

LCD for POLYSOMNOGRAPHY Sleep Testing (L26556)

Contractor Information

Contractor Name

Wisconsin Physicians Service Insurance Corporation

Contractor Number

05401

Contractor Type

MAC - Part A

LCD Information

LCD ID Number

L26556

LCD Title

POLYSOMNOGRAPHY Sleep Testing

Contractor's Determination Number

AMA CPT / ADA CDT Copyright Statement

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CMS National Coverage Policy

Social Security Act, Title XVIII, section 1862(a)(1)(A) allows coverage and payment for only those services that are considered to be reasonable and medically necessary, i.e., reasonable and necessary are those tests used in the diagnosis and management of illness or injury or to improve the function of a malformed body part.

Social Security Act, Title XVIII, section 1862(a)(7) excludes routine physical examinations.

Social Security Act, Title XVIII, sections 1861 (s) and (t) outline coverage for drugs and biologicals and services and supplies.

Medicare National Coverage Determinations Manual (Pub 100-3), Chapter 1, Part 4, Section 240.4.

Medicare Benefit Policy (Pub 100-2), Chapter 6, Section 50.

Primary Geographic Jurisdiction

LCD Information

LCD ID Number

Nebraska

Oversight Region

Region I

Original Determination Effective Date

For services performed on or after 02/01/2008

Original Determination Ending Date

Revision Effective Date

For services performed on or after 03/01/2008

Revision Ending Date

Indications and Limitations of Coverage and/or Medical Necessity

Indications

Polysomnography includes sleep staging that is refined to include a 1-4 lead electroencephalogram (EEG), and electro-oculogram (EOG), and a submental electromyogram (EMG). For a study to be reported as polysomnography, sleep must be recorded and staged. Additional parameters of sleep include:

- electrocardiogram (ECG)
- airflow
- ventilation and respiratory effort
- gas exchange by oximetry, transcutaneous monitoring, or end tidal gas analysis
- extremity muscle activity, motor activity-movement
- extended EEG monitoring
- penile tumescence
- gastroesophageal reflux
- continuous blood pressure monitoring
- snoring
- body positions, etc.

For a study to be reported as a polysomnogram:

- studies must be performed for 6 hours
- sleep must be recorded and staged
- an attendant must be present throughout the course of the study

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Diagnostic testing is covered when a patient has the symptoms or complaints of one of the following conditions:

Narcolepsy - Narcolepsy is a neurologic disorder of unknown etiology characterized predominantly by abnormalities of REM, some abnormalities of NREM sleep and the presence of excessive daytime sleepiness often with involuntary daytime sleep episodes (e.g., while driving, in the middle of a meal, amnesiac episodes). Other associated symptoms of narcolepsy including cataplexy and other REM sleep phenomena, such as sleep paralysis and hypnagogic hallucinations. The diagnosis of narcolepsy is usually confirmed by an overnight sleep study (Polysomnography) followed by a multiple sleep latency test (MSLT). The following measurements are normally required to diagnose narcolepsy:

Polysomnographic assessment of the quality and quantity of night-time sleep

-determination of the latency to the first REM episode

MSLT

the presence of REM-sleep episodes.

The minimum electrophysiological channels that are required for this diagnosis include EEG, EOG, and chin EMG. Initial polysomnography and multiple sleep latency testing occasionally fail to identify narcolepsy. Repeat testing is necessary when the initial results are negative or ambiguous and the clinical history strongly indicates a diagnosis of narcolepsy. The diagnosis of narcolepsy requires documentation of the absence of other untreated significant disorders that cause excessive daytime sleepiness (i.e., sleep apnea, mental depression, insomnia, etc.) Treatment for narcolepsy is usually focused around the symptom of sleepiness and primarily consists of prescribing and taking of stimulant medication.

