-REM sleep, including REM sleep with the patient in the supine position.
4. A second full night of PSG for CPAP titration is performed if the diagnosis of a sleep- related breathing disorder is confirmed, but criteria 2 and 3 are not met.

NOTE: If the clinical presentation in the initial supervised PSG meets the criteria for a Split-Night study listed above and the clinician decides that it is in the patient's best interest to transition the PSG to a split-night study, a split-night study will be authorized retroactively as **medically necessary** if appropriate documentation is submitted showing that the clinical criteria listed above are met.

When a service is considered investigational for (PSG) in a Sleep Laboratory:

The use of an abbreviated daytime sleep study (PAP-NAP) as a supplement to standard sleep studies is considered investigational.

Section C: Polysomnography and Multiple Sleep Latency Testing (MSLT) for non- respiratory sleep disorders.

When a service may be considered medically necessary:

Polysomnography (PSG) and a multiple sleep latency test performed on the day after the PSG may be considered **medically necessary** in the evaluation of suspected narcolepsy or

idiopathic hypersomnia.

PSG may be **medically necessary** when evaluating patients with parasomnias when there is a history of sleep-related injurious or potentially injurious disruptive behaviors.

PSG may be **medically necessary** when a diagnosis of periodic limb movement disorder is considered when there is:

- A complaint of repetitive limb movement during sleep by the patient or an observer; **AND**
- No other concurrent sleep disorder; **AND**
- At least one of the following is present:
    - Frequent awakenings; **OR**
    - Fragmented sleep; **OR**
    - Difficulty maintaining sleep; **OR**
    - Excessive daytime sleepiness.

When a service is considered not medically necessary:

PSG and MSLT for the diagnosis of periodic limb movement disorder is considered **not medically necessary** when there is concurrent untreated obstructive sleep apnea, restless legs syndrome, narcolepsy, or rapid eye movement sleep behavior disorder.

When a service is considered investigational:

- Multiple sleep latency testing is considered **investigational** in the diagnosis of OSA.
- PSG and MSLT is considered **investigational** for the diagnosis of non-respiratory sleep disorders not meeting the criteria above, including but not limited to nightmare disorder, depression, sleep-related bruxism, or non-injurious disorders of arousal

Section D: Medical Management

There are three major positive airway pressure (PAP) modalities used to treat patients with OSA: continuous positive airway pressure (CPAP), Auto-adjusting positive airway pressure (APAP) and bi-level positive airway pressure (BIPAP). CPAP/APAP is generally preferred for most patients because it has been well studied, is simpler to use, and is less costly. Each of these modalities requires choosing between fixed or auto- titrating technology.

Continuous positive airway pressure (CPAP/APAP)

Fixed or Auto-adjusting CPAP/APAP is suggested as first-line treatment for most patients with OSA because its efficacy is well established and supported by extensive clinical experience [1]. With the advent of home sleep apnea testing, auto-titrating CPAP/APAP is becoming more commonplace, and studies suggest that it has comparable efficacy and adherence compared with fixed CPAP, although auto-titrating flow generators can be more expensive.

When a service is considered medically necessary:

Auto-adjusting positive airway pressure (APAP) may be considered **medically necessary** for the titration of pressure in adults with clinically significant OSA defined as those who have:

- An Apnea/Hypopnea Index (AHI), Respiratory Disturbance Index (RDI), or Respiratory Event Index (REI) of at least 15 events per hour; **OR**
- An AHI, RDI, or REI of at least 5 events per hour in a patient with one or more signs or symptoms associated with OSA (eg, excessive daytime sleepiness, hypertension, cardiovascular heart disease, or stroke); **OR**
- If there is a significant change in weight or change in symptoms suggesting that continuous positive airway pressure (CPAP) should be re-titrated or possibly discontinued.

CPAP may be considered **medically necessary** in adult or pediatric patients with clinically significant OSA.

Clinically significant OSA in adults is defined as:

- An AHI, RDI, or REI ≥15; **OR**
- An AHI, RDI, or REI ≥5 in a patient with one or more signs or symptoms associated with OSA (e.g., excessive daytime sleepiness, hypertension, cardiovascular heart disease, or stroke).

