

Policy Name:	Sleep Studies for Initial Diagnosis of Obstructive Sleep Apnea
Effective Date:	01/01/2024

Important Information – Please Read Before Using This Policy

These services may or may not be covered by all Medica plans. Coverage is subject to requirements in applicable federal or state laws. Please refer to the member’s plan document for other specific coverage information. If there is a difference between this general information and the member’s plan document, the member’s plan document will be used to determine coverage. With respect to Medicare, Medicaid, and other government programs, this policy will apply unless these programs require different coverage. Members may contact Medica Customer Service at the phone number listed on their member identification card to discuss their benefits more specifically. Providers with questions may call the Medica Provider Service Center toll-free at 1-800-458-5512.

Medica coverage policies are not medical advice. Members should consult with appropriate health care providers to obtain needed medical advice, care, and treatment.

Coverage Policy

POLYSOMNOGRAPHY

Adults

Polysomnography for individuals 18 years of age or older *requires prior authorization*.

NOTE: See Medica Utilization Management policy, *Facility-Based Polysomnography, Adults (Sleep Study)*, for specific medical necessity criteria.

Children and Adolescents

- A. **Attended, full-night, full-channel PSG** using a type I device performed in an overnight sleep center as part of a comprehensive sleep evaluation is **not investigative** for **initial diagnosis** of OSA in **children and adolescents** under 18 years of age when the individual presents with **one** of the following:
 - 1. Initial clinical evaluation strongly suggestive of OSA
 - 2. Habitual snoring is present and the individual presents with **at least one** of the following:
 - a. Excessive daytime sleepiness interfering with normal daytime activities
 - b. Behaviors indicative of difficulty staying awake (e.g., aggressive, or disruptive behavior; hyperactivity; lack of attentiveness)
 - c. Failure to thrive
 - d. Craniofacial anomalies obstructing the upper airway (e.g., Pierre Robin Syndrome; choanal atresia; nasal glioma; severe mandibular hypoplasia)
 - e. Obesity
 - f. Pulmonary complications (e.g., chronic asthma; cystic fibrosis; pulmonary hypertension; bronchopulmonary dysplasia)
 - g. Neurologic disorder (e.g., Down’s syndrome; Prader-Willi syndrome; myelomeningocele)
 - h. Neuromuscular disorder or chest wall deformity (e.g., congenital central alveolar hypoventilation syndrome; sleep related hypoventilation; kyphoscoliosis)
 - 3. Parasomnia
 - 4. Periodic limb movement disorder (PLMD)
 - 5. Narcolepsy

6. Tracheostomy, prior to removal of the tracheostomy tube
 7. Presurgical evaluation of OSA done prior to adenotonsillectomy to treat OSA
 8. Residual symptoms of OSA persisting following adenotonsillectomy
 9. Infant has survival of a life-threatening sleep-related breathing event (severe apnea event; sleep-related seizure).
- B. **Attended, split-night, full-channel PSG with PAP titration** using a Type I device performed in an overnight sleep center or healthcare facility as part of a comprehensive sleep evaluation is **COVERED** in *children and adolescents* under 18 years of age with symptoms of unconfirmed OSA when criteria outlined above are met and standard titration protocols are performed.
- C. **Attended, full-night, full-channel PSG** performed in an overnight sleep center is investigative and therefore **NOT COVERED** for *initial diagnosis* in *children and adolescents* for all other device types (e.g., type II device) and indications not listed above, including but not limited to, restless limb syndrome; circadian rhythm disorders; bruxism.

