Texas Children's'	Sleep Studies in Children		
	<b>Categories</b> Clinical →Care Management CM	This Guideline Applies To: Texas Children's Health Plan	
<b>Guideline #</b> 6235		Document Owner  Bhavana Babber	

#### Abbreviations:

AASM: American Academy of Sleep Medicine

BMI: Body Mass Index

CPT: Current Procedural Terminology MSLT: Multiple Sleep Latency Test TCHP: Texas Children's Health Plan

### **GUIDELINE STATEMENT:**

Texas Children's Health Plan (TCHP) performs authorization of all Sleep Studies, including polysomnography, multiple sleep latency tests, actigraphy, and pneumocardiograms.

### Definitions:

Polysomnography is distinguished from sleep studies by the inclusion of sleep staging that includes a 1-to 4- lead electroencephalogram, electro-oculogram, and a limb or submental electromyogram.

Additional parameters of sleep that are evaluated in polysomnography include, but are not limited to, the following:

- Electrocardiogram
- Airflow (by thermistor or intra-nasal pressure monitoring)
- Respiratory effort
- Adequacy of oxygenation by oximetry or transcutaneous monitoring
- Extremity movement or motor activity
- Electroencophalogram monitoring for sleep staging
- Nocturnal penile tumescence

- •Esophageal pH or intraluminal pressure monitoring
- Continuous blood pressure monitoring
- Snoring
- Body positions
- Adequacy of ventilation by end-tidal or transcutaneous CO2 monitoring

For a sleep study to be reported as a polysomnography, sleep must be recorded and staged

Interpretation and treatment recommendations must be completed by a sleep specialist. The physician's professional interpretation and report must include inspection of the entire recording, examination of the technologist's analysis and observations, and integration of the information gathered from all physiological systems.

Home sleep apnea test: An unattended study that is performed in the client's home using a portable monitoring device. A Home Sleep Apnea Test is administered by an accredited sleep center under the supervision of a board-certified sleep medicine physician, or a board-eligible sleep medicine provider and has a minimum of the following sensors: nasal pressure, chest and abdominal respiratory inductance plethysmography, and oximetry; or else PAT with oximetry and actigraphy. The portable monitoring device must meet American Academy of Sleep Medicine (AASM) practice parameters and clinical guidelines.

# **Prior Authorization GUIDELINE**

- 1. All requests for prior authorization for sleep studies in children are received via fax, phone or mail by the Utilization Management Department and processed during normal business hours.
- 2. The Utilization Management professional receiving the request evaluates the submitted information to determine if the documentation supports the sleep study as an eligible service.
- 3. To request prior authorization for a sleep study, the facility providing the services must be accredited by the American Academy of Sleep Medicine (AASM) or the Joint Commission of Accreditation of Healthcare Organizations. The physician providing supervision of the sleep facility and the specialist interpreting the sleep study must be board-certified or board-eligible, as outlined in the AASM guidelines.

- 4. To request prior authorization for a sleep study, the following documentation must be submitted by the ordering provider:
  - 4.1. Completed Prior Authorization form
  - 4.2. Clinical documentation supporting the medical necessity of the requested study
- 5. Facility/laboratory (supervised) sleep studies in children (17 years and younger) may be considered **medically necessary** when **any one** of the following are met:
  - 5.1. Clinical assessment suggests the diagnosis of congenital central alveolar hypoventilation syndrome
  - 5.2. Clinical concern of risk for sleep disordered breathing due to severe neuromuscular or genetic disorders (e.g. Down syndrome, Prader-Willi syndrome, mucopolysaccharidosis (Hunter, Hurler, Morquio, and Scheie syndromes), Muscular Dystrophies, Spinal Muscular Atrophy, Chiari malformations, myelomeningocele) or severe chest wall deformities (severe scoliosis, severe restrictive lung disease); or
  - 5.3. Craniofacial anomalies that obstruct the upper airway (eg, craniofacial anomalies (cleft palate status post repair, Treacher Collins Syndrome, Pierre Robin Sequence), Achondroplasia, severe Laryngomalacia; or
  - 5.4. Clinical concern of risk for sleep disordered breathing and any of the following complaints or associated features of obstructive sleep apnea (OSA):
    - 5.4.1. Obesity
    - 5.4.2. Hypertension; or
  - 5.5. Adenotonsillectomy is being considered for treatment of obstructive sleep apnea (preoperative indication); or
  - 5.6. Suspected narcoplepsy or suspected idiopathic hypersomnia when a Multiple Sleep Latency Test (MSLT) is planned and adequate amount of sleep is documented; or
  - 5.7. Children suspected of having periodic limb movement disorder (PLMD); or
  - 5.8. Seizures/epilepsy; or
  - 5.9. Positive airway pressure (PAP) titration with a diagnosis of obstructive sleep apnea (OSA); or
  - 5.10. Frequent snoring > 3 nights per week and any of the following complaints or associated features of obstructive sleep apnea (OSA):
    - 5.10.1. Labored breathing during sleep; or
    - 5.10.2. Gasps/snorting noises/observed episodes of apnea; or
    - 5.10.3. Cyanosis; or

