## Local Coverage Determination (LCD): Autonomic Function Tests (L34788)

### Contractor Information

<table>
<thead>
<tr>
<th>Contractor Name</th>
<th>Contract Number</th>
<th>Contract Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Novitas Solutions, Inc.</td>
<td>04412</td>
<td>A and B MAC</td>
</tr>
</tbody>
</table>

### LCD Information

#### Document Information

- **LCD ID**: L34788
- **LCD Title**: Autonomic Function Tests
- **Revision Effective Date**: For services performed on or after 09/01/2014
- **Notice Period Start Date**: 06/05/2014
- **Notice Period End Date**: 07/23/2014
- **Revise Ending Date**: N/A

#### Jurisdiction

**Texas**

#### Original Effective Date

For services performed on or after 07/24/2014

#### Retirement Date

N/A

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CMS National Coverage Policy

Title XIX of the Social Security Act, Section 1862(a)(1)(A) states that no Medicare payment shall be made for items or services which are not reasonable and necessary for the diagnosis or treatment of illness or injury.

Title XIX of the Social Security Act, Section 1862(a)(7). This section excludes routine physical examinations.

Title XIX of the Social Security Act, Section 1833(e) states that no payment shall be made to any provider for any claim that lacks the necessary information to process the claim.

Coverage Guidance

Coverage Indications, Limitations, and/or Medical Necessity

Compliance with the provisions in this policy may be monitored and addressed through post payment data analysis and subsequent medical review audits.

Notice: It is not appropriate to bill Medicare for services that are not covered (as described by this entire LCD) as if they are covered. When billing for non-covered services, use the appropriate modifier.

Autonomic Nervous System (ANS) testing measures alterations in the R-R interval of the electrocardiogram (ECG) in response to parasympathetic and sympathetic system stimulation. The aim of such testing is to correlate signs and symptoms of possible autonomic dysfunction with objective measurement to substantiate or support clinical usefulness.

Drugs can have substantial effects on the results of ANS testing and are a common cause of falsely abnormal results. Patients should refrain from caffeine, nicotine, and alcohol at least 3 hours prior to testing. All medications with adrenergic and anticholinergic properties need to be discontinued at least 48 hours prior to the study. These would include but are not limited to the following drugs: chlorpromazine, thioridazine, the tricyclic and tetracyclic antidepressants, bupropion, mirtazapine, venlafaxine, clonidine, alpha-blockers, beta-blockers, calcium channel blockers, opiates, topical capsaicin, and diphenhydramine.

ANS testing can be grouped into three general categories:

- Cardiovascular innervation (CPT code 95921) – a test that provides a standardized quantitative evaluation of vagal innervation to parasympathetic function of the heart. Responses are based on the interpretation of changes in continuous heart recordings in response to standardized maneuvers and include heart rate response to deep breathing, Valsalva ratio, and 30:15 ratio heart rate responses to standing.

- Vasomotor adrenergic innervation (CPT code 95922) – evaluates adrenergic innervation of the circulation and of the heart in autonomic failure. The following tests are included: beat-to-beat blood pressure and R-R interval response to Valsalva maneuver, sustained hand grip, and blood pressure and heart rate responses to tilt-up or active standing.

- Sudomotor (CPT code 95923) – function testing is used to evaluate and document neuropathic disturbances that may be associated with pain. The quantitative sudomotor axon reflex test (QFAR), thermoregulatory sweat test (TST), sympathetic skin responses, and silastic sweat imprints are tests of sympathetic cholinergic sudomotor function.

The QFAR measures axon reflex-mediated sudomotor responses quantitatively and evaluates post-ganglionic sudomotor function. Recording is usually carried out from the forearm and three lower extremity skin sites to assess the distribution of post-ganglionic deficits.

The TST evaluates the distribution of sweating by a change in color of an indicator powder. This test has a high sensitivity, and its specificity for delineating the site of lesion is greatly enhanced when used in conjunction with QFAR.

Sweat imprints are formed by the secretion of active sweat glands into a plastic (silastic) imprint. The test can determine sweat gland density, a histogram of sweat droplet size and sweat volume per area.
Indications:

Most autonomic disorders are diagnosed clinically, with laboratory and formal diagnostic testing playing an adjunctive or confirmatory role. Testing may also be appropriate to monitor disease progression when there is a change in clinical status, or to evaluate a patient’s response to specific treatment for an autonomic disorder.

