Coding for Sleep Disorders

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Relationship Disclosure: Dr Molano reports no disclosure.

Unlabeled Use of Products/Investigational Use Disclosure: Dr Molano reports no disclosure.

Accurate coding is an important function of neurologic practice. This section of CONTINUUM is part of an ongoing series that presents helpful coding information along with examples related to the issue topic. Tips for diagnosis coding, evaluation and management coding, procedure coding, or a combination are presented, depending on which are most useful for the subject area of the issue.

DIAGNOSTIC CODING

The *International Classification of Sleep Disorders, Second Edition: Diagnostic and Coding Manual* (*ICSD-2*)[1] has the following main categories for sleep disorders in adults: insomnia, sleep-related breathing disorders, hypersomnias, circadian rhythm sleep disorders, parasomnias, sleep-related movement disorders, and other sleep disorders. Coding for these disorders is disseminated in multiple sections of the *International Classification of Diseases, Ninth Revision, Clinical Modification* (*ICD-9-CM*).[2] A full list of codes can be found at the following website: *www.cdc.gov/nchs/icd/icd9cm.htm*

General *ICD-9-CM* Sections and Categories Associated with *ICSD-2* Diagnoses

Sections	Categories
Diseases of the Nervous System and Sense Organs	307, 327, 333, 347, 368
Mental Disorders	291, 292, 300, 307
Persons Encountering Health Services in Other Circumstances	V69
Symptoms, Signs, and Ill-Defined Conditions	780, 786

Primary sleep disorders, such as obstructive sleep apnea (OSA) or narcolepsy, should not be used as codes until a diagnosis has been made after a formal evaluation and symptoms can be used to order diagnostic testing. For example, in a patient with symptoms of sleep-disordered breathing, symptoms such as snoring (*ICD-9-CM* code 786.09 other respiratory abnormalities) and hypersomnia (*ICD-9-CM* code 780.54) can be used to order the initial diagnostic polysomnography for suspected OSA.

For sleep disorders due to a secondary cause, general guidelines are as follows:

1. If any sleep diagnosis is due to a mental disorder or a medical condition, the underlying condition should be coded first.

2. Any diagnosis associated with a drug or substance is coded as 292.85.
3. Any diagnosis associated with alcohol use is coded as 291.82.

For example, if a patient has either insomnia or hypersomnia due to a drug or substance, the code 292.85 for drug-induced sleep disorders should be used. If the patient has sleep difficulties due to alcohol use, then the code 291.82 for alcohol-induced sleep disorders should be used.

Similar to the *ICD-9-CM*, the *International Classification of Diseases, Tenth Edition, Clinical Modification* (*ICD-10-CM*) codes for sleep symptoms and disorders can be found in various sections.[2] A partial list of these sections is included below.

General *ICD-10-CM* Sections Associated with Sleep Symptoms and Disorders

Sleep Symptoms and Disorders	Section
Sleep disorders not due to a substance or known physiological condition	F51
Sleep disorders	G47
Abnormalities of breathing	R06
Problems related to sleep	Z72

Restless legs syndrome (G25.81) and somnolence (R40.0) are not included in this table. Specific ICD-10-CM codes have been made for sleep disorders associated not only with alcohol abuse or dependence (F10.182 or F10.282), but also with individual drugs and substances, such as opioid use unspecified with opioid-induced sleep disorder (F11.982) and other stimulant abuse with stimulant-induced sleep disorder (F15.182).

CURRENT PROCEDURAL TERMINOLOGY CODES

Current Procedural Terminology (CPT) codes for commonly ordered studies in sleep medicine are described below.[3]

Code	Type of Study
95800	Sleep study, unattended, simultaneous recording of heart rate, oxygen saturation, respiratory analysis (eg, by airflow or peripheral arterial tone), and sleep time
95801	Sleep study, unattended, minimum of heart rate, oxygen saturation, and respiratory analysis (eg, by airflow or peripheral arterial tone)
95803	Actigraphy testing, recording, analysis, interpretation, and report (minimum of 72 hours to 14 consecutive days of recording)
95805	Multiple sleep latency or maintenance of wakefulness testing, recording, analysis and interpretation of physiological measurements of sleep during multiple trials to assess sleepiness

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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, 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 parameters of sleep, attended by a technologist
95811	Polysomnography, age 6 years or older, sleep staging with 4 or more parameters of sleep and positive airway pressure, attended by a technologist
95872	Polysomnography, younger than 6 years, sleep staging with 4 or more additional parameters of sleep, attended by a technologist
95873	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

POLYSOMNOGRAPHY AND OTHER TYPES OF STUDIES

Both ''sleep study'' and ''polysomnography'' refer to the recording of various sleep parameters for at least 6 hours. Polysomnography includes sleep staging with EEG, submental EMG, and electrooculogram (EOC). Other sleep parameters can include heart rate with an ECG, respiratory effort, pulse oximetry or other measures of gas exchange, limb movements with bilateral anterior tibialis EMG, extended EEG monitoring, snoring, body position, and esophageal monitoring. A sleep study does not include sleep staging in the analysis.

