

# Clinical Policy: Multiple Sleep Latency Testing

Reference Number: LA.CP.MP.24

Date of Last Revision: ~~05/23~~07/24

[Coding Implications](#)

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## 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 Louisiana Healthcare Connections 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 Louisiana Healthcare Connections 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>

### Coding Implications

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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	<del>Review</del> <u>Revision</u> Date	Approval Date
Converted corporate to local policy.	08/15/2020	
Replaced all instances of “member” with “member/enrollee.” References reviewed and updated.	10/2021	
Annual review. Updated language in description. Added criteria for repeat MSLT in section II. Updated additional background information with no further impact to criteria. References reviewed and updated. Specialist reviewed.	7/22	9/26/22
Annual review completed. Minor rewording with no clinical significance. ICD-10-code table removed. References reviewed and updated.	5/23	7/21/23
<u>Annual review. References reviewed and updated. Reviewed by external specialist.</u>	<u>07/24</u>	

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