Sleep Apnea - Sleep Apnea is defined as a cessation of airflow for at least 10 seconds. These cessations of breathing may be due to either an occlusion of the airway (obstructive sleep apnea), absence of respiratory effort (central sleep apnea), or a combination of these factors (mixed sleep apnea). Central sleep apnea is a relatively rare entity. Obstructive sleep apnea is caused by one of the following:

-reduced upper airway caliber due to obesity, adenotonsillar hypertrophy, mandibular deficiency macroglossia, or upper airway tumor

-excessive pressure across the collapsible segment of the upper airway
-activity of the muscles of the upper airway insufficient to maintain patency.

The most common nocturnal (during sleep) symptoms of sleep apnea are snoring, abnormal motor activity (including periodic limb movement), and nocturia. Diurnal (during wakefulness) symptoms associated with sleep apnea are excessive daytime sleepiness due to sleep disruption from hypoxemia and cognitive impairment, including poor memory, and personality changes.

Normally, the polysomnography measurements used to diagnose Sleep Apnea are: the electrophysiologic indices contrasting respiratory effort with actual ventilation (chest and/or abdomen movement; airflow at the nose and mouth); and consequences of apneic events, including electrocardiograms and pulse oximetry. The most frequent and satisfying treatment used for patients with sleep apnea is nasal CPAP. Other possible treatment options include oral appliances, a variety of surgical procedures, medications that suppress REM sleep, weight reduction, and sleep position training.

Polysomnography with CPAP titration is appropriate for patients with any of the following polysomnographic results:

AHI (Apnea-Hypopnea Index) greater than or equal to 15 events per hour or;

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AHI (Apnea-Hypopnea Index) greater than or equal to 5 and less than or equal to 14 events per hour with documented symptoms of excessive daytime sleepiness, impaired cognition, mood disorders or insomnia, or documented hypertension, ischemic heart disease or history of stroke.

The AHI (Apnea-Hypopnea Index) is equal to the average number of episodes of apnea and hypopnea per hour and must be based on a minimum of 2 hours of sleep recorded by polysomnography using actual recorded hours of sleep (i.e., the AHI may not be extrapolated or projected).

For CPAP titration, a split-night study (initial diagnostic polysomnogram followed by CPAP titration during polysomnography on the same night) is an alternative to one full night of diagnostic polysomnography followed by a second night of titration if the following criteria are met:

An AHI as outlined above;

CPAP titration is carried out for more than 3 hours;

Polysomnography documents that CPAP eliminates or nearly eliminates the respiratory events during REM and/or NREM sleep;

Follow up polysomnography or a cardiorespiratory sleep study is indicated for the following conditions:

-to evaluate the response to treatment (CPAP, oral appliances, surgical intervention);

-after substantial weight loss has occurred in patients on CPAP for treatment of sleep-related breathing disorders to ascertain whether CPAP is still needed at the previously titrated pressure;

-after substantial weight gain has occurred in patients previously treated with CPAP successfully, who are again symptomatic despite the continued use of CPAP, to ascertain whether pressure adjustments are needed;
or

-when clinical response is insufficient or when symptoms return despite a good initial response to treatment with CPAP.

Follow up polysomnography or a cardio-respiratory sleep study is not routinely indicated in patients treated with CPAP whose symptoms continue to be resolved with CPAP treatment.

Parasomnias - Parasomnias are a group of behavioral disorders during sleep that are associated with brief or partial arousals but not with marked sleep disruption or impaired daytime alertness. The presenting complaint is usually related to the behavior itself. Most parasomnias are more common in children, but may persist into adulthood when their occurrence may have more pathologic significance. Parasomnias include the following conditions: sleepwalking (Somnambulism), sleep terrors, REM sleep behavior disorder, sleep bruxism, sleep enuresis, and miscellaneous (nocturnal headbanging, sleep talking, and nocturnal leg cramps).

Normally, a clinical history, neurologic exam and routine EEG obtained while the patient is awake and asleep are often sufficient to establish the diagnosis and permit the appropriate treatment of sleep related epilepsy. In addition, common, uncomplicated, noninjurious parasomnias, such as typical disorders of arousal, nightmares, enuresis, somniloquy, and bruxism can usually be diagnosed by clinical evaluation alone.