- 5.10.4. Daytime sleepiness (interferes with daily activities and is not explained by other conditions, or patient exhibits behavior that may indicate increased efforts to stay awake such as difficulty in attentiveness, hyperactivity, aggressive or disruptive behavior); or
- 5.10.5. Headaches on awakening; or
- 5.10.6. Sleeping in a seated position or with neck hyperextended; or Sleep enuresis after at least six months of continence (secondary enuresis in children > 5 years, which is when nocturnal bladder continence is developmentally expected); or
- 5.10.7. Attention-deficit/hyperactivity disorder (ADHD); or
- 5.10.8. Learning problems associated to poor school performance due to excessive daytime sleepiness; or
- 5.10.9. Overweight (BMI percentile: > the 95th percentile for age and gender); or
- 5.10.10. Underweight (BMI percentile: less than the 5th percentile for age and
- 5.10.11.gender); or
- 5.10.12. Failure to thrive; or
- 5.10.13. Tonsillar hypertrophy; or
- 5.10.14. Adenoidal Facies (dentofacial growth anomaly caused by long term adenoid hypertrophy); or
- 5.10.15. High arched palate; or
- 5.10.16. Micrognathia (jaw is undersized)/retrognathia (abnormal posterior positioning of the maxilla or mandible); or
- 5.10.17. Hypertension
- 5.11. Repeat supervised facility/laboratory sleep study in children may be considered medically necessary when any one of the following are met:
  - 5.11.1. Initial sleep study is inadequate or non-diagnostic and the accompanying caregiver reports that the child's sleep and breathing patterns during the testing were not representative of the child's sleep at home; or
  - A child with previously diagnosed and treated obstructive sleep apnea who 5.11.2. continues to exhibit persistent snoring or other symptoms of sleep disordered breathing; or
  - 5.11.3. Children on chronic PAP support to evaluate whether pressure requirements have changed as a result of the child's growth and development, progression of the underlying severe chronic progressive disease, or the presence of recurrent symptoms while on PAP support; or

## **GUIDELINE**

- 5.11.4. If obesity was a major contributing factor and significant weight loss (10% of body weight or greater) has been achieved, repeat testing may be indicated to determine the need for continued therapy; or
- Six weeks or more post adenotonsillectomy or other pharyngeal surgery 5.11.5. for obstructive sleep apnea (OSA) if severe obstructive sleep apnea (OSA) was present on pre-operative sleep study or if symptoms related to preoperative sleep disordered breathing persist or recur.
- 6. Multiple Sleep Latency Testing (MSLT) may be considered medically
  - 6.1. For the evaluation of symptoms of narcolepsy, to confirm the diagnosis; or
  - 6.2. Suspected idiopathic hypersomnia; or
  - 6.3. When performed for any one of the following:
    - 6.3.1. The first test was invalid or uninterpretable; or
    - 6.3.2. The response to treatment needs to be determined; or
    - 6.3.3. The patient is suspected of having more than one sleep disorder (e.g. diagnosis of obstructive sleep apnea and the patient continues to have excessive daytime sleepiness despite treatment); or
    - 6.3.4. The most recent prior MSLT was conducted two (2) or more years ago
- 7. Home sleep apnea testing may be considered for members 18 years and over who are suspected of having moderate to severe obstructive sleep apnea based on clinical evaluation. A home sleep apnea test must be performed in conjunction with a comprehensive sleep evaluation that has been performed by a physician who is board-certified or board-eligible, as outlined in the AASM guidelines.:
- 8. Actigraphy may be considered medically necessary when objective information is needed to aid in the diagnosis and treatment of insomnia, circadian-rhythm disorders, and excessive sleepiness.
- 9. Billing considerations:
  - 9.1All sleep studies are limited to one per day, and two per rolling year by any provider.
    - 9.2 Pneumocardiograms (procedure code 95807) are limited to clients who are birth through 12 months of age.
    - 9.3 The following CPT codes may be used when reporting sleep study services:
      - 9.3.195803 Actigraphy testing, recording, analysis, interpretation, and report (minimum of 72 hours to 14 consecutive days of recording)
      - 9.3.295805 Multiple sleep latency or maintenance of wakefulness

- this process, 97530testing, recording, analysis and interpretation of physiological measurements of sleep durinmultiple trials to assess sleepiness
  - 9.3.3 95807 (Pneumocardiogram) Sleep study, simultaneous recording of ventilation, respiratory effort, ECG or heart rate, and oxygen saturation, attended by a technologist.
  - 9.3.4 95808 Polysomnography; any age, sleep staging with 1-3 additional parameters of sleep, attended by a technologist
  - 9.3.5 95810 Polysomnography Age 6 years or older, sleep staging with 4 or more additional parameters of sleep, attended by a technologist
  - 9.3.6 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
  - 9.3.7 95782 Polysomnography younger than 6 years, sleep staging 4 or more additional parameters of sleep, attended by technologist
  - 9.3.8 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 technologist
  - 9.3.9 Home Sleep Apnea Tests (Procedure codes G0398, G0399, and G0400) are restricted to members 18 years and over who have a diagnosis code of G4733 (Obstructive sleep apnea)
- Requests that do not meet the criteria established by this guideline will be referred to a TCHP Medical Director/Physician Reviewer for review and the Denial Policy will be followed.
- 11. Preauthorization is based on medical necessity and not a guarantee of benefits or eligibility. Even if preauthorization is approved for treatment or a particular service, that authorization applies only to the medical necessity of treatment or service. All services are subject to benefit limitations and exclusions. Providers are subject to State and Federal Regulatory compliance and failure to comply may result in retrospective audit and potential financial recoupment.

