

# Clinical Policy: Multiple Sleep Latency Testing

Reference Number: PA.CP.MP.24

Effective Date: 01/18

Date of Last Revision: 04/23

Coding Implications

Revision Log

## Description

Multiple Sleep Latency Testing (MSLT) objectively measures an individual's tendency to fall asleep and is a component of the routine evaluation for suspected narcolepsy or idiopathic hypersomnia. The MSLT is considered the standard measurement of sleepiness and has proven to be a sensitive and reproducible test for quantifying sleepiness; however, it is not a part of the routine evaluation for other sleep disorders. A polysomnogram (PSG) should be conducted on the night prior to the MSLT and should not demonstrate significant sleep pathology (e.g., obstructive sleep apnea, central sleep apnea, etc.) to ensure the most valid MSLT results.<sup>1</sup>

## Policy/Criteria

- I. It is the policy of PA Health and Wellness® that MSLT is **medically necessary** for ages two years and above, when all of the following criteria are met:
  - A. Excessive daytime sleepiness (EDS) for  $\geq$  eight weeks, as measured by a score of  $\geq 10$  on the Epworth Sleepiness Scale;
  - B. If age is  $< 11$  years, all of the following:
    1. Has had a consultation with a pediatric neurologist, pediatric pulmonologist, or pediatric sleep medicine specialist, and the MSLT has been ordered by the consulting physician;
    2. The MSLT will be conducted in a facility specializing in pediatric sleep disturbances with pediatric consultants available;
  - C. A standard PSG is planned for the night before the MSLT;
  - D. Suspected idiopathic hypersomnia; or suspected narcolepsy and any of the following:
    1. Cataplexy (brief, sudden loss of muscle tone);
    2. Hypnagogic and/or hypnopompic hallucinations;
    3. Sleep paralysis;
  - E. Medical conditions considered and treated, if indicated;
  - F. Medications deemed noncontributory;
  - G. No psychiatric disorder by history, or psychiatric disorder is under the care of a psychiatrist or psychologist;
  - H. Drug and alcohol misuse excluded.
- II. It is the policy of PA Health and Wellness® that repeat MSLT is **medically necessary** for ages two years and above when meeting criteria in section I. and at least one of the following:
  - A. The initial test findings are invalid or uninterpretable;
  - B. The initial test is affected by extraneous circumstances, or appropriate study conditions were not present during initial testing;
  - C. The member/enrollee is suspected to have narcolepsy, but previous MSLT evaluation did not provide polygraphic confirmation.

### **Background**

The multiple sleep latency test (MSLT) consists of four or five 20-minute nap opportunities at two-hour intervals throughout the day, while recording an electroencephalography (EEG) and other parameters comparable to a polysomnography (PSG). The test is based on the belief that the speed with which one falls asleep is an indication of the severity of sleepiness and is conducted on the day following an overnight PSG.<sup>5,10,11</sup> The MSLT is indicated as part of the evaluation of patients with suspected narcolepsy and may be useful in the evaluation of patients with suspected idiopathic hypersomnia.<sup>1,8,13</sup>

During the MSLT, a sleep latency time of less than five minutes is distinctly abnormal and supports a diagnosis of narcolepsy or severe sleep deprivation. The International Classification of Sleep Disorders, 3rd edition (ICSD-3), requires a mean sleep latency of less than eight minutes and two or more sleep onset REM periods as part of the diagnostic criteria for narcolepsy. Prepubertal children tend to have a somewhat longer sleep latency on the MSLT compared with adults, such that values of eight to 15 minutes (rather than less than eight minutes) on the MSLT may suggest pathologic sleepiness.<sup>1,10,11</sup>