HOME (UNATTENDED/UNSUPERVISED) SLEEP STUDIES

Adults

- A. A home (unattended/unsupervised) sleep study is **COVERED** for *adults* at least 18 years of age with symptoms of unconfirmed obstructive sleep apnea (OSA) when:
1. The study is limited to one night or day (e.g., shift worker) sleep cycle,
and
 2. The study is performed using either a Type II or Type III device with a minimum of four respiratory recording channels, including
 - a. Airflow
 - b. Electrocardiogram (EKG) or heart rate
 - c. Oxygen saturation
 - d. Respiratory movement index,
and
 3. The individual displays signs or symptoms of unconfirmed OSA, including but not limited to, chronic snoring, demonstrated apneas, excessive daytime sleepiness, change in behavior/attentiveness, or obesity,
and
 4. The individual has not been diagnosed with a complex sleep disorder requiring alternative means of treatment and/or ventilation, including but not limited to:
 - a. Central apnea
 - b. Congestive heart failure / significant cardiac disease
 - c. Narcolepsy
 - d. Neuromuscular or neuropulmonary disease, moderate to severe
 - e. Obesity hypoventilation syndrome
 - f. Parasomnia.
- B. A home (unattended/unsupervised) sleep study using a Type II or Type III device for *adults* at least 18 years of age with symptoms of unconfirmed OSA is investigative and therefore **NOT COVERED** for all other indications that do not meet the criteria outlined above, including but not limited to, device not measuring four respiratory parameters; circadian rhythm disorders, insomnia, depression.
- C. A home (unattended/unsupervised) sleep study using a Type IV device for *adults* at least 18 years of age with symptoms of unconfirmed OSA is investigative and therefore **NOT COVERED**.
- D. A home (unattended/unsupervised) sleep study using a portable device using peripheral arterial tonometry (PAT®) (e.g., WatchPAT) is **COVERED** for *adults* at least 18 years of age with symptoms of unconfirmed OSA when:
1. The study is limited to one night or day (e.g., shift worker) sleep cycle,
and

2. The individual displays signs or symptoms of unconfirmed OSA, including but not limited to, chronic snoring, demonstrated apneas, excessive daytime sleepiness, change in behavior/attentiveness, or obesity, **and**
 3. In individual has not been diagnosed with a complex sleep disorder requiring alternative means of treatment and/or ventilation, including but not limited to:
 - a. Central apnea
 - b. Congestive heart failure / significant cardiac disease
 - c. Narcolepsy
 - d. Neuromuscular or neuropulmonary disease, moderate to severe
 - e. Obesity hypoventilation syndrome
 - f. Parasomnia.
- E. A home (unattended/unsupervised) sleep study using a portable device using peripheral arterial tonometry (PAT) (e.g., WatchPAT) is investigative and therefore **NOT COVERED** for all other indications that do not meet the criteria outlined in D., above, for **adults** at least 18 years of age.

Children and Adolescents

- A. A home (unattended/unsupervised) sleep study for children and adolescents under 18 years of age is investigative and therefore **NOT COVERED**
- B. A home (unattended/unsupervised) sleep study using a portable device using peripheral arterial tonometry (PAT) (e.g., WatchPAT) for children and adolescents under 18 years of age is investigative and therefore **NOT COVERED**

Note: See also related Medica coverage policy, *Actigraphy*.

Description

OSA is the result of blocked airflow during sleep, such as from narrowed airways, but ventilatory effort persists. Reduced upper airway space produces episodes of slow and/or shallow breathing (hypopnea) or interruptions in breathing (apnea) that lead to decreased blood oxygen saturation levels, sleep fragmentation, and daytime sleepiness. OSA is confirmed when a sleep study validates the presence of OSA as indicated by an apnea hypopnea index (AHI) or respiratory disturbance index (RDI) that is:

1. Greater than or equal to 15 events per hour, OR
2. Between five and 14 events per hour and is accompanied by documentation of at least one symptom of OSA.

Signs and symptoms of OSA can include, but are not limited to, any of the following:

1. Disruptive snoring and/or witnessed apnea events (e.g., non-breathing episodes; gasping or choking during sleep)
2. Excessive daytime sleepiness (e.g., Epworth Sleepiness Scale greater than 10)
3. Impaired cognition
4. Mood disorder
5. Insomnia
6. Hypertension
7. Ischemic heart disease or coronary artery disease
8. History of stroke.

Full- or split-night PSG is normally a facility-based procedure attended by a technologist. The individual sleeps while connected to various monitoring devices while the technologist periodically monitors and/or records multiple respiratory-related physiologic variables using a Type I or Type II device (see below). A split-night PSG may also be done. The second half of the PSG includes continuous positive airway pressure (CPAP) titration to establish the amount of positive airway pressure required to prevent upper airway collapse during sleep.