Clinically significant OSA in pediatric patients is defined as:

- An AHI or RDI ≥5; **OR**
- An AHI or RDI ≥1.5 in a patient with excessive daytime sleepiness, behavioral problems, or hyperactivity.

NOTE**:** For Pediatric CPAP/APAP treatment, An AHI greater than 1.5 is considered abnormal in children. The first-line treatment for children with OSA is adenotonsillectomy, but CPAP/APAP is an option for children who are not candidates for surgery or who have an inadequate response to surgery. In these circumstances, CPAP/APAP for pediatric treatment of OSA may be considered **medically necessary**.

Bilevel positive airway pressure (BPAP)

Bilevel positive airway pressure may be considered **medically necessary** in patients with clinically significant OSA who have failed a prior trial of CPAP/APAP or for whom bilevel positive airway pressure is found to be more effective in the sleep lab.

A heated humidifier HCPCS Code (E0562) may be considered **medically necessary** for use with CPAP BPAP, or APAP, and should be provided during the initial trial period and with the rental-to- purchase agreement.

Prior Authorization of CPAP/APAP/BIPAP Therapy

If the above medical necessity criteria are met a 90-day rental trial of CPAP/APAP/BPAP will be authorized. In order to consider benefits beyond the 90-day rental trial, the Plan requires a report from the CPAP/APAP/BPAP machine demonstrating the hours of usage from the device itself or from the Smartcard in order to evaluate compliance. The date the CPAP/APAP/BPAP was set up and the date of the compliance report must also be submitted along with the hours of usage information.

Rental to purchase will be authorized if compliance is greater than or equal to four hours per night, 70% of nights. If compliance is less than this, reevaluation and counseling by the sleep specialist is required to ensure that the equipment is properly fitted and being used properly, and that the member has a full understanding of the medical necessity of treatment and the risks of under-treatment. Following this evaluation an additional 30-day trial will be authorized.

When a service is considered investigational:

The use of CPAP, bi-level positive airway pressure and APAP that do not meet the above criteria is considered **investigational** for the treatment of OSA.

Palate and mandible expansion devices are considered **investigational** for the treatment of OSA.

Nasal expiratory positive airway pressure and oral pressure therapy devices are considered **investigational**.

When a service is considered not medically necessary:

Replacement of a CPAP/APAP/BPAP for the purposes of upgrading to a newer model, or one with additional features, unless the member's current machine is both malfunctioning and out of warranty is considered **not medically necessary**.

Regarding request for restart of medical treatment for OSA

When a request is made to restart medical treatment for OSA with CPAP/APAP/BPAP, when the member has been off of treatment and no longer has durable medical equipment to treat OSA, documentation must be submitted to verify appropriate medical necessity criteria above are met.

Section E: Surgical Treatment of Obstructive Sleep Apnea (OSA) and Upper Airway Resistance Syndrome (UARS)

Medical therapy is considered the first-line treatment for OSA and UARS. These therapies include weight loss, various continuous positive airway pressure (CPAP/APAA) devices, or

orthodontic repositioning devices. There is insufficient evidence to support surgery as a first line treatment for OSA or upper airway resistance syndrome (UARS). Therefore, surgical treatments are considered only after failed medical therapy, including CPAP/APAP trials.

When a service is considered medically necessary:

Palatopharyngoplasty (eg, uvulopalatopharyngoplasty, uvulopharyngoplasty, uvulopalatal flap, expansion sphincter pharyngoplasty, lateral pharyngoplasty, palatal advancement pharyngoplasty, relocation pharyngoplasty) may be considered **medically necessary** for the treatment of clinically significant obstructive sleep apnea (OSA) syndrome in appropriately select adults who have failed an adequate trial of continuous positive airway pressure (CPAP) or failed an adequate trial of an oral appliance. Clinically significant OSA is defined as those patients who have:

- Apnea/Hypopnea Index (AHI) or Respiratory Disturbance Index (RDI) of 15 or more events per hour; **OR**
- AHI or RDI of at least 5 events per hour with one or more signs or symptoms associated with OSA (eg, excessive daytime sleepiness, hypertension, cardiovascular heart disease, or stroke).