Autonomic function testing is covered as reasonable and necessary when used as a diagnostic tool to evaluate symptoms indicative of vasomotor instability, such as hypotension, orthostatic tachycardia, and hyperhidrosis after more common causes have been excluded by other testing, and the ANS testing is directed at establishing a more accurate or definitive diagnosis or contributing to clinically useful and relevant medical decision making for one of the following indications:

1. To diagnose the presence of autonomic neuropathy in a patient with signs or symptoms suggesting a progressive autonomic neuropathy.
2. To evaluate the severity and distribution of a diagnosed progressive autonomic neuropathy.
3. To differentiate the diagnosis between certain complicated variants of syncope from other causes of loss of consciousness.
4. To evaluate inadequate response to beta blockade in vasodepressor syncope.
5. To evaluate distressing symptoms in a patient with a clinical picture suspicious for distal small fiber neuropathy in order to diagnose the condition.
6. To differentiate the cause of postural tachycardia syndrome.
7. To evaluate change in type, distribution or severity of autonomic deficits in patients with autonomic failure.
8. To evaluate the response to treatment in patients with autonomic failure who demonstrate a change in clinical exam.
9. To diagnose axonal neuropathy or suspected autonomic neuropathy in the symptomatic patient.
10. To evaluate and treat patients with recurrent unexplained syncope to demonstrate autonomic failure, after more common causes have been excluded by other standard testing.

Limitations:

 Syndromes of autonomic dysfunction for which ANS might add valuable clinical information are relatively rare. Generally, only after excluding more common causes of autonomic signs or symptoms (e.g., hypotension, hyperhidrosis, and orthostatic tachycardia) may formal autonomic testing be indicated to exclude or confirm rarer autonomic disorders. The following indications are considered NOT medically reasonable and necessary and will not be covered:

1. Patient screenings without signs or symptoms of autonomic dysfunction, including patients with diabetes, hepatic or renal disease
2. Testing for the sole purpose of monitoring disease intensity or treatment efficacy in diabetes, hepatic or renal disease
3. Testing where the results are not used in clinical decision-making and patient management
4. Testing performed by physicians who do not have evidence of training, and expertise to perform and interpret these tests. (Physicians must have knowledge, training, and expertise to perform and interpret these tests, and to assess and train personnel working with them. This training and expertise must have been acquired within the framework of an accredited residency and/or fellowship program or must reflect extensive continued medical education activities. If these skills have been acquired by way of continued medical education, the courses must be comprehensive, offered or sponsored or endorsed by an academic institution in the United States and/or by the applicable specialty/subspecialty society in the United States, and designated by the American Medical Association (AMA) or American Osteopathic Association (AOA) as category I credit.)

Equipment for Autonomic Nervous System Studies

Equipment with FDA clearance for heart rate variability measurements in response to paced respirations and exercises that tests only heart rate variability does not meet the full range of testing parameters required for the performance of 95921 and 95922, and does not ensure full test requirements, such as blood pressure monitoring and blood oxygen levels; nor do they incorporate proper testing conditions, such as the use of a tilt table. Providers may be asked to supply information on the equipment used to perform autonomic nervous system studies, to ensure that all studies performed meet the requirements of the procedure.

Notice: This LCD imposes diagnosis limitations that support diagnosis to procedure code automated denials. However, services performed for any given diagnosis must meet all of the indications and limitations stated in this policy, the general requirements for medical necessity as stated in CMS payment policy manuals, any and all existing CMS national coverage determinations, and all Medicare payment rules.

As published in CMS IOM 100-08, Section 13.5.1, in order to be covered under Medicare, a service shall be reasonable and necessary. When appropriate, contractors shall describe the circumstances under which the proposed LCD for the service is considered reasonable and necessary under Section 1862(a)(1)(A).

