

# MEDICAL POLICY



<b>SUBJECT: QUANTITATIVE SENSORY TESTING</b>	<b>EFFECTIVE DATE: 10/18/01</b> <b>REVISED DATE: 09/19/02</b> <b>ARCHIVED DATE: 08/21/03</b> <b>EDITED DATE: 11/10/05, 11/16/06, 11/15/07, 11/20/08, 10/29/09, 10/28/10, 09/15/11, 09/20/12, 09/19/13, 09/18/14, 09/17/15, 09/15/16, 09/21/17, 09/20/18</b>
<b>POLICY NUMBER: 2.01.34</b> <b>CATEGORY: Technology Assessment</b>	<b>PAGE: 1 OF: 3</b>
<ul style="list-style-type: none"><li>• <i>If a product excludes coverage for a service, it is not covered, and medical policy criteria do not apply.</i></li><li>• <i>If a commercial product (including an Essential Plan product) or a Medicaid product covers a specific service, medical policy criteria apply to the benefit.</i></li><li>• <i>If a Medicare product covers a specific service, and there is no national or local Medicare coverage decision for the service, medical policy criteria apply to the benefit.</i></li></ul>	

## **POLICY STATEMENT:**

Based upon our criteria and assessment of the peer-reviewed literature, quantitative sensory testing has not been medically proven to be effective and is considered **investigational** for all indications.

*Refer to Corporate Medical Policy # 11.01.03 regarding Experimental and Investigational Services.*

## **POLICY GUIDELINES:**

The Federal Employees Health Benefit Program (FEHBP/FEP) requires that procedures, devices or laboratory tests approved by the U.S. Food and Drug Administration (FDA) may not be considered investigational and thus, these procedures, devices, or laboratory tests may be assessed only on the basis of their medical necessity.

## **DESCRIPTION:**

Electromyographic nerve conduction tests are diagnostic studies designed to evaluate the function of large myelinated nerve fibers (e.g., the motor nerves) and thus do not evaluate the function of smaller myelinated and unmyelinated sensory nerves which may show pathologic changes before the involvement of the motor nerves.

Quantitative sensory testing (QST) is not a nerve conduction study and is not electromyography. It is proposed as a non-invasive technique for assessing nerve damage by measuring the pressure threshold felt in the skin. QST was developed to measure sensory stimuli, thermal stimuli or vibratory stimuli. Current perception threshold (CPT) testing and pressure-specified sensory device (PSSD) testing are two methods of QST.

By testing an area of the skin that corresponds to a specific nerve, the extent of nerve damage can be determined by the amount of pressure needed for a person to feel the touch of the testing device. Each area is tested several times and pressure threshold measurements are stored in a computer. The test is pain-free and uses no electrical stimulation, just touch.

Another distinction between a nerve conduction test and quantitative sensory testing is that the former is performed in a laboratory setting, while QST is performed in an office setting.

QST has been investigated for a broad range of clinical applications, including detection of carpal tunnel syndrome, detection of tarsal tunnel syndrome, detection of diabetic neuropathy, detection of fasciitis, evaluation of incomplete spinal cord injury, lumbar radiculopathy, neurotoxicity testing and quantification of hypoesthetic and hyperesthetic conditions.

The CASE IV Computer Aided Sensory Evaluator, Neurometer® CPT, Medi-Dx 7000, Vibration Perception Threshold (VPT) meter, and the NK Pressure Specified Sensory Device are examples of QST devices approved by the Food and Drug Administration (FDA) for use in the U.S.

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**RATIONALE:**

Neurotron received U.S. Food and Drug Administration (FDA) clearance in 1986 to market the electrodiagnostic sensory nerve conduction threshold neurometer for the evaluation of sensory nerve disease and injuries.

Although quantitative sensory testing was developed as an alternative to traditional electrodiagnostic testing, published studies have not provided evidence to validate its efficacy and its clinical role.

**CODES:**    Number            Description

*Eligibility for reimbursement is based upon the benefits set forth in the member's subscriber contract.*

CODES MAY NOT BE COVERED UNDER ALL CIRCUMSTANCES. PLEASE READ THE POLICY AND GUIDELINES STATEMENTS CAREFULLY.

Codes may not be all inclusive as the AMA and CMS code updates may occur more frequently than policy updates.

**All codes are considered investigational.**

<b><u>CPT:</u></b>	0106T	Quantitative sensory testing (QST), testing and interpretation per extremity, using touch pressure stimuli to assess large diameter sensation
	0107T	Quantitative sensory testing (QST), testing and interpretation per extremity, using vibration to assess large diameter fiber sensation
	0108T	Quantitative sensory testing (QST), testing and interpretation per extremity, using cooling stimuli to assess small nerve fiber sensation and hyperalgesia
	0109T	Quantitative sensory testing (QST), testing and interpretation per extremity, using heat-pain stimuli to assess small nerve fiber sensation and hyperalgesia
	0110T	Quantitative sensory testing (QST), testing and interpretation per extremity, using other stimuli to assess sensation

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<b><u>HCPCS:</u></b>	G0255	Current perception threshold/sensory nerve conduction threshold test (sNCT), per limb, any nerve
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**ICD10:**    Multiple diagnosis codes

**REFERENCES:**

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\*Periquet MI, et al. Painful sensory neuropathy; prospective evaluation using skin biopsy. Neurol 1999 Nov 10;53(8):1614-5.

\*Shy ME, et al. Quantitative sensory testing: Report of the Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology. Neurol 2003;60:898-904.

**KEY WORDS:**

Current perception threshold testing, Quantitative sensory test, QST, Sensory nerve conduction threshold test.

## CMS COVERAGE FOR MEDICARE PRODUCT MEMBERS

There is currently a National Coverage Determination (NCD) for Sensory Nerve Conduction Threshold Tests. Please refer to the following NCD website for Medicare Members:

<https://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=270&ncdver=2&CoverageSelection=Both&ArticleType=All&PolicyType=Final&s=New+York+-+Upstate&CptHcpcsCode=36514&bc=gAAAABAAAAAAAA%3d%3d&>