Hyoid suspension, surgical modification of the tongue, and/or maxillofacial surgery, including mandibular-maxillary advancement (MMA), may be considered **medically necessary** in appropriately selected adults with clinically significant OSA and objective documentation of hypopharyngeal obstruction who have failed an adequate trial of CPAP or failed an adequate trial of an oral appliance. Clinically significant OSA is defined as those patients who have:

- AHI or RDI of 15 or more events per hour; **OR**
- AHI or RDI of at least 5 events per hour with one or more signs or symptoms associated with OSA (eg, excessive daytime sleepiness, hypertension, cardiovascular heart disease, or stroke).

Adenotonsillectomy may be considered **medically necessary** in pediatric patients with clinically significant OSA and hypertrophic tonsils. Clinically significant OSA is defined as those pediatric patients who have:

- AHI or RDI of at least 5 per hour; **OR**
- AHI or RDI of at least 1.5 per hour in a patient with excessive daytime sleepiness, behavioral problems, or hyperactivity.

Hypoglossal nerve stimulation may be considered **medically necessary** in adults with OSA under the following conditions:

- Age ≥ 22 years; **AND**
- AHI ≥ 15 with less than 25% central apneas; **AND**
- CPAP failure (residual AHI ≥ 15 or failure to use CPAP ≥ 4 hours per night for ≥ 5 nights per week) or inability to tolerate CPAP; **AND**
- Body mass index ≤ 32 kg/m^2; **AND**
- Non-concentric retropalatal obstruction on drug-induced sleep endoscopy (see Glossary below.)

Hypoglossal nerve stimulation may be considered **medically necessary** in adolescents or young adults with Down syndrome and OSA under the following conditions:

- Age 10 to 21 years; AND
- AHI >10 and <50 with less than 25% central apneas after prior adenotonsillectomy; AND
- Have either tracheotomy or be ineffectively treated with CPAP due to noncompliance, discomfort, un-desirable side effects, persistent symptoms despite compliance use, or refusal to use the device; AND
- Body mass index ≤ 95th percentile for age; AND
- Non-concentric retropalatal obstruction on drug-induced sleep endoscopy (See Glossary below.)

NOTE: Drug-induced sleep endoscopy is considered medically necessary in the workup of sleep apnea when treatment by hypoglossal nerve stimulation is being considered.

When a service is considered not medically necessary:

Surgical treatment of OSA that does not meet the criteria above would be **considered not medically necessary.**

All interventions, including laser-assisted palatoplasty, radiofrequency volumetric tissue reduction of the palate, or palatal stiffening procedures, are considered **not medically necessary** for the treatment of snoring *in the absence of documented OSA*; snoring alone is not considered a medical condition.

When a service is considered investigational:

The following minimally invasive surgical procedures are considered **investigational** for the sole or adjunctive treatment of OSA or upper airway resistance syndrome:

- Laser-assisted palatoplasty or radiofrequency volumetric tissue reduction of the palatal tissues
- Laser-assisted palatoplasty or radiofrequency volumetric tissue reduction of the palatal tissues
- Radiofrequency volumetric tissue reduction of the tongue, with or without radiofrequency reduction of the palatal tissues
- Palatal stiffening procedures including, but not limited to, cautery-assisted palatal stiffening operation, injection of a sclerosing agent, and the implantation of palatal implants
- Tongue base suspension
- All other minimally invasive surgical procedures not described above.

Implantable hypoglossal nerve stimulators are considered **investigational** for all indications other those than listed as medically necessary above.

Replacement of lost, stolen or destroyed Durable Medical Equipment

We will replace one lost, stolen or destroyed Durable Medical Equipment, prosthetic or

orthotic per Plan Year if not covered by an alternative entity (including but not limited to homeowners insurance and automobile insurance) if:

- the Durable Medical Equipment, prosthetic or orthotic's absence would put the Member at risk of death, disability or significant negative health consequences such as a hospital admission;
- the Durable Medical Equipment is still under warranty.

NOTE: In order to replace a stolen item we require you to submit documentation, such as a police report, with the request.