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Polysomnography is indicated to provide a diagnostic classification or prognosis when both of the following exist when the clinical evaluation and results of standard EEG have ruled out a seizure disorder; and in cases that present a history of repeated violence or injurious episodes during sleep. Normally when polysomnography is performed for the diagnosis of parasomnias, the following measurements are obtained: sleep-scoring channels (EEG, EOG, chin EMG); EEG using an expanded bilateral montage; EMG for body movements; and audiovisual recording and documented technologist observations.

Limitations

Diagnostic testing that is duplicative of previous sleep testing done by the attending physician to the extent the results are still pertinent is not covered because it is not reasonable and necessary if there have been no significant clinical changes in medical history since the previous study.

Home sleep testing is not covered.

Polysomnography, or a MSLT is not covered in the following situations:

- for the diagnosis of patients with chronic insomnia
- to preoperatively evaluate a patient undergoing a laser assisted uvulopalatopharyngoplasty without clinical evidence that obstructive sleep apnea is suspected
- to diagnose chronic lung disease (Nocturnal hypoxemia in patients with chronic, obstructive, restrictive, or reactive lung disease is usually adequately evaluated by oximetry. However, if the patient's symptoms suggest a diagnosis of obstructive sleep apnea, polysomnography is considered medically necessary)
- in cases where seizure disorders have not been ruled out
- in cases of typical, uncomplicated, and noninjurious parasomnias when the diagnosis is clearly delineated
- for patients with epilepsy who have no specific complaints consistent with a sleep disorder
- for patients with symptoms suggestive of the periodic limb movement disorder or restless leg syndrome unless symptoms are suspected to be related to a covered indication
- for the diagnosis of insomnia related to depression
- for the diagnosis of circadian rhythm sleep disorders [i.e., 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]

Coverage Topic

Outpatient Hospital Services

Coding Information

Coding Information

Bill Type Codes:

Contractors may specify Bill Types to help providers identify those Bill Types typically used to report this service. Absence of a Bill Type does not guarantee that the policy does not apply to that Bill Type. Complete absence of all Bill Types indicates that coverage is not influenced by Bill Type and the policy should be assumed to apply equally to all claims.

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Revenue Codes:

Contractors may specify Revenue Codes to help providers identify those Revenue Codes typically used to report this service. In most instances Revenue Codes are purely advisory; unless specified in the policy services reported under other Revenue Codes are equally subject to this coverage determination. Complete absence of all Revenue Codes indicates that coverage is not influenced by Revenue Code and the policy should be assumed to apply equally to all Revenue Codes.

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074X EEG-general classification

0920 Other diagnostic services-general classification

CPT/HCPCS Codes

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, 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	

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	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
95822	ELECTROENCEPHALOGRAM (EEG); RECORDING IN COMA OR SLEEP ONLY

ICD-9 Codes that Support Medical Necessity

307.44	PERSISTENT DISORDER OF INITIATING OR MAINTAINING WAKEFULNESS
307.46	SLEEP AROUSAL DISORDER
307.47	OTHER DYSFUNCTIONS OF SLEEP STAGES OR AROUSAL FROM SLEEP
307.48	REPETITIVE INTRUSIONS OF SLEEP
327.00	ORGANIC INSOMNIA, UNSPECIFIED
327.01	INSOMNIA DUE TO MEDICAL CONDITION CLASSIFIED ELSEWHERE
327.20	ORGANIC SLEEP APNEA, UNSPECIFIED
327.21	PRIMARY CENTRAL SLEEP APNEA
327.22	HIGH ALTITUDE PERIODIC BREATHING
327.23	OBSTRUCTIVE SLEEP APNEA (ADULT) (PEDIATRIC)
327.24	IDIOPATHIC SLEEP RELATED NON OBSTRUCTIVE ALVEOLAR HYPOVENTILATION
327.25	CONGENITAL CENTRAL ALVEOLAR HYPOVENTILATION SYNDROME
327.26	SLEEP RELATED HYPOVENTILATION/HYPOXEMIA IN CONDITIONS CLASSIFIABLE ELSEWHERE
327.27	CENTRAL SLEEP APNEA IN CONDITIONS CLASSIFIED ELSEWHERE
327.40	ORGANIC PARASOMNIA, UNSPECIFIED
327.41	CONFUSIONAL AROUSALS
327.42	REM SLEEP BEHAVIOR DISORDER
327.43	RECURRENT ISOLATED SLEEP PARALYSIS

