

## Policy and Procedure

Subject:	Polysomnography
Policy Number:	104
Department:	5B Medicare Advantage
Provision Effective Date:	
Revision Date:	

## **PURPOSE**

Sleep studies/polysomnogram (PSG) procedures refer to continuous and simultaneous monitoring and recording observational physiological parameters of sleep for a period of at least six hours. Attended sleep studies are typically performed in a sleep laboratory or facility and attended by a technologist or qualified healthcare professional. Unattended sleep studies may be performed in the home. The purpose of this policy is to define the appropriate place of service for sleep studies.

### **POLICY**

It is the policy of BlueCross BlueShield of South Carolina that a diagnosis of obstructive sleep apnea (OSA) can be made with results from any of the following sleep tests:

- A. Attended polysomnography (PSG) performed in a sleep laboratory
- B. Unattended home sleep test (HST) with a Type II home sleep monitoring device
- C. Unattended HST with a Type III home sleep monitoring device
- D. Unattended HST with a Type IV home sleep monitoring device that measures at least three (3) channels

### **SCOPE**

Policyholders requiring polysomnography, providers furnishing polysomnography

## REFERENCE DOCUMENTS

- 1) Gleitsmann, K., Kriz, H., Thielke, A., Bunker, K., Ryan, K., Lorish, K., & King, V. Sleep Apnea Diagnosis and Treatment in Adults. Center for Evidence-based Policy, Oregon Health and Science University. Washington Health Technology Assessment. Feb. 15, 2012.
- Centers for Medicare & Medicaid Services. Sleep Testing for Obstructive Sleep Apnea (OSA). National Coverage Determination 240.4.1, version 1. <a href="https://www.cms.gov/medicarecoverage-database/details/ncd-details.aspx?NCDId=330&ver=1">https://www.cms.gov/medicarecoverage-database/details/ncd-details.aspx?NCDId=330&ver=1</a> Accessed Nov. 9, 2021.
- Centers for Medicare & Medicaid Services. Continuous Positive Airway Pressure (CPAP) Therapy for Obstructive Sleep Apnea (OSA). National Coverage Determination 240.4, version 3. <a href="https://www.cms.gov/medicare-coverage-database/details/ncddetails.aspx?NCDId=226&ver=3">https://www.cms.gov/medicare-coverage-database/details/ncddetails.aspx?NCDId=226&ver=3</a> Accessed Nov. 9, 2021.

P&P for Polysomnography
Approved Nov. 19, 2021

Page 1 of 9



- 4) Centers for Medicare & Medicaid Services. LCD Polysomnography. Local Coverage Determination L36593R10 Revision 10. https://careweb.careguidelines.com/ed25/index.html Accessed Nov. 9, 2021.
- 5) Kapur, VK, et al. Clinical Practice Guideline for Diagnostic Testing for Adult Obstructive Sleep Apnea. Journal of Sleep Medicine, Volume 13, Issue 3. Published online March 15, 2017. <a href="https://jcsm.aasm.org/doi/10.5664/jcsm.6506">https://jcsm.aasm.org/doi/10.5664/jcsm.6506</a> Accessed 11/09/2021.
- 6) Zeineddine, S. and Badr S. Treatment-Emergent Central Apnea: Physiologic Mechanisms Informing Clinical Practice. Chest Journal. Volume 159, Issue 6, June 01, 2021. https://journal.chestnet.org/article/S0012-3692(21)00108-2/fulltext Accessed 10/1/21.
- 7) Current Procedural Terminology (CPT®), 2020 Centers for Medicare & Medicaid Services (CMS) Place of Service Code Set, Place of Service Codes for Professional Claims. Available at <a href="https://www.cms.gov/Medicare/Coding/place-of-service-codes/Place\_of\_Service\_Code\_Set">https://www.cms.gov/Medicare/Coding/place-of-service-codes/Place\_of\_Service\_Code\_Set</a>.

#### **DEFINITIONS**

**Place of Service** — Two-digit code used on health care professional claims to indicate the setting in which service was provided

**Sleep Study** — Continuous and simultaneous monitoring and recording observational physiological parameters of sleep for a period of at least six (6) hours.