We do not cover the replacement of a lost, stolen or destroyed Durable Medical Equipment, prosthetic or orthotic:

- if the criteria above have not been met; and
- for more than one lost, stolen or destroyed Durable Medical Equipment, prosthetic or orthotic per Plan Year.

Glossary for Further Guidance:

Apnea-hypopnea index (AHI) or Respiratory disturbance index (RDI) - the total number of apneas and hypopneas per hour of sleep.

The following AHI levels are used for the diagnosis of OSA:

- Mild OSA: AHI between 5 and 15
- Moderate OSA: AHI ≥ 15
- Severe OSA: AHI ≥ 30

Central Sleep Apnea (CSA) occurs when the brain fails to send the appropriate signals to the breathing muscles to initiate respirations. CSA is less common than obstructive sleep apnea.

Continuous positive airway pressure (CPAP/APAP) is a procedure in which the patient wears a mask over the nose during sleep, and pressure from an air blower forces air through the nasal passages. The air pressure is adjusted so that it is just enough to prevent the throat from collapsing during sleep. The pressure is constant and continuous.

Drug-induced sleep endoscopy (DISE) replicates sleep with an infusion of propofol. DISE will suggest either a flat, anterior-posterior collapse or complete circumferential oropharyngeal collapse. Concentric collapse decreases the success of hypoglossal nerve stimulation and is an exclusion criterion from the U.S. Food and Drug Administration.

Hypopnea is defined as either a 33% reduction in airflow for at least 10 seconds or a 4% or greater decrease in oxygen saturations while the patient is still breathing.

High Pretest Probability of OSA. Although not an exclusive list, patients with any of the following symptoms are considered to be at high-risk for obstructive sleep apnea (OSA):

- habitual loud snoring

- witnessed apnea or gasping/choking
- excessive daytime sleepiness
- Obesity

Polysomnography is a test that records a variety of body functions during sleep, such as the electrical activity of the brain, eye movement, muscle activity, heart rate, respiratory effort, airflow, and blood oxygen levels. These tests are used both to diagnose sleep apnea and to determine its severity.

Multiple Sleep Latency Test (MSLT) measures the speed of falling asleep.

The Epworth Sleepiness Scale One of the criteria for obtaining a sleep study is abnormal daytime sleepiness. This is usually measured using a tool called the Epworth Sleepiness scale (ESS). An ESS score of greater than or equal to 21 is considered excessive daytime sleepiness, but in clinical practice a score of greater than 10 is considered abnormal and requiring medical attention.

Reference Resources

1. BCBSA MPRM 2.01.18 - Diagnosis of Obstructive Sleep Apnea Syndrome. Last reviewed 07/2022. Accessed 12/2022.
2. BCBSA MPRM 2.01.99 - Polysomnography for Non-Respiratory Sleep Disorders. Last reviewed 07/2022. Accessed 12/2022.
3. BCBSA MPRM 7.01.101 - Surgical Treatment of Snoring and Obstructive Sleep Apnea Syndrome. Last reviewed 07/2022. Accessed 12/2022.
4. UpToDate - Clinical presentation and diagnosis of obstructive sleep apnea in adults. Literature Review current through 8/2021. Accessed 9/2021.
5. UpToDate - Management of obstructive sleep apnea in adults. Literature Review current through 11/2022. Accessed 12/2022.
6. BCBSA MPRM 8.01.67 - Medical Management of Obstructive Sleep Apnea Syndrome. Last reviewed 12/2022. Accessed 12/2022.

Related Policies

Durable Medical Equipment (DME)
Oral Appliances for Obstructive Sleep Apnea (OSA)
Bariatric Surgery

Document Precedence

Blue Cross and Blue Shield of Vermont (BCBSVT) Medical Policies are developed to provide clinical guidance and are based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. The applicable group/individual contract and member certificate language, or employer's benefit plan if an ASO group, determines benefits that are in effect at the time of service. Since medical practices and knowledge are constantly evolving, BCBSVT reserves the right to review and revise its medical policies periodically. To the extent that there may be any conflict

between medical policy and contract/employer benefit plan language, the member's contract/employer benefit plan language takes precedence.

Audit Information

BCBSVT reserves the right to conduct audits on any provider and/or facility to ensure compliance with the guidelines stated in the medical policy. If an audit identifies instances of non-compliance with this medical policy, BCBSVT reserves the right to recoup all non- compliant payments.