Coding Information

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327.44	PARASOMNIA IN CONDITIONS CLASSIFIED ELSEWHERE
327.51	PERIODIC LIMB MOVEMENT DISORDER
327.53	SLEEP RELATED BRUXISM
333.2	MYOCLONUS
518.81	ACUTE RESPIRATORY FAILURE
780.51	INSOMNIA WITH SLEEP APNEA, UNSPECIFIED
780.53 - 780.59	HYPERSOMNIA WITH SLEEP APNEA, UNSPECIFIED - OTHER SLEEP DISTURBANCES
786.06	TACHYPNEA
788.43	NOCTURIA

Claims submitted with the following diagnosis may be subject to pre-payment review.

347.00	NARCOLEPSY, WITHOUT CATAPLEXY
347.01	NARCOLEPSY, WITH CATAPLEXY
347.10	NARCOLEPSY IN CONDITIONS CLASSIFIED ELSEWHERE, WITHOUT CATAPLEXY
347.11	NARCOLEPSY IN CONDITIONS CLASSIFIED ELSEWHERE, WITH CATAPLEXY

Diagnoses that Support Medical Necessity

ICD-9 Codes that DO NOT Support Medical Necessity

ICD-9 Codes that DO NOT Support Medical Necessity Asterisk Explanation

Diagnoses that DO NOT Support Medical Necessity

General Information

Documentation Requirements

Documentation must support the patient has been referred to the clinic by their attending physician, has signs/symptoms of a covered medical condition as listed in this policy and the sleep testing is being performed to diagnose or rule out a condition. In addition, when repeat sleep testing is performed, documentation must support the medical necessity of this test which may include reasons such as: to evaluate the response to treatment, after substantial weight gain/weight loss, symptomatic even after therapeutic intervention, etc.

The above information is normally found in a clinical evaluation such as a history and physical and test results.

If documentation is requested for review, please submit the following:

History and Physical

Physician orders / progress notes

Nurses notes

Diagnosis

Test results

Itemization of charges

Appendices

Utilization Guidelines

This determination should be interpreted to incorporate future changes in the ICD-9-CM or CPT/HCPCS coding systems such that its original intent and scope will not be substantively changed.

Sources of Information and Basis for Decision

American Sleep Disorders Association and Sleep Research Society. (1997). Practice Parameters for the indications for Polysomnography and related procedures. *Sleep*, 20 (6): 406-422.

Goetz: *Textbook of Clinical Neurology*, 2nd ed., 2003, p. 473.

Murray & Nadel: *Textbook of Respiratory Medicine*, 3rd ed., 2000, Saunders; Chapter 81

Practice Patterns for Using Polysomnography to Evaluate Insomnia: An Update; *American Academy of Sleep Medicine; Sleep*, Vol 26, No. 6, 2003, pp 754-760

Other Intermediary's LCDs

Advisory Committee Meeting Notes

General Information

Documentation Requirements

Start Date of Comment Period

End Date of Comment Period

Start Date of Notice Period

12/15/2007

Revision History Number

1

Revision History Explanation

added Kansas

Reason for Change

Last Reviewed On Date

11/01/2007

Related Documents

This LCD has no Related Documents.

LCD Attachments

There are no attachments for this LCD.

Other Versions

Updated on 11/29/2007 with effective dates 02/01/2008 - N/A