A home (unattended/unsupervised) sleep study, also referred to as portable monitoring (PM), utilizes equipment that monitors and records multiple parameters. However, no device measures the complete number of parameters used in a full-channel polysomnography (PSG). Generally, a technologist is not in attendance during actual performance of the home sleep study. Type II or Type III devices are normally recommended for home sleep studies, although Type IV devices have been suggested (see below).

Sleep study devices are classified as Types I, II, III, or IV. Type I devices are used for in-laboratory, attended sleep studies. Unattended devices fall into categories Type II through Type IV. Type II devices use the same monitoring sensors as full PSGs (Type I) but are unattended, and thus can be performed outside of the sleep laboratory.

Characteristics of the various devices follow:

1. Type I Device – Performs attended studies with full sleep staging with a minimum of eight channels, and typically includes the following channels:
 - a. Electroencephalogram (EEG)
 - b. Electro-oculography (EOG)
 - c. Electrocardiogram (EKG/Heart rate)
 - d. Chin electromyogram (EMG)
 - e. Limb EMG
 - f. Respiratory effort
 - g. Air Flow
 - h. Oxygen saturation
 - i. Additional channels per instrumentation used (e.g., continuous positive airway pressure (CPAP)/bilevel positive airway pressure (BPAP) levels; carbon dioxide (CO₂) level; pH level)
2. Type II Device – Performs attended or unattended facility-based NPSG or unattended home sleep study with a minimum of seven channels, and typically include the following channels:
 - a. EEG
 - b. EOG
 - c. EKG/heart rate
 - d. EMG
 - e. Airflow
 - f. Respiratory effort
 - g. Oxygen saturation
3. Type III Device – These devices do not record the signals needed to determine sleep stages or sleep disruption. Performs unattended home sleep study with a minimum of four channels, and typically include the following channels:
 - a. Two respiratory movement/airflow measurements
 - b. EKG/heart rate
 - c. Oxygen saturation
4. Type IV Device – Performs unattended home sleep study with a minimum of three channels, allowing for direct calculation of an apnea-hypopnea index (AHI) or respiratory disturbance index (RDI) as the result of measuring airflow or thoracoabdominal movement.

Home (unattended/unsupervised) sleep study using a portable device using proprietary peripheral arterial tonometry (PAT®) (e.g., WatchPAT) is a non-invasive in-home diagnostic test for individuals suspected of having obstructive sleep apnea. The PAT signal is intended to measure the arterial tone changes in the peripheral arterial beds during sleep. The device is worn like a wristwatch, with a finger probe that fits over the index finger. It is comprised of the following components: a PAT and pulse oximeter probe, an embedded actigraph, electronics, device software, and a rechargeable lithium ion battery. The device measures multiple clinical parameters, including: RDI, apnea-hypopnea index (AHI), oxygen desaturation index (ODI), wake/sleep detection, and sleep staging.

FDA Approval

Sleep studies are procedures and therefore not subject to FDA approval.

A number of different devices used for PSG and home sleep studies have been approved by the FDA via the 510(k) approval process.

Prior Authorization

Prior authorization is not required. However, services with specific coverage criteria may be reviewed retrospectively to determine if criteria are being met. Retrospective denial may result if criteria are not met.

Coding Considerations

Use the current applicable CPT/HCPCS code(s). The following codes are included below for informational purposes only, and are subject to change without notice. Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement.

CPT Codes

- **95782** - Polysomnography; sleep staging; younger than 6 years, sleep staging with 4 or more additional parameters of sleep, attended by a technologist.
- **95783** - Polysomnography; sleep staging; 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 (eg, by airflow or peripheral arterial tone), and sleep time
- **95801** - Sleep study, unattended, simultaneous recording; minimum of heart rate, oxygen saturation, and respiratory analysis (eg, by airflow or peripheral arterial tone)
- **95806** - Sleep study, unattended, simultaneous recording of, heart rate, oxygen saturation, respiratory airflow, and respiratory effort (eg, thoracoabdominal movement)
- **95807** - Sleep study, simultaneous recording of ventilation, respiratory effort, ECG 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 bilevel ventilation, attended by a technologist

HCPC Codes

- **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

Original Effective Date: 7/1/2016

Re-Review Date(s): 5/15/2019
12/18/2019

Medica Coverage Policy



5/18/2022
11/15/2023

© 2016-2023 Medica.