Related Policies - Not applicable

### **RESPONSIBILITIES**

Medical director, utilization management

#### **PROCEDURE**

Medical necessity

UNATTENDED (HOME) SLEEP STUDIES FOR ADULT PATIENTS:

Section 1 — Unattended sleep studies do not require a prior authorization and may be considered medically necessary for members who meet ALL of the following criteria:

- Adults with suspected moderate to severe obstructive sleep apnea (OSA), as indicated by one (1) or more of the following:
  - o Epworth sleepiness score of 10 or greater
  - Excessive daytime sleepiness (EDS), fatigue or awakening with gasping and choking and ANY of the following:
    - BMI greater than 30
    - Excessive sleepiness while driving
    - Member is a commercial vehicle driver
    - Loud/intense snoring

P&P for Polysomnography Approved Nov. 19, 2021 Page 2 of 9



- Hypertension
- Witnessed nocturnal apnea, choking and/or gasping
- o Hypertension that is uncontrolled despite three (3)-drug regimen that includes a diuretic
- Postoperative assessment needed after performance of surgery to treat sleep apnea, as indicated by one (1) or more of the following:
  - Apnea-hypopnea index (AHI) or respiratory disturbance index (RDI) of 20 or greater on preoperative PSG
  - Persistent apnea witnessed after surgery
- Significant oxygen desaturation (<90 percent) on overnight pulse oximetry</li>
- Agency providing in-home sleep study testing uses equipment that has been tested and validated in literature and has well-described protocols and quality-assurance program and supported adequately by trained and qualified sleep specialist

Section 2 — Repeated unattended (unsupervised) home sleep studies does not require prior authorization and may be considered medically necessary in adult members for ANY of the following:

- To assess the efficacy of surgery or oral appliances/devices
- To reevaluate the diagnosis of OSA and need for continued CPAP (e.g., a significant change in weight or change in symptoms suggests CPAP should be re-titrated or possibly discontinued)

### ATTENDED NOCTURNAL POLYSOMNOGRAPHY (NPSG)

Section 3 — Initial supervised (attended) full-channel nocturnal polysomnography (NPSG) performed in a health care facility, including split-night studies, requires a prior authorization for diagnosis in members with symptoms suggestive of obstructive sleep apnea (OSA) and may be considered medically necessary for ANY of the following:

- Member has ANY of the following comorbid medical conditions that degrade the accuracy of unattended sleep studies AND criteria of section 1 are also met:
  - Moderate to severe pulmonary disease (e.g., COPD, asthma) with nocturnal oxygen use or daytime hypercapnia with documented arterial blood gasses showing PaO2 less than 60 mmHg or PaCO2 greater than 45 mmHg
  - Neuromuscular disease (e.g., Parkinson's disease, spina bifida, myotonic dystrophy, amyotrophic lateral sclerosis)
  - Stroke with residual respiratory effects
  - Epilepsy

P&P for Polysomnography Approved Nov. 19, 2021 Page 3 of 9



- Congestive heart failure (NYHA class III or IV or LVEF less than 45 percent)
- Chronic opioid medication use
- Super obesity (BMI greater than 45)
- Obesity hypoventilation syndrome, known or suspected (e.g., BMI greater than 30 plus arterial blood gas with PCO2 greater than 45)
- Member has ANY of the following comorbid sleep disorders AND criteria of section 1 are also met:
  - Periodic limb movement disorder (involuntary, jerking movements of the legs during sleep causing excessive daytime sleepiness due to sleep fragmentation)
  - Parasomnias that are unusual or atypical because of the individual's age at onset, the time, duration or frequency of occurrence of the behavior including but not limited to nocturnal seizures, psychogenic dissociative states, REM sleep behavior disorder, sleep talking and/or confusional arousals
  - o Severe insomnia
  - Narcolepsy or cataplexy
  - o Central sleep apnea or complex sleep apnea
- Member has prior negative or technically inadequate unattended sleep study
- Member has low pretest probability of obstructive sleep apnea and meets ALL of the following criteria:
  - Normal BMI (less than 30)
  - Normal airway (Mallampati score 1 or 2)
  - No snoring
  - o Normal neck circumference (less than 17 inches in men, and less than 16 inches in women)
  - Sleep medicine provider documents rationale to suspect OSA and medical necessity of monitored polysomnogram
- Member has low pretest probability of OSA (e.g., meets ONE (1) OR MORE criteria: normal BMI (less than 30); AND normal airway (Mallampati score 1 or 2); AND no snoring; AND normal neck circumference (less than 17 inches in men, and less than 16 inches in women); AND sleep medicine provider documents rationale to suspect OSA and medical necessity of monitored polysomnogram) and a diagnosis of atrial fibrillation (AF) without structural heart disease, hypertensive heart disease or venous thromboembolism but does NOT meet criteria of section 1
- Member lacks the mobility or dexterity to use portable monitoring equipment at home AND criteria of section 1 is also met
- To confirm diagnosis of obstructive sleep apnea prior to surgical modifications of the upper airway

