Medical Coverage Policy | Autonomic Nervous System Testing Using Portable Automated Devices

EFFECTIVE DATE: 11|03|2015
POLICY LAST UPDATED: 10|04|2023

OVERVIEW

The autonomic nervous system (ANS) controls physiologic processes that are not under conscious control. ANS testing consists of a battery of tests intended to evaluate the integrity and function of the ANS. These tests are intended as adjuncts to the clinical examination in the diagnosis of ANS disorder.

This policy is specific to testing using portable automated devices.

MEDICAL CRITERIA

Not applicable

PRIOR AUTHORIZATION

Not applicable

POLICY STATEMENT

Medicare Advantage and Commercial Products

Autonomic nervous system testing using portable automated devices is considered not covered for Medicare Advantage Plans and not medically necessary for Commercial Products for all indications as the evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Non-standardized component information of autonomic function testing (AFT) that is determined by a physician to be useful in a patient assessment and clinical decision making given certain patient risks/signs/symptoms, is included in the physician's basic evaluation and management service and is not separately reimbursed service.

COVERAGE

Benefits may vary between groups and contracts. Please refer to the appropriate Benefit Booklet or Subscriber Agreement for limitations of benefits/coverage for services not medically necessary.

BACKGROUND

The autonomic nervous system (ANS) has a primary role in controlling physiologic processes not generally under conscious control. They include heart rate, respirations, gastrointestinal (GI) motility, thermal regulation, bladder control, and sexual function. The ANS is a complex neural regulatory network that consists of 2 complementary systems that work to maintain homeostasis: the sympathetic and the parasympathetic systems. The sympathetic nervous system is responsible for arousal, and sympathetic stimulation leads to increased pulse, increased blood pressure (BP), increased sweating, decreased GI motility, and an increase in other glandular exocrine secretions. This is typically understood as the "fight or flight" response. Activation of the parasympathetic nervous system will mostly have the opposite effects; BP and pulse will decrease, GI motility increases, and ~~there will be a~~ decreased ~~in~~ sweating and other glandular secretions.

Autonomic nervous system (ANS) testing should be performed in a dedicated ANS testing laboratory. Testing in a dedicated laboratory should be performed under closely controlled conditions, and results should be interpreted by an individual with expertise in ANS testing. Testing using automated devices with results interpreted by computer software has not been validated and thus has the potential to lead to

erroneous results. Therefore, the evidence for ANS testing using portable automated devices is insufficient to determine that the technology results in an improvement in the net health outcome.

Examples of Automated testing devices are as follows:

ANX 3.0
Sudoscan®
Hrv Acquire
ZYTO Hand Cradle
Bodytronic® 200
Finapres Nova Noninvasive Hemodynamic Monitor
VitalScan® ANS

Medicare Advantage Products

The following indications are considered not medically reasonable and necessary and will not be covered:

1. Screening patients 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 results that are not used in clinical decision-making or 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, 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) as category I credit or the American Osteopathic Association (AOA).
5. General professional standards with FDA clearance apply for all equipment used in ANS testing.
6. Testing with ANSAR ANX 3.0 or a similar machine is considered investigational for screening and will not be covered.

For individuals who have signs and symptoms of autonomic nervous system (ANS) dysfunction who receive ANS testing, the evidence includes studies of diagnostic accuracy. Relevant outcomes are test accuracy, symptoms, functional outcomes, and quality of life. The evidence base is limited. There is a lack of a criterion standard for determining autonomic dysfunction, which limits the ability to perform high-quality research on diagnostic accuracy. Also, numerous tests are used in various conditions, making it difficult to determine values for the overall diagnostic accuracy of a battery of tests. Scattered reports of diagnostic accuracy are available for certain tests, most commonly in the diabetic population, but these reports do not specify estimates of accuracy for the entire battery of tests. Reported sensitivities and specificities are high for patients with clinically defined distal symmetric polyneuropathy using a symptom-based score as a reference standard, but these estimates are likely biased by study designs that used patients with clinically diagnosed disease and a control group of healthy volunteers. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

CODING

Medicare Advantage and Commercial Products

There is no specific CPT code for Autonomic nervous system testing using portable automated devices. Claims should be filed with an unlisted CPT code.

95999 Unlisted neurological or neuromuscular diagnostic procedure

RELATED POLICIES
Medicare Advantage Plan National and Local Coverage Determinations

PUBLISHED
Provider Update, December 2023
Provider Update, May 2022
Provider Update, August 2021
Provider Update, July 2020
Provider Update, June 2019

REFERENCES

1. Gibbons CH, Cheshire WP, Fife TD. American Academy of Neurology Model Coverage Policy: Autonomic Nervous System Testing. 2014; https://www.aan.com/siteassets/home-page/tools-and-resources/practicing-neurologist--administrators/billing-and-coding/model-coverage-policies/14autonomicmodel_tr.pdf Accessed April 19, 2023.
2. Centers for Medicare and Medicaid (CMS Local Coverage Determination (LCD) L36236- Autonomic Function Testing.
3. Centers for Medicare and Medicaid (CMS Local Coverage Determination (LCD) Billing and Coding: Autonomic Function Testing Article A57024

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