

Corporate Medical Policy

Dynamic Posturography

File Name: dynamic_posturography
Origination: 9/1990
Last Review: 2/2023

Description of Procedure or Service

Dynamic posturography tests an individual's balance control in situations intended to isolate factors that affect balance in everyday experiences. It provides quantitative information on the degree of imbalance present but is not intended to diagnosis specific types of balance disorders.

Dynamic posturography attempts to provide more quantitative information regarding the functional ability to maintain balance. The individual, wearing a harness to prevent falls, stands on an enclosed platform surrounded by a visual field. By altering the angle of the platform or shifting the visual field, the test assesses movement coordination and the sensory organization of visual, somatosensory, and vestibular information relevant to postural control. The individual undergoes six different testing situations designed to evaluate the vestibular, visual, and proprioceptive/somatosensory components of balance. In general terms, the test measures an individual's balance (as measured by a force platform to calculate the movement of the individual's center of mass) while visual and somatosensory cues are altered. These tests vary by whether the eyes are open or closed, whether the platform is fixed or sway-referenced, and whether the visual surround is fixed or sway-referenced. Sway-referencing involves making instantaneous computer-aided alterations in the platform or visual surround to coincide with changes in body position produced by sway. The purpose of sway-referencing is to cancel out accurate feedback from somatosensory or visual systems that are normally involved in maintaining balance. In the first 3 components of the test, the support surface is stable, and visual cues are either present, absent, or sway-referenced. In tests 4 to 6, the support surface is sway-referenced to the individual, and visual cues are either present, absent, or sway-referenced. In tests 5 and 6, the only accurate sensory cues that are available for balance are vestibular cues. Results of computerized dynamic posturography have been used to determine what type of information (i.e., visual, vestibular, proprioceptive) can and cannot be used to maintain balance. Dynamic posturography cannot be used to localize the site of a lesion.

Complaints of imbalance are common in older individuals and contribute to the risk of falling in the elderly population. Falls are an important cause of death and disability in this population in the United States. Maintenance of balance is a complex physiologic process requiring interaction of the vestibular, visual, proprioceptive/somatosensory system, and central reflex mechanisms and is influenced by the general health of the individual (i.e., muscle tone, strength, and range of motion). Therefore, identifying and treating the underlying balance disorder may be difficult. Commonly used balance function tests such as electronystagmography (ENG) and rotational chair tests attempt to measure the extent and site of a vestibular lesion, but do not attempt to assess the functional ability of the patient to maintain balance. Posturography tests an individual's balance control in situations intended to isolate factors that affect balance in everyday experiences. Balance can be rapidly assessed qualitatively by asking the individual to maintain a steady stance on a flat or compressible surface (i.e., foam pads) with the eyes open or closed. By closing the eyes, the visual input into balance is eliminated. The use of foam pads eliminates the sensory and proprioceptive cues. Therefore, only vestibular input is available when standing on a foam pad with eyes closed.

The NeuroCom EquiTest® (NeuroCom International, Portland, OR; now Clackamas, OR) is a dynamic posturography device that received 510(k) marketing clearance from the U.S. Food and Drug Administration (FDA). Other dynamic posturography device makers include Vestibular Technologies

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(Cheyenne, WY) and Medicapteurs (Balma, France). Companies that previously manufactured dynamic posturography devices include Metitur (Jyvaskyla, Finland) and Micromedical Technology (Chatham, IL).

*****Note: This Medical Policy is complex and technical. For questions concerning the technical language and/or specific clinical indications for its use, please consult your physician.**

Policy

Dynamic Posturography is considered investigational for all applications. BCBSNC does not provide coverage for investigational services or procedures.

Benefits Application

This medical policy relates only to the services or supplies described herein. Please refer to the Member's Benefit Booklet for availability of benefits. Member's benefits may vary according to benefit design; therefore member benefit language should be reviewed before applying the terms of this medical policy.

When Dynamic Posturography is covered

Not applicable.

When Dynamic Posturography is not covered

Dynamic Posturography is considered investigational.

Policy Guidelines

For individuals with suspected balance disorders who receive dynamic posturography, the evidence includes cross-sectional comparisons of results in patients with balance disorders and healthy controls, and retrospective case series reporting outcomes of patients assessed with dynamic posturography as part of clinical care. Relevant outcomes are test accuracy and validity, symptoms, and morbid events. There are no generally accepted reference standards for dynamic posturography, which makes it difficult to determine how the results can be applied in clinical care. There are no studies demonstrating the clinical utility of the test that would lead to changes in management that improve outcomes (eg, symptoms, function). The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Billing/Coding/Physician Documentation Information

This policy may apply to the following codes. Inclusion of a code in this section does not guarantee that it will be reimbursed. For further information on reimbursement guidelines, please see Administrative Policies on the Blue Cross Blue Shield of North Carolina web site at www.bcsnc.com. They are listed in the Category Search on the Medical Policy search page.