Section 4 — Repeated supervised sleep studies require a prior authorization and may be considered medically necessary in adult members for ANY of the following when the criteria in section 3 are met:

P&P for Polysomnography
Approved Nov. 19, 2021

Page 4 of 9



- To determine whether positive airway pressure treatment (e.g., CPAP, bilevel positive airway pressure BiPAP), demand positive airway pressure (DPAP), variable positive airway pressure (VPAP) or autotitrating positive airway pressure (AutoPAP) continues to be effective in members with new or persistent symptoms, after interrogation of current positive airway pressure device
- To determine whether positive airway pressure treatment settings need to be changed in persons with new or persistent symptoms, after interrogation of current positive airway pressure device (Note: This criterion does not apply to AutoPAP devices, as these devices are automatically titrated and do not require manual adjustment of treatment settings)
- For members with substantial weight loss (loss of 10 percent or more body weight) or some other change in their medical condition that would affect the need for continued positive airway pressure treatment (e.g., heart attack, stroke, heart failure), to determine whether continue treatment with positive airway pressure treatment is necessary;
- To assess treatment response after upper airway surgical procedures and after initial treatment with oral appliances/devices

ATTENDED SPLIT-NIGHT AND FULL-NIGHT TITRATION STUDIES Section 5 — Split-night sleep study is indicated if ANY of the following criteria are met:

- The Apnea Hypopnea Index (AHI) is greater than 15 in first two (2) hours of a diagnostic sleep study
- o Moderate or severe sleep apnea is noted during an in-lab sleep study
- o Previous sleep study indicated moderate or severe apnea

Section 6 — Full-night titration sleep study is indicated if ANY of the following criteria are met:

- o If the member meets criteria for treatment with CPAP AND
  - Member meets criteria for initial supervised sleep study (criteria of section 3).
  - Member meets criteria for repeated supervised sleep study (criteria of section 4).
  - There is documentation from the sleep provider as to why AutoPAP is not appropriate and full-night sleep titration is medically necessary (e.g., aberrant downloads, claustrophobia, member use of narcotics, member with pulmonary or cardiac issues).
- If a previous split-night study did not allow for the abolishment of the vast majority of obstructive respiratory events
- If prescribed CPAP/auto pap does not control clinical symptoms (disturbed sleep with significant arousals) despite documented compliance
- o Persistently high AHI (e.g. > 10) with the use of a PAP device
- Need to try an alternative, non-CPAP modality (e.g. bilevel, bilevel Spontaneous Timed ST, adaptive servo-ventilation)

P&P for Polysomnography
Approved Nov. 19, 2021
Page 5 of 9



Section 7 — One (1) supervised polysomnogram per lifetime is allowed for members with a diagnosis of ANY of the following to evaluate for the presence of OSA:

- Neuromuscular disorder which significantly increases risk of OSA (e.g. Down's Syndrome, Prader Willi, myelomeningocele)
- Craniofacial anomalies which impair the upper airway, such as those which cause midface hypoplasia, retrognathia or micrognathia

Section 8 — Supervised polysomnography requires prior authorization and may be considered medically necessary prior to multiple sleep latency testing (MSLT) and prior to maintenance of wakefulness testing