Contracts shall consider a service to be reasonable and necessary if the contractor determines that the service is:

- Safe and effective.
- Not experimental or investigational (exception: routine costs of qualifying clinical trial services with dates of service on or after September 19, 2000 that meet the requirements of the Clinical Trials NCD are considered reasonable and necessary).
- Appropriate, including the duration and frequency that is considered appropriate for the service, in terms of whether it is:
  - Furnished in accordance with accepted standards of medical practice for the diagnosis or treatment of the patient's condition or to improve the function of a malformed body member.
  - Furnished in a setting appropriate to the patient's medical needs and condition.
  - Ordered and furnished by qualified personnel.
  - One that meets, but does not exceed, the patient's medical needs.
  - At least as beneficial as an existing and available medically appropriate alternative.

### Coding Information

#### Bill Type Codes

Contractors may specify Bill Types to help providers identify those Bill Types typically used to report this service. Absence of a Bill Type does not guarantee that the policy does not apply to that Bill Type. Complete absence of all Bill Types indicates that coverage is not influenced by Bill Type and the policy should be assumed to apply equally to all claims.

<table>
<thead>
<tr>
<th>Bill Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>999x</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

#### Revenue Codes

Contractors may specify Revenue Codes to help providers identify those Revenue Codes typically used to report this service. In most instances Revenue Codes are purely advisory; unless specified in the policy services reported under other Revenue Codes are equally subject to this coverage determination. Complete absence of all Revenue Codes indicates that coverage is not influenced by Revenue Code and the policy should be assumed to apply equally to all Revenue Codes.

**Note:** The contractor has identified the Bill Type and Revenue Codes applicable for use with the CPT/HCPCS codes included in this LCD. Providers are reminded that not all CPT/HCPCS codes listed can be billed with all Bill Type and/or Revenue Codes listed. CPT/HCPCS codes are required to be billed with specific Bill Type and Revenue Codes. Providers are encouraged to refer to the CMS Internet-Only Manual (IOM) Pub. 100-04 Claims Processing Manual, for further guidance.

<table>
<thead>
<tr>
<th>Revenue Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>99999</td>
<td>Not Applicable</td>
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</table>

#### CPT/HCPCS Codes

##### Group 1 Paragraph

Italicized and/or quoted material is excerpted from the American Medical Association, *Current Procedural Terminology (CPT)* codes.

**Note:** Providers are reminded to refer to the long descriptors of the CPT codes in their CPT book.

##### Group 1 Codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>95921</td>
<td>Autonomic nrv parasymp inerv</td>
</tr>
<tr>
<td>95922</td>
<td>Autonomic nrv adrenrg inerv</td>
</tr>
<tr>
<td>95923</td>
<td>Autonomic nrv syst funj test</td>
</tr>
<tr>
<td>95924</td>
<td>Ans parasymp &amp; symp w/tlt</td>
</tr>
<tr>
<td>95943</td>
<td>Parasymp&amp;symp hrt rate test</td>
</tr>
</tbody>
</table>
ICD-9 Codes that Support Medical Necessity

**Group 1 Paragraph:** It is the provider’s responsibility to select codes carried out to the highest level of specificity and selected from the ICD-9-CM code book appropriate to the year in which the service is rendered for the claim(s) submitted.