Administrative and Contractual Guidance

Benefit Determination Guidance

Prior approval may be required and benefits are subject to all terms, limitations and conditions of the subscriber contract.

Incomplete authorization requests may result in a delay of decision pending submission of missing information. To be considered compete, see policy guidelines above.

NEHP/ABNE members may have different benefits for services listed in this policy. To confirm
benefits, please contact the customer service department at the member's health plan.

Federal Employee Program (FEP): Members may have different benefits that apply. For further information please contact FEP customer service or refer to the FEP Service Benefit Plan Brochure. It is important to verify the member's benefits prior to providing the service to determine if benefits are available or if there is a specific exclusion in the member's benefit.

Coverage varies according to the member's group or individual contract. Not all groups are required to follow the Vermont legislative mandates. Member Contract language takes precedence over medical policy when there is a conflict.

If the member receives benefits through an Administrative Services Only (ASO) group, benefits may vary or not apply. To verify benefit information, please refer to the member's employer benefit plan documents or contact the customer service department. Language in the employer benefit plan documents takes precedence over medical policy when there is a conflict.

Policy Implementation/Update information

9/2000, 12/2002	Added TVHP medical director to signature, removed applies to section, reformatted added when services are covered and not covered sections

8/2003	Updated resources & added definitions and new HCPC codes with the establishment of absolute and relative criteria based upon literature review, research, and BCBSVT Specialty Advisory Committee consensus including Vermont sleep specialty physicians from network community hospitals and tertiary care centers.
11/2005	Reviewed clinical information regarding CPAP/BPAP compliance was added.
12/2006 – 01/2007	Reviewed incorporating feedback from Vermont network sleep specialty physicians and updated BCBSA Medical Policy. Epworth sleepiness scale added to policy. This policy was reviewed and approved by the BCBSVT Clinical Advisory Committee in March 2007.
12/2007	Revised with 2 more relative indications added to criteria and criteria for repeat sleep study added. To be reviewed by the CAC 1/08.
12/2011	Updated and transferred to new format. New criteria for surgical procedures to correct OSA added.
02/2013	AHI index- Severe OSA changed (was ≥50, now ≥30). Indications for Home sleep studies added. Description/criteria added for surgical procedures, UPPP, Hyoid suspension and adenotonsillectomy. Home Sleep Study codes added, CPT® 2013 CPT® codes added. Changes/Updates to medical necessity criteria. Medical/Coder reviewed- RLJ.
05/2014	Policy revised. HSS codes updated, they no longer require PA. Removed indications for HSS. Added some not medically necessary criteria for repeat sleet study. HPM clarification. Medical/Coder reviewed. RLJ.
10/2016	Reformatted and reorganized, updated pediatric criteria, removed ICD-9 codes, revised ICD-10 codes, aligned with BCBSA Medical Policy MPRM 2.01.18, updated references.
04/2017	Added criteria under "Other co-morbid conditions which may contribute to OSA:" section – added #5 Screening tool in patients who are scheduled for bariatric surgery. Added section Related Policies added Bariatric Policy. Added ICD 10 code R06.83 diagnosis snoring as may be medically necessary if medical criteria has been met.
11/2017	Added more specific criteria on Pediatric sleep studies and treatment of OSA from UpToDate®. Reworded and rearranged medical criteria within medical policy for clarification. Added DME lost and stolen language. Coding reviewed with no changes, re-sequenced ICD-10-CM codes.