### MULTIPLE SLEEP LATENCY TESTING

- Multiple sleep latency test (MSLT) requires a prior authorization and may be considered medically
  necessary when ordered by a pulmonologist, neurologist, psychiatrist, otolaryngologist, a physician
  board certified in sleep medicine or their advanced practitioners to confirm the diagnosis of narcolepsy
  and other disorders of excessive daytime sleepiness as indicated by one (1) or more of the following:
- Initial test needed, as indicated by one (1) or more of the following:
  - Cataplexy (e.g., sudden weakness or loss of muscle tone not accompanied by loss of consciousness)
  - o Disturbed or fragmented sleep
  - o Excessive daytime sleepiness
  - Hallucinations with sleep onset (hypnagogic) or upon awakening (hypnopompic)
  - Sleep paralysis
- Repeat test needed, as indicated by one (1) or more of the following:
  - o Initial MSLT results indeterminate
  - o Initial MSLT results negative, but strong clinical suspicion of narcolepsy
- MSLT is considered experimental/investigational and therefore not medically

### MAINTENANCE OF WAKEFULNESS TESTING

 Maintenance of wakefulness testing (MWT) requires a prior authorization and may be considered medically necessary when ordered by a pulmonologist, neurologist, psychiatrist, otolaryngologist, a

P&P for Polysomnography Approved Nov. 19, 2021 Page 6 of 9



physician board certified in sleep medicine or their advanced practitioners and is as indicated by one (1) or more of the following:

- Assessment of member for whom inability to remain awake constitutes safety issue (e.g., member is airplane pilot)
- Assessment of member with narcolepsy or idiopathic hypersomnia to assess response to treatment

Polysomnography, home sleep test, and multiple sleep latency test are **NOT COVERED** for ANY of the following:

- Diagnosis of chronic lung disease (nocturnal hypoxemia in patient with chronic, obstructive, restrictive, or reactive lung disease)
- Home sleep testing for patient with one (1) or more of the following:
  - o Moderate to severe pulmonary disease (e.g., patient on oxygen or regular bronchodilator use)
  - o Neuromuscular disease affecting muscles of respiration
  - Congestive heart failure
  - Suspicion of presence of other sleep disorders (i.e., narcolepsy, parasomnia, periodic limb movements of sleep)
  - Other respiratory disorders, impotence, restless legs syndrome
- Diagnosis of patient with chronic insomnia
- Preoperative evaluation of patient for laser-assisted uvulopalatopharyngoplasty without clinical evidence that obstructive sleep apnea is suspected
- Case where seizure disorders have not been ruled out
- Case of typical, uncomplicated, and non-injurious parasomnias when diagnosis is clearly delineated
- Patient with epilepsy who has no specific complaints consistent with sleep disorder
- Diagnosis of insomnia related to depression
- Diagnosis of circadian rhythm sleep disorders (e.g., rapid time-zone change [jet lag], shift-work sleep disorder, delayed sleep phase syndrome, advanced sleep phase syndrome and non-24-hour sleep/wake disorder)
- Multiple sleep latency test performed routinely for patient with sleep apnea
- Actigraphy when not performed as part of sleep test or when it is used for monitoring

## **Applicable Procedure Codes:**

CPT/HCPCS Code Descriptor – For sleep studies that **do not require** prior authorization.

P&P for Polysomnography Approved Nov. 19, 2021 Page 7 of 9



**95800** Sleep study, unattended, simultaneous recording of heart rate, oxygen saturation, respiratory analysis and sleep time

**85801** Sleep study, unattended, simultaneous recording of minimum of heart rate, oxygen saturation, respiratory analysis

**95806** Sleep study, unattended, simultaneous recording of heart rate, oxygen saturation, respiratory airflow and respiratory effort

CPT/HCPCS Code Descriptor – For sleep studies that **require** prior authorization.

**95807** Sleep study, simultaneous recording of ventilation, respiratory effort, ECG or heart rate, and oxygen saturation, attended by a technologist

**95808** Polysomnography; any age, sleep staging with 1-3 additional parameters of sleep, 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

P&P for Polysomnography Approved Nov. 19, 2021 Page 8 of 9



## **APPROVAL SIGNATURES**

Title	Printed Name	Signature	Date

### **REVISION HISTORY**

Implementation Date	Description	Business Owner (Signature Required)	Approval Committee

P&P for Polysomnography Approved Nov. 19, 2021