**Group 1 Codes**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>250.60</td>
<td>DIABETES WITH NEUROLOGICAL MANIFESTATIONS, TYPE II OR UNSPECIFIED TYPE, NOT STATED AS UNCONTROLLED</td>
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<tr>
<td>250.61</td>
<td>DIABETES WITH NEUROLOGICAL MANIFESTATIONS, TYPE I [JUVENILE TYPE], NOT STATED AS UNCONTROLLED</td>
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<tr>
<td>250.62</td>
<td>DIABETES WITH NEUROLOGICAL MANIFESTATIONS, TYPE II OR UNSPECIFIED TYPE, UNCONTROLLED</td>
</tr>
<tr>
<td>250.63</td>
<td>DIABETES WITH NEUROLOGICAL MANIFESTATIONS, TYPE I [JUVENILE TYPE], UNCONTROLLED</td>
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<tr>
<td>277.30</td>
<td>AMYLOIDOSIS, UNSPECIFIED</td>
</tr>
<tr>
<td>277.31</td>
<td>FAMILIAL MEDITERRANEAN FEVER</td>
</tr>
<tr>
<td>277.39</td>
<td>OTHER AMYLOIDOSIS</td>
</tr>
<tr>
<td>333.0</td>
<td>OTHER DEGENERATIVE DISEASES OF THE BASAL GANGLIA</td>
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<tr>
<td>337.00</td>
<td>IDIOPATHIC PERIPHERAL AUTONOMIC NEUROPATHY, UNSPECIFIED</td>
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<tr>
<td>337.09</td>
<td>OTHER IDIOPATHIC PERIPHERAL AUTONOMIC NEUROPATHY</td>
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<tr>
<td>337.20</td>
<td>REFLEX SYMPATHETIC DYSTROPHY UNSPECIFIED</td>
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<tr>
<td>337.21</td>
<td>REFLEX SYMPATHETIC DYSTROPHY OF THE UPPER LIMB</td>
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<td>337.22</td>
<td>REFLEX SYMPATHETIC DYSTROPHY OF THE LOWER LIMB</td>
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<tr>
<td>337.29</td>
<td>REFLEX SYMPATHETIC DYSTROPHY OF OTHER SPECIFIED SITE</td>
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<td>356.4</td>
<td>IDIOPATHIC PROGRESSIVE POLYNEUROPATHY</td>
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<td>356.8</td>
<td>OTHER SPECIFIED IDIOPATHIC PERIPHERAL NEUROPATHY</td>
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<td>356.9</td>
<td>UNSPECIFIED IDIOPATHIC PERIPHERAL NEUROPATHY</td>
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<tr>
<td>458.0</td>
<td>ORTHOSTATIC HYPOTENSION</td>
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<td>780.2</td>
<td>SYNCOPE AND COLLAPSE</td>
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<td>780.8</td>
<td>GENERALIZED HYPERHIDROSIS</td>
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<tr>
<td>785.0</td>
<td>TACHYCARDIA UNSPECIFIED</td>
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ICD-9 Codes that DO NOT Support Medical Necessity

General Information

**Associated Information**

**DOCUMENTATION REQUIREMENTS**

1. All documentation must be maintained in the patient’s medical record and available to the contractor upon request.
2. Every page of the record must be legible and include appropriate patient identification information (e.g., complete name, dates of service(s)). The documentation must include the legible signature of the physician or non-physician practitioner responsible for and providing the care to the patient.
3. The submitted medical record must support the use of the selected ICD-9-CM code(s). The submitted CPT/HCPCS code must describe the service performed.
4. The medical record documentation must support the medical necessity of the services as directed in this policy.
UTILIZATION GUIDELINES

In accordance with CMS Ruling 95-1 (V), utilization of these services should be consistent with locally acceptable standards of practice.

Appropriate diagnostic testing may be performed once for patients to confirm or exclude specific autonomic disease.

For patients with an identified autonomic disorder, frequency of testing depends on changes in clinical status or response to intervention.

Providers who perform these tests on an unusually high proportion of their patients, or at frequencies exceeding once per patient per year, may be subject to medical review.

Notice: This LCD imposes utilization guideline limitations. Despite Medicare allowing up to these maximums, each patient’s condition and response to treatment must medically warrant the number of services reported for payment. Medicare requires the medical necessity for each service reported to be clearly demonstrated in the patient’s medical record. Medicare expects that patients will not routinely require the maximum allowable number of services.

Sources of Information and Basis for Decision

The contractor is not responsible for the continued viability of websites listed.


Other Contractor Policies

Contractor Medical Directors

Revision History Information

<table>
<thead>
<tr>
<th>Revision Number</th>
<th>Effective Date</th>
<th>Explanation</th>
<th>Reason for Change</th>
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<tr>
<td>R2</td>
<td>09/01/2014</td>
<td>This revision updates the Novitas Solutions MAC numerical jurisdictional designation to the new MAC Lettered jurisdiction designation(s). No other changes were made to this LCD.</td>
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</table>

Link to this LCD on the MCD:

Looking for more detail? View this policy at the CMS Medicare Coverage Database (MCD) for your state by choosing the appropriate link:

Arkansas | Louisiana | Mississippi | Colorado | Texas | Oklahoma | New Mexico

Associated Documents

Attachments

N/A