Narcolepsy has been reported in children as young as two years; however, the peak onset is 15 years, with a less pronounced peak at 36 years. The classic pentad of narcolepsy consists of excessive daytime sleepiness (EDS), cataplexy, hypnagogic and/or hypnopompic hallucinations, disrupted nocturnal sleep, and sleep paralysis. Children rarely manifest all five classic symptoms; restlessness and over-activity may be more common than EDS. Academic deterioration, inattentiveness, and emotional lability are common. Serial MSLTs may be required for diagnosis, and multiple confounding factors may be involved.<sup>2</sup>

Diagnosing narcolepsy in children presents several challenges. Clinical manifestations of sleep problems can vary by age and developmental level with further variations within pediatric age groups. There are consistent data showing the diagnostic utility of MSLT in school-aged children as young as five years with suspected narcolepsy.<sup>1,14</sup> Studies show MSLT is a highly sensitive test in this population, with sensitivity for diagnosing narcolepsy ranging from 79% to 100%.<sup>1,13</sup>

The same standard criteria used for adults are used for MSLT in children and studies are scored similarly, using the same normative data. However, special issues exist regarding performance, interpretation, and operating characteristics of MSLT in children. Studies demonstrated that developmentally normal, prepubertal, school-aged children seldom become sleepy during the standard 20-minute daytime nap timeframe; yet adolescents often can fall asleep on MSLT.<sup>13</sup> As a result, some studies extended the nap timeframe from the usual 20 minutes to 30 minutes. As young children have a long sleep latency, research is needed to determine whether nap opportunities longer than the standard 20 minutes would better evaluate sleepiness in prepubertal children.<sup>13</sup> A repeat MSLT may be indicated if the initial test was affected by inappropriate study conditions, the results are unclear or uninterpretable, or the test failed to confirm a diagnosis of narcolepsy despite strong clinical suspicion.<sup>5</sup> Children with suspected narcolepsy must be evaluated by a pediatric neurologist, pulmonologist, or sleep medicine specialist.<sup>2</sup>

## CLINICAL POLICY

### Multiple Sleep Latency Testing



#### Coding Implications

This clinical policy references Current Procedural Terminology (CPT®). CPT® is a registered trademark of the American Medical Association. All CPT codes and descriptions are copyrighted 2022, American Medical Association. All rights reserved. CPT codes and CPT descriptions are from the current manuals and those included herein are not intended to be all-inclusive and are included for informational purposes only. Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

CPT® Codes	Description
95805	Multiple sleep latency or maintenance of wakefulness testing, recording, analysis and interpretation of physiological measurements of sleep during multiple trials to assess sleepiness.

Reviews, Revisions, and Approvals	Date	Approval Date
References reviewed and updated	05/18	07/18
Minor wording changes for clarity. Deleted codes 95810 and 95811 as they are informational only (for PSG). References reviewed and updated. Specialist review.	10/2020	07/2020
Replaced all instances of “member” with “participant/enrollee” where applicable. References reviewed and updated. Specialist review.	7/15/2021	
Annual review. Added criteria for repeat MSLT in section II. Updated additional background information with no further impact to criteria. References reviewed and updated. Changed “review date” in the header to “date of last revision” and “date” in the revision log header to “revision date.” Specialist reviewed.	8/30/2022	
Ad Hoc review completed. Minor rewording with no clinical significance. ICD-10-code table removed. References reviewed and updated.	04/23	

#### References

1. Aurora RN, Lamm CI, Zak RS, et al. Practice parameters for the non-respiratory indications for polysomnography and multiple sleep latency testing for children. *Sleep*. 2012;35(11):1467 to 1473. Published 2012 Nov 1. doi:10.5665/sleep.2190
2. Nallu S, Bozorg AM, Thomas DJ. Narcolepsy. Medscape. Accessed at <https://emedicine.medscape.com/article/1188433-overview>. Published August 3, 2020. Accessed March 1, 2023.
3. Chervin RD. Approach to the patient with excessive daytime sleepiness. UpToDate. [www.uptodate.com](http://www.uptodate.com). Updated January 26, 2023. Accessed March 1, 2023.