Polysomnography

Polysomnography performed in a sleep laboratory and attended by a technologist is billed as 95810 if it is a diagnostic study and 95811 if it is a titration study with continuous positive airway pressure after OSA has been diagnosed. Both codes include sleep staging with at least four additional sleep parameters. Polysomnography that is attended by a technologist is billed as 95808 if only one to three other sleep parameters are included.

The American Academy of Sleep Medicine (AASM) has published practice guidelines for polysomnography and sleep studies.[4] Polysomnography is recommended for the following indications:

1. To diagnose sleep-related breathing disorders especially in those with congestive heart failure and symptoms of sleep-disordered breathing
2. To be used as a preoperative evaluation before upper airway surgery in those with snoring or symptoms of OSA

3. To be performed as a part of a titration study for continuous positive airway pressure treatment in those diagnosed with a sleep-related breathing disorder
4. To evaluate for sleep disturbance in patients with neuromuscular disorders if a diagnosis has not been made after clinical assessment of sleep hygiene and sleep schedules
5. To diagnose narcolepsy (must be performed on the evening before a multiple sleep latency test)
6. To diagnose periodic limb movement disorder in those with repetitive leg movements and associated symptoms such as nonrestorative sleep or excessive daytime sleepiness.

Polysomnography can be considered in those with coronary artery disease or stroke who have symptoms of sleep-disordered breathing, in those with sleep-related behaviors that are potentially injurious, as well as in those with parasomnias and seizures that are refractory to conventional treatment. Polysomnography is not recommended to diagnose circadian rhythm disorders, chronic lung disease, restless legs syndrome, depression, or ''common, uncomplicated, noninjurious parasomnias, such as typical disorders of arousals, nightmares, enuresis, sleeptalking, and bruxism.''[4] The study is also not recommended for the routine evaluation for insomnia but can be considered if symptoms of sleep-disordered breathing are present or if insomnia is refractory to treatment.[5]

Current national coverage guidelines from the Centers for Medicare and Medicaid Services (CMS) only address the use of polysomnography in the evaluation for OSA and provide coverage for polysomnography performed in a dedicated sleep study laboratory.[6] As a result, approval for polysomnography may vary by Medicare carrier, and those ordering polysomnography should refer to local Medicare guidelines to determine whether the test is covered for the evaluation of narcolepsy, parasomnias, periodic limb movement disorder, and other sleep disturbances.

Portable Monitoring

In addition to polysomnography that is performed in a sleep laboratory, portable monitoring studies can be used to determine the presence of OSA. Given recent discussions of changes that support the ordering of more out-of-center testing, the AASM is currently in the process of determining not only the types of portable monitors that are appropriate for the diagnosis of OSA but also the patients who would be appropriate for these out-of-center studies.[7]

Portable monitoring studies have been categorized into three types. Type II studies are portable monitors that include sleep staging and therefore can be considered as unattended polysomnography that is not performed in a sleep medicine laboratory. Type III studies are portable monitors that include at least four channels measuring airflow or respiratory effort, heart rate, and oxygen saturation. Type IV studies are portable monitors that use at least one channel and typically include oximetry but do not meet criteria for the other types of studies. Of note, a type I study is not associated with portable monitoring and refers to polysomnography that is performed in a sleep medicine laboratory and attended by a technologist.

Sleep studies associated with codes 95806 and 95807 refer to studies with four channels that monitor ventilation, heart rate, oxygen saturation, and respiratory effort (type III studies). Code 95806 should be used if the study is

not attended by a technologist, and code 95807 should be used if the study is attended by a technologist.

The 95800 and 95801 codes were added in 2011 and refer to unattended out-of-clinic sleep studies with three channels that monitor heart rate, oxygen saturation, and respiratory analysis (type IV studies). Either airflow or peripheral arterial tone can be used for respiratory analysis; respiratory effort is not included. Code 95800 should be used if sleep time is recorded, and code 95801 should be used if sleep time is not recorded. G codes also have been used to report home sleep studies as seen below.