#### REFERENCES:

#### **Peer Reviewed Publications:**

UpToDateExternal Site. Evaluation of Suspected Obstructive Sleep Apnea in Children, Shalini Paruthi, M.D.. Topic last updated January 3, 2019.

## **GUIDELINE**

 UpToDateExternal Site. Management of Obstructive Sleep Apnea in Children, Shalini Paruthi, M.D.. Topic last updated September 11, 2019,

### **Government Agency, Medical Society, and Other Publications:**

Texas Medicaid Provider Procedures Manual, Medical and Nursing Specialists, Physicians, and Physician Assistants Handbook section 9.2.67.3 . August 2020

http://www.tmhp.com/Manuals\_HTML1/TMPPM/Current/index.html#t=TMPPM%2F2\_Med\_Specs\_and\_Phys\_Srvs.htm%23XREF\_24474\_Medical\_and Accessed 01/02/2020

American College of Obstetricians and Gynecologists (ACOG). ACOG Committee on Practice Bulletins. American Academy of Sleep Medicine Guidelines:

Practice Parameters for the Respiratory Indications for Polysomnography in and related procedures: an update for 2005.

Kushida CA, Littner MR, Morgenthaler T, Alessi CA, Bailey D, Coleman J Jr, Friedman L, Hirshkowitz M, Kapen S, Kramer M, Lee-Chiong T, Loube DL, Owens J, Pancer JP, Wise M.

Sleep. 2005 Apr;28(4):499-521. doi: 10.1093/sleep/28.4.499.

Clinical Practice Guideline for Diagnostic Testing for Adult Obstructive Sleep Apnea: An American Academy of Sleep Medicine Clinical Practice Guideline.

Kapur VK, Auckley DH, Chowdhuri S, Kuhlmann DC, Mehra R, Ramar K, Harrod CG.

J Clin Sleep Med. 2017 Mar 15;13(3):479-504. doi: 10.5664/jcsm.6506.

Use of Actigraphy for the Evaluation of Sleep Disorders and Circadian Rhythm Sleep-Wake Disorders: An American Academy of Sleep Medicine Clinical Practice Guideline. Smith MT, McCrae CS, Cheung J, Martin JL, Harrod CG, Heald JL, Carden KA. J Clin Sleep Med. 2018 Jul 15;14(7):1231-1237. doi: 10.5664/jcsm.7230.

Practice parameters for clinical use of the multiple sleep latency test and the maintenance of wakefulness test. Littner MR, Kushida C, Wise M, Davila DG, Morgenthaler T, Lee-Chiong T, Hirshkowitz M, Daniel LL, Bailey D, Berry RB, Kapen S, Kramer M; Standards of Practice Committee of the American Academy of Sleep Medicine.Sleep. 2005 Jan;28(1):113-21. doi: 10.1093/sleep/28.1.113.

Practice parameters for the respiratory indications for polysomnography in children.

Aurora RN, Zak RS, Karippot A, Lamm CI, Morgenthaler TI, Auerbach SH, Bista SR, Casey KR, Chowdhuri S, Kristo DA, Ramar K; American Academy of Sleep Medicine. Sleep. 2011 Mar 1;34(3):379-88. doi: 10.1093/sleep/34.3.379.

Practice parameters for the non-respiratory indications for polysomnography and multiple sleep latency testing for children. Aurora RN, Lamm CI, Zak RS, Kristo DA, Bista SR, Rowley JA, Casey KR.Sleep. 2012 Nov 1;35(11):1467-73. doi: 10.5665/sleep.2190

## **GUIDELINE**

American Academy of Pediatrics Policy:

Diagnosis and management of childhood obstructive sleep apnea syndrome. Marcus CL, Brooks LJ, Draper KA, Gozal D, Halbower AC, Jones J, Schechter MS, Sheldon SH, Spruyt K, Ward SD, Lehmann C, Shiffman RN; American Academy of Pediatrics. Pediatrics. 2012 Sep;130(3):576-84. doi: 10.1542/peds.2012-1671

Last Approval date by the Clinic & Administrative Advisory Committee (CAAC): 09/17/2020

**RELATED DOCUMENTS:** 

**REFERENCES:** 

Original Document Creation Date: 11/21/2016	This Version Creation Date: 08/04/2020	Effective/Publication Date: 03/23/2021