## CLINICAL POLICY

### Multiple Sleep Latency Testing



4. Chervin RD. Idiopathic hypersomnia. UpToDate. [www.uptodate.com](http://www.uptodate.com). Updated January 31, 2022. Accessed March 1, 2023.
5. Freedman N. Quantifying sleepiness. UpToDate. [www.uptodate.com](http://www.uptodate.com). Updated October 10, 2022. Accessed March 1, 2023.
6. Kirsch D. Stages and architecture of normal sleep. UpToDate. [www.uptodate.com](http://www.uptodate.com). Updated September 12, 2022. Accessed March 1, 2023.
7. Kotagal S, Maski K. Clinical features and diagnosis of narcolepsy in children. UpToDate. [www.uptodate.com](http://www.uptodate.com). Updated September 12, 2022. Accessed March 1, 2023.
8. Littner MR, Kushida C, Wise M, et al. Practice parameters for clinical use of the multiple sleep latency test and the maintenance of wakefulness test. *Sleep*. 2005;28(1):113 to 121. doi:10.1093/sleep/28.1.113
9. Marcus CL, Brooks LJ, Draper KA, et al. Diagnosis and management of childhood obstructive sleep apnea syndrome. *Pediatrics*. 2012;130(3):e714 to e755. doi:10.1542/peds.2012-1672
10. Krahn LE, Arand DL, Avidan AY, et al. Recommended protocols for the Multiple Sleep Latency Test and the Maintenance of Wakefulness Test in adults: guidance from the American Academy of Sleep Medicine. *J Clin Sleep Med*. 2021;17(12):2489 to 2498.
11. Tapia IE, Wise MS. Assessment of sleep disorders in children. UpToDate. [www.uptodate.com](http://www.uptodate.com). Updated May 26, 2022. Accessed March 1, 2023.
12. Smith MT, McCrae CS, Cheung J, et al. Use of actigraphy for the evaluation of sleep disorders and circadian rhythm sleep-wake disorders: an American academy of sleep medicine clinical practice guideline. *J Clin Sleep Med*. 2018;14(7):1231 to 1237. Published 2018 Jul 15. doi:10.5664/jcsm.7230
13. Kotagal S, Nichols CD, Grigg-Damberger MM, et al. Non-respiratory indications for polysomnography and related procedures in children: an evidence-based review. *Sleep*. 2012;35(11):1451 to 1466. Published 2012 Nov 1. doi:10.5665/sleep.2188
14. Pamula Y, Nixon GM, Edwards E, et al. Australasian Sleep Association clinical practice guidelines for performing sleep studies in children. *Sleep Med*. 2017;36 Suppl 1:S23 to S42. doi:10.1016/j.sleep.2017.03.020
15. Local coverage determination (LCD): polysomnography and other sleep studies (L36861). Centers for Medicare and Medicaid Services Web site. <https://www.cms.gov/medicare-coverage-database/search.aspx>. Published June 5, 2017 (revised December 1, 2019). Accessed March 1, 2023.
16. Local coverage determination (LCD): polysomnography and other sleep studies (L34040). Centers for Medicare and Medicaid Services Web site. <https://www.cms.gov/medicare-coverage-database/search.aspx>. Published October 1, 2015 (revised December 1, 2019). Accessed March 1, 2023.
17. Local coverage determination (LCD): polysomnography and other sleep studies (L36902). Centers for Medicare and Medicaid Services Web site. <https://www.cms.gov/medicare-coverage-database/search.aspx>. Published March 6, 2017 (revised January 26, 2023). Accessed March 1, 2023.
18. Local coverage determination (LCD): polysomnography and sleep testing (L33405). Centers for Medicare and Medicaid Services Web site. <https://www.cms.gov/medicare-coverage-database/search.aspx>. Published October 1, 2015 (revised July 1, 2020). Accessed March 1, 2023.