02/2019	External input received. Updated references, updated “Medical Necessity” criteria and “Home Sleep Study” sections. Updated CPAP to add Auto-Adjusting Positive Airway devices to be included in policy throughout medical policy as CPAP/APAP. Updated medical criteria around 90 day CPAP/APAP/BPAP trial period.
07/2019	Updated CPAP to add Auto-Adjusting Positive Airway devices to be included in policy throughout medical policy as CPAP/APAP/BPAP. Code E0485 non-covered benefit exclusion. Codes 95811& 95783 requires prior approval.
01/2020	Added medical criteria section for Split Night Studies. Added clarifying language under supervised PSG section.
09/2021	Policy Reviewed. References updated. Policy language clarified. Language added regarding request for restart of treatment. Added language around requests for restart of medical treatment for OSA. Added code K1027 to coding table as requiring prior approval.
10/2021	Input from network provider reviewed. Added criteria for attended sleep study for significant hypoxia found on home sleep study. Clarification of criteria for attended sleep study. Added Glossary definition of High Pretest Probability of OSA.
12/2021	Adaptive Maintenance Effective 01/01/2022: Added codes 64582, 64583, 64584 as requiring prior approval.
03/2022	Adaptive Maintenance Effective 04/01/2022: Added codes K1028 & K1029 ss investigational to coding table.
12/2022	Policy reviewed. Language around drug-induced sleep endoscopy added. Minor formatting changes. Added codes: 98960 as non-covered Provider Liability, 21685 as requiring prior approval, 42975 no prior approval required & K1001 as investigational. Re-sequenced codes in the ICD-10-CM table.

Eligible Providers

Qualified healthcare professionals practicing within the scope of their license(s).

Approved by BCBSVT Medical Directors **Date Approved**

Tom Weigel, MD, MBA
Vice President & Chief Medical Officer

Attachment I
CPT® Code Table & Policy Instructions

Code Type	Number	Brief Description	Policy Instructions
The following codes will be considered as medically necessary when applicable criteria have been met.			
CPT®	21685	Hyoid myotomy and suspension	Requires Prior Approval
CPT®	42145	Palatopharyngoplasty (e.g., uvulopatatopharyngoplasty, uvulopharyngoplasty)	Requires Prior Approval
CPT®	42975	Drug-induced sleep endoscopy, with dynamic evaluation of velum, pharynx, tongue base, and larynx for evaluation of sleep-disordered breathing, flexible, diagnostic	Does Not Require Prior Approval
CPT®	64582	Open implantation of hypoglossal nerve neurostimulator array, pulse generator, and distal respiratory sensor electrode or electrode array	Requires Prior Approval
CPT®	64583	Revision or replacement of hypoglossal nerve neurostimulator array and distal respiratory sensor electrode or electrode array, including connection to existing pulse generator	Requires Prior Approval
CPT®	64584	Removal of hypoglossal nerve neurostimulator array, pulse generator, and distal respiratory sensor electrode or electrode array	Requires Prior Approval

CPT®	95782	Polysomnography; younger than 6 years, sleep staging with 4 or more additional parameters of sleep, attended by a technologist	Requires Prior Approval
CPT®	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	Requires Prior Approval
CPT®	95800	Sleep study, unattended, simultaneous recording; heart rate, oxygen saturation, respiratory analysis (e.g., by airflow or peripheral arterial tone), and sleep time	Does Not Require Prior Approval
CPT®	95801	Sleep study, unattended, simultaneous recording; minimum of heart rate, oxygen saturation, and respiratory analysis (e.g., by airflow or peripheral arterial tone)	Does Not Require Prior Approval
CPT®	95805	Multiple sleep latency or maintenance of wakefulness testing, recording, analysis and interpretation of physiological measurements of sleep during multiple trials to assess sleepiness	Requires Prior Approval
CPT®	95806	Sleep study, unattended, simultaneous recording of, heart rate, oxygen saturation, respiratory airflow, and respiratory effort (e.g., thoracoabdominal movement)	Does Not Require Prior Approval
CPT®	95807	Sleep study, simultaneous recording of ventilation, respiratory effort, ECG or heart rate, and oxygen saturation, attended by a technologist	Requires Prior Approval
CPT®	95808	Polysomnography; any age, sleep staging with 1-3 additional parameters of sleep, attended by a technologist	Requires Prior Approval
CPT®	95810	Polysomnography; age 6 years or older, sleep staging with 4 or more additional parameters of sleep, attended by a technologist	Requires Prior Approval