G Code	Type of Study
G0398	Type II Portable Monitor
G0399	Type III Portable Monitor
G0400	Type IV Portable Monitor

According to CMS national guidelines, type II or type III portable monitoring can be covered to diagnose OSA.[6] Type IV portable monitoring can also be covered if at least three channels are used.[6] However, the AASM recommends that portable monitoring only be performed with a comprehensive sleep medicine evaluation by a board-certified or board-eligible sleep medicine specialist and should include airflow, respiratory effort, and heart rate.

Portable monitoring can be considered in those without significant medical comorbidities who are at high risk for having OSA and also can be considered to evaluate response to non–continuous positive airway pressure treatments for OSA. Portable monitoring is not recommended for those with significant medical comorbidities such as neuromuscular disease, pulmonary disease, or congestive heart failure, as well as for those with other sleep disorders.

Actigraphy, Multiple Sleep Latency Test, and Maintenance of Wakefulness Test

There are no CMS national-coverage documents for actigraphy, the multiple sleep latency test (MSLT) or the maintenance of wakefulness test (MWT); those ordering sleep studies should refer to local guidelines to determine whether the test is covered.[6] However, guidelines from the AASM have been published.

MSLT is indicated as a part of the workup for narcolepsy and may be useful in the diagnosis for idiopathic hypersomnia, but is not recommended to diagnose OSA, hypersomnia due to secondary causes, insomnia, or circadian rhythm disorders. MWT can be used to determine effectiveness of treatment for narcolepsy or idiopathic hypersomnia and to determine safety issues depending on clinical judgment.[9] Actigraphy may be used to evaluate circadian rhythm disorders and insomnia, to determine total sleep time in patients with OSA when polysomnography cannot be performed, and to document treatment response for those with circadian rhythm disorders or insomnia.[10]

Pediatric Polysomnography

For children 6 years of age and older, polysomnography performed in a sleep laboratory and attended by a technologist is billed as a 95810 if it is a diagnostic

study and 95811 if it is a titration study with continuous positive airway pressure after OSA has been diagnosed. For children under 6 years of age, polysomnography performed in a sleep laboratory and attended by a technologist is billed as 95872 if it is a diagnostic study and 95873 if it is a titration study with continuous positive airway pressure (CPAP) after OSA has been diagnosed.

AASM practice guidelines for respiratory indications for polysomnography in children have been published. Polysomnography is indicated in children who have symptoms of sleep-disordered breathing. It is indicated to determine the presence of residual OSA after treatment—typically adenotonsillectomy in children—in those with persistent symptoms of sleep-disordered breathing; in those with mild OSA; or in those with craniofacial abnormalities, moderate to severe OSA, obesity, or neurologic conditions. It also is indicated as a part of a titration study with CPAP treatment if there is residual OSA. Polysomnography can be used in those with congenital central alveolar hypoventilation, sleep-related hypoventilation, or an apparent life-threatening event.[11]

OTHER CONSIDERATIONS

Coverage for Continuous Positive Airway Pressure Treatment

Once OSA has been diagnosed, national coverage guidelines by the CMS currently cover the use of CPAP for an initial 12-week period in those who have an apnea-hypopnea index (AHI) of at least 15 events/h or in those with an AHI between five events/h and 15 events/h with the following documented symptoms or comorbidities: excessive daytime sleepiness, cognitive impairment, insomnia, mood disorders, hypertension, ischemic heart disease, or stroke.[6] The AHI should have been determined based on recommended AASM scoring criteria.[6,8]

Coverage for CPAP would continue if the patient were found to benefit from CPAP during the initial 12-week period. In addition to documentation of improved symptoms of OSA and a follow-up clinical evaluation, physicians should also document whether the patient is compliant to CPAP. This compliance data can be downloaded from the CPAP machine and must show that the patient used the device at least 4 hours a night over 70% of nights in a 30-day period.[6] Other local coverage guidelines may apply.

CONCLUSION

Diagnostic codes in the clinical evaluation of sleep disorders can be found in various sections of the *ICD-9-CM* and *ICD-10-CM*.''Polysomnography'' refers to tests that include sleep staging, and ''sleep studies'' are tests that do not include sleep staging. National CMS guidelines currently address the use of polysomnography and portable monitoring (type II and type III studies) in the diagnosis of obstructive sleep apnea, and clinicians should review local Medicare guidelines before ordering studies in the evaluation of other sleep disorders. Changes for coding in sleep medicine, not only for diagnosing a patient with a sleep disorder but in ordering tests to evaluate for sleep disturbances, will continue to occur.

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