



MEDICAL POLICY STATEMENT

Ohio Medicaid

Policy Name & Number	Date Effective
Autonomic Nerve Testing-OH MCD-MM-1783	09/01/2025
Policy Type	
MEDICAL	

Medical Policy Statement prepared by CareSource and its affiliates are derived from literature based on and supported by clinical guidelines, nationally recognized utilization and technology assessment guidelines, other medical management industry standards, and published MCO clinical policy guidelines. Medically necessary services include, but are not limited to, those health care services or supplies that are proper and necessary for the diagnosis or treatment of disease, illness, or injury and without which the patient can be expected to suffer prolonged, increased or new morbidity, impairment of function, dysfunction of a body organ or part, or significant pain and discomfort. These services meet the standards of good medical practice in the local area, are the lowest cost alternative, and are not provided mainly for the convenience of the member or provider. Medically necessary services also include those services defined in any Evidence of Coverage documents, Medical Policy Statements, Provider Manuals, Member Handbooks, and/or other policies and procedures.

Medical Policy Statements prepared by CareSource and its affiliates do not ensure an authorization or payment of services. Please refer to the plan contract (often referred to as the Evidence of Coverage) for the service(s) referenced in the Medical Policy Statement. If there is a conflict between the Medical Policy Statement and the plan contract (i.e., Evidence of Coverage), then the plan contract (i.e., Evidence of Coverage) will be the controlling document used to make the determination. According to the rules of Mental Health Parity Addiction Equity Act (MHPAEA), coverage for the diagnosis and treatment of a behavioral health disorder will not be subject to any limitations that are less favorable than the limitations that apply to medical conditions as covered under this policy.

Table of Contents

A. Subject	2
B. Background	2
C. Definitions.....	2
D. Policy	3
E. Conditions of Coverage	3
F. Related Policies/Rules	4
G. Review/Revision History	4
H. References	4

A. Subject

Autonomic Nerve Testing

B. Background

The autonomic nervous system (ANS) coordinates multiple reflex actions which are essential for life. It controls the heart rate, blood pressure, digestion, respiration, pupillary reactivity, sweating, urination, sexual arousal, and regulates the functions of internal organs. This system provides the homeostasis of the cells, tissues, and organs throughout the body and protects against the disturbances imposed by the external and internal stressors.

The ANS has three main divisions: the sympathetic nervous system (SNS), the parasympathetic nervous system (PNS), and the enteric nervous system. In general, the SNS and PNS have opposing effects. Each region belonging to the 'pain matrix' interacts with ANS. The descending system regulates pain and creates a regulatory effect by the contribution of aminergic neurotransmitters.

Disorders of the ANS can affect any system of the body; they can originate in the peripheral or central nervous system and may be primary or secondary to other disorders. Symptoms suggesting autonomic dysfunction include orthostatic hypotension, heat intolerance, nausea, constipation, urinary retention or incontinence, nocturia, impotence, and dry mucous membranes. If a patient has symptoms suggesting autonomic dysfunction, cardiovagal, adrenergic, and sudomotor tests are usually done to help determine severity and distribution of the dysfunction.

Autonomic testing using automated devices, in which software automatically generates an interpretation, has not been validated. Most of these devices generate reports automatically and do not allow physician interpretation of the raw data, which is a serious design flaw when evaluating patients who have, for example, cardiac rhythm abnormalities that mislead the testing results.

C. Definitions

- **Autonomic Nervous System** – The part of the nervous system that controls involuntary visceral actions.
- **Cardiovagal innervation** – 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. A tilt table may be used but is not required.
- **Vasomotor adrenergic innervation** – A test that 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 and must be performed with a tilt table.

- **Sudomotor** – Function testing is used to evaluate and document neuropathic disturbances that may be associated with pain. The quantitative sudomotor axon reflex test (QSART), thermoregulatory sweat test (TST), sympathetic skin responses, and silastic sweat imprints are tests of sympathetic cholinergic sudomotor.
- **Sympathetic Skin Response** – A test to measure a provoked change in the electrical potential of the skin.

D. Policy

- I. CareSource considers autonomic nerve testing medically necessary to evaluate autonomic nerve function and aid in the diagnosis of **ANY** of the following conditions:
 - A. distal small fiber neuropathy
 - B. postural tachycardia syndrome
 - C. reflexive sympathetic dystrophy
 - D. recurrent variants of syncope
 - E. one or more of the following progressive autonomic neuropathies:
 1. diabetic autonomic neuropathy
 2. amyloid neuropathy
 3. Sjogren's syndrome
 4. idiopathic neuropathy
 5. pure autonomic failure
 6. multiple system atrophy

II. Limitations

Properly trained physicians with the necessary expertise should perform and interpret these tests. Training can be obtained through accredited residency/fellowship programs or AMA-approved continuing medical education courses.

III. Exclusions

- A. Autonomic nerve function testing to aid in the diagnosis of **ANY** other condition not listed above may not be covered or reimbursable.
- B. Screening patients without signs or symptoms of autonomic dysfunction, including patients with diabetes, hepatic or renal disease.
- C. Testing results that are not used in clinical decision-making or patient management
- D. The use portable automated devices for autonomic nerve testing, including ANSAR ANX 3.0, VitalScan ANS, ANSiscope or any similar device is considered experimental, investigational and non-covered.

E. Conditions of Coverage

NA

F. Related Policies/Rules

Experimental or Investigational Item or Service

G. Review/Revision History

DATE		ACTION
Date Issued	05/21/2025	New policy. Approved at Committee.
Date Revised		
Date Effective	09/01/2025	
Date Archived		

H. References

1. Baker JR, Hira R, Uppal J, et al. Clinical Assessment of the Autonomic Nervous System. *Card Electrophysiol Clin*. 2024;16(3):239-248. doi:10.1016/j.ccep.2024.02.001
2. Cheshire WP, Freeman R, Gibbons CH, et al. Electrodiagnostic assessment of the autonomic nervous system: A consensus statement endorsed by the American Autonomic Society, American Academy of Neurology, and the International Federation of Clinical Neurophysiology *Clin Neurophysiol*. 2021;132(2):666-682. doi:10.1016/j.clinph.2020.11.024
3. Gutiérrez J. Electrophysiological assessment of peripheral and central autonomic disorders. *Handb Clin Neurol*. 2023;195:301-314. doi:10.1016/B978-0-323-98818-6.00015-7
4. Illigens BMW, Gibbons CH. Autonomic testing, methods and techniques. *Handb Clin Neurol*. 2019;160:419-433. doi:10.1016/B978-0-444-64032-1.00028-X.
5. Lee HJ, Lee KH, Moon JY, et al. Prevalence of autonomic nervous system dysfunction in complex regional pain syndrome. *Reg Anesth Pain Med*. 2021;46(3):196-202. doi:10.1136/rapm-2020-101644
6. Novak P. Quantitative autonomic testing. *J Vis Exp*. 2011;(53):2502. doi:10.3791/2502
7. Panigrahi B, Srivastava AK, Garg D, et al. Examination of the autonomic nervous system at the bedside. *Acta Neurol Belg*. Published online December 5, 2024. doi:10.1007/s13760-024-02654-2

Approved ODM 06/04/2025