CPT®	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 bi-level ventilation, attended by a technologist	Requires Prior Approval
HCPCS	A7027	Combination oral/nasal mask, used with continuous positive airway pressure device, each	Prior Approval is not required unless the purchase price is greater than the dollar threshold
HCPCS	A7028	Oral cushion for combination oral/nasal mask, replacement only, each	Prior Approval is not required unless the purchase price is greater than the dollar threshold
HCPCS	A7029	Nasal pillows for combination oral/nasal mask, replacement only, pair	Prior Approval is not required unless the purchase price is greater than the dollar threshold
HCPCS	A7030	Full face mask used with positive airway pressure device, each	Prior Approval is not required unless the purchase price is greater than the dollar threshold
HCPCS	A7031	Face mask interface, replacement for full face mask, each	Prior Approval is not required unless the purchase price is greater than the dollar threshold
HCPCS	A7032	Cushion for use on nasal mask interface, replacement only, each	Prior Approval is not required unless the purchase price is greater than the dollar threshold
HCPCS	A7033	Pillow for use on nasal cannula type interface, replacement only, pair	Prior Approval is not required unless the purchase price is greater than the dollar threshold
HCPCS	A7034	Nasal interface (mask or cannula type) used with positive airway pressure device, with or without head strap	Prior Approval is not required unless the purchase price is greater than the dollar threshold
HCPCS	A7035	Headgear used with positive airway pressure device	Prior Approval is not required unless the purchase price is greater than the dollar threshold

HCPCS	A7036	Chinstrap used with positive airway pressure device	Prior Approval is not required unless the purchase price is greater than the dollar threshold
HCPCS	A7037	Tubing used with positive airway pressure device	Prior Approval is not required unless the purchase price is greater than the dollar threshold
HCPCS	A7038	Filter, disposable, used with positive airway pressure device	Prior Approval is not required unless the purchase price is greater than the dollar threshold
HCPCS	A7039	Filter, non-disposable, used with positive airway pressure device	Prior Approval is not required unless the purchase price is greater than the dollar threshold
HCPCS	A7044	Oral interface used with positive airway pressure device, each	Prior Approval is not required unless the purchase price is greater than the dollar threshold
HCPCS	A7045	Exhalation port with or without swivel used with accessories for positive airway devices, replacement only	Prior Approval is not required unless the purchase price is greater than the dollar threshold
HCPCS	A7046	Water chamber for humidifier, used with positive airway pressure device, replacement, each	Prior Approval is not required unless the purchase price is greater than the dollar threshold
HCPCS	E0470	Respiratory assist device, bi-level pressure capability, without backup rate feature, used with noninvasive interface, e.g., nasal or facial mask (intermittent assist device with continuous positive airway pressure device)	Requires Prior Approval
HCPCS	E0471	Respiratory assist device, bi-level pressure capability, with back-up rate feature, used with noninvasive interface, e.g., nasal or facial mask (intermittent assist device with continuous positive airway pressure device)	Requires Prior Approval

HCPC	E0472	Respiratory assist device, bi-level pressure capability, with backup rate feature, used with invasive interface, e.g., tracheostomy tube (intermittent assist device with continuous positive airway pressure device)	Requires Prior Approval
HCPCS	E0486	Oral device/appliance used to reduce upper airway collapsibility, adjustable or non-adjustable, custom fabricated, includes fitting and adjustment	Requires Prior Approval
HCPCS	E0561	Humidifier, non-heated, used with positive airway pressure device	Prior Approval is not required unless the purchase price is greater than the dollar threshold
HCPCS	E0562	Humidifier, heated, used with positive airway pressure device	Prior Approval is not required unless the purchase price is greater than the dollar threshold
HCPCS	E0601	Continuous airway pressure (CPAP) device	Requires Prior Approval
HCPCS	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.	Does Not Require Prior Approval
HCPCS	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.	Does Not Require Prior Approval
HCPCS	G0400	Home sleep test (HST) with type IV portable monitor, unattended; minimum of 3 channels.	Does Not Require Prior Approval
HCPCS	K1027	Oral device/appliance used to reduce upper airway collapsibility, without fixed mechanical hinge, custom fabricated, includes fitting and adjustment	Requires Prior Approval
The following codes will be denied as investigational			
CPT ®	41512	Tongue base suspension, permanent suture technique	Investigational

CPT ®	95803	Actigraphy testing, recording analysis, interpretation and report (minimum of 72 hours to 14 consecutive days of recording)	Investigational
HCPCS	K1001	Electronic positional obstructive sleep apnea treatment, with sensor, includes all components and accessories, any type	Investigational
HCPCS	K1028	Power source and control electronics unit for oral device/appliance for neuromuscular electrical stimulation of the tongue muscle for the reduction of snoring and obstructive sleep apnea, controlled by phone application	Investigational
HCPCS	K1029	Oral device/appliance for neuromuscular electrical stimulation of the tongue muscle, used in conjunction with the power source and control electronics unit, controlled by phone application, 90-day supply	Investigational
HCPCS	S8040	Topographic brain mapping	Investigational
The following codes will suspend for Medical Review			
CPT ®	42299	Unlisted procedure, palate, uvula	When this code is submitted it will **suspend for medical review** and be denied when specified as Cautery-assisted palatal stiffening (CAPSO)-Coblation, Palatal implants, Injection snoreplasty, The Pillar system, or when specified as Transpalatal Advancement Pharyngoplasty (TAP).
CPT ®	92700	Unlisted otorhinolaryngological service or procedure	When this code is submitted it will **suspend for medical review** and will be denied when specified as Acoustic Pharyngometry

CPT ®	95999	Unlisted neurological or neuromuscular diagnostic procedure	When this code is submitted it will **suspend for medical review** and be denied when specified as a Nap Study
The following codes will be denied as not medically necessary			
CPT ®	41530	Submucosal ablation of the tongue base, radiofrequency, 1 or more sites, per session	Not Medically Necessary
HCPCS	C9727	Insertion of implants into the soft palate; minimum of three implants	Not Medically Necessary
HCPCS	S2080	Laser-assisted uvulopalatoplasty (LAUP procedure)	Not Medically Necessary
The following codes will be denied as a Benefit Exclusion or Non-Covered			
CPT ®	98960	Education and training for patient self-management by a qualified, nonphysician health care professional using a standardized curriculum, face-to-face with the patient (could include caregiver/family) each 30 minutes; individual patient	Non-Covered, Provider Liability
HCPCS	A9279	Monitoring feature device that stands alone for compliance monitoring	Benefit Exclusion
HCPCS	E0485	Oral device/appliance used to reduce upper airway collapsibility, adjustable or non-adjustable, prefabricated, includes fitting and adjustment	Benefit Exclusion

Attachment II

ICD-10-CM Code Table

Code Type	Number	Diagnosis Description
The following diagnosis will be considered as medically necessary when applicable criteria have been met.		
ICD-10-CM	F51.19	Other hypersomnia not due to a substance or known physiological condition
ICD-10_CM	G47.10	Hypersomnia, unspecified
ICD-10-CM	G47.11	Idiopathic hypersomnia with long sleep time
ICD-10-CM	G47.12	Idiopathic hypersomnia without long sleep time
ICD-10-CM	G47.13	Recurrent hypersomnia
ICD-10-CM	G47.14	Hypersomnia due to medical condition
ICD-10-CM	G47.19	Other hypersomnia
ICD-10-CM	G47.30	Sleep apnea, unspecified
ICD-10-CM	G47.31	Primary central sleep apnea
ICD-10-CM	G47.33	Obstructive sleep apnea (adult) (pediatric)
ICD-10-CM	G47.35	Congenital central alveolar hypoventilation syndrome
ICD-10-CM	G47.36	Sleep related hypoventilation in conditions classified elsewhere
ICD-10-CM	G47.37	Central sleep apnea in conditions classified elsewhere
ICD-10-CM	G47.39	Other sleep apnea
ICD-10-CM	G47.411	Narcolepsy with cataplexy
ICD-10-CM	G47.419	Narcolepsy without cataplexy
ICD-10-CM	G47.421	Narcolepsy in conditions classified elsewhere with cataplexy
ICD-10-CM	G47.429	Narcolepsy in conditions classified elsewhere without cataplexy
ICD-10-CM	G47.8	Other sleep disorders
ICD-10-CM	G47.9	Sleep Disorder Unspecified
ICD-10-CM	R06.81	Apnea, not elsewhere classified
ICD-10-CM	R06.83	Snoring
ICD-10-CM	R40.0	Somnolence