Applicable Code: 92548, 92549

BCBSNC may request medical records for determination of medical necessity. When medical records are requested, letters of support and/or explanation are often useful, but are not sufficient documentation unless all specific information needed to make a medical necessity determination is included.

Scientific Background and Reference Sources

Dynamic Posturography

BCBSA Medical Policy Reference Manual - 12/95

MEDLINE search 1/96 through 7/97

MEDLINE search 1/97 through 8/99. No change to policy.

Baloh RW, Jacobson KM, Beykirch K, Honrubia V. Static and Dynamic Posturography in patients with vestibular and cerebellar lesions. *Arch Neurol*. 1998 May;55(5):649-54

Baloh RW, Corona S, Jacobson KM, Enrietto JA, Bell T. A prospective study of posturography in normal older people. *J Am Geriatr Soc* 1998 Apr;46(4):438-43

Evans MK, Krebs DE. Posturography does not test vestibulospinal function. *Otolaryngol Head Neck Surg* 1999 Feb;120(2):164-73.

Specialty Matched Consultant Advisory Group 9/2000

Medical Policy Advisory Group - 9/14/2000

Specialty Matched Consultant Advisory Panel - 7/2002

BCBSA Medical Policy Reference Manual - Policy # 2.01.02; 7/12/2002 Update

ECRI HTAIS Hotline - "Dynamic Posturography for Balance/Mobility Disorders; Accessed 8/30/02

BCBSA Medical Policy Reference Manual, 2.01.02; 7/17/03

Specialty Matched Consultant Advisory Panel - 6/2004.

BCBSA Medical Policy Reference Manual, 2.01.02; 4/1/05

BCBSA Medical Policy Reference Manual, 2.01.02; 3/7/06

Specialty Matched Consultant Advisory Panel - 6/2006.

BCBSA Medical Policy Reference Manual [Electronic Version]. 2.01.02, 4/17/07

BCBSA Medical Policy Reference Manual [Electronic Version]. 2.01.02, 5/8/08

Specialty Matched Consultant Advisory Panel - 6/23/08

BCBSA Medical Policy Reference Manual [Electronic Version]. 2.01.02, 10/6/09

BCBSA Technology Evaluation Center (TEC). Dynamic posturography in the assessment of vestibular dysfunction. TEC Assessments 1996; Volume 11, Tab 11

BCBSA Medical Policy Reference Manual [Electronic Version]. 2.01.02, 11/11/10

Specialty Matched Consultant Advisory Panel – 2/29/12

BCBSA Medical Policy Reference Manual [Electronic Version]. 2.01.02, 11/08/12

Specialty Matched Consultant Advisory Panel – 2/20/13

BCBSA Medical Policy Reference Manual [Electronic Version]. 2.01.02, 11/14/13

Specialty Matched Consultant Advisory Panel – 2/25/14

BCBSA Medical Policy Reference Manual [Electronic Version]. 2.01.02, 11/13/14

Specialty Matched Consultant Advisory Panel – 2/25/15

Specialty Matched Consultant Advisory Panel – 2/24/16

BCBSA Medical Policy Reference Manual [Electronic Version]. 2.01.02, 2/11/16

Specialty Matched Consultant Advisory Panel – 2/22/17

BCBSA Medical Policy Reference Manual [Electronic Version]. 2.01.02, 2/9/17

BCBSA Medical Policy Reference Manual [Electronic Version]. 2.01.02, 2/8/2018

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Specialty Matched Consultant Advisory Panel – 2/28/2018
Specialty Matched Consultant Advisory Panel – 2/20/2019
BCBSA Medical Policy Reference Manual [Electronic Version]. 2.01.02, 2/14/2019
Specialty Matched Consultant Advisory Panel – 2/2020
BCBSA Medical Policy Reference Manual [Electronic Version]. 2.01.02, 2/13/2020
Specialty Matched Consultant Advisory Panel – 2/2021
BCBSA Medical Policy Reference Manual [Electronic Version]. 2.01.02, 2/11/2021
Specialty Matched Consultant Advisory Panel – 2/2022
Specialty Matched Consultant Advisory Panel – 2/2023

Policy Implementation/Update Information

5/90	Evaluated: Investigational
6/96	Reviewed: National Association reviewed - 12/95. No change.
7/97	Reviewed. No change.
8/99	Reviewed, Reformatted, Medical Term Definitions added. No policy change
10/99	Archived
6/00	Reactivated due to investigational status.
7/00	System coding changes.
9/00	Specialty Matched Consultant Advisory Panel. Approved. Medical Policy Advisory Group review. Approved. No change in criteria.
11/01	Coding format change.
8/02	Specialty Matched Consultant Advisory Panel meeting 7/12/2002. No changes.
9/02	Billing/Coding section revised to indicate that CPT code 92548 describes Computerized Dynamic Posturography. System coding changes.
3/04	Benefits Application and Billing/Coding sections updated for consistency.
7/15/04	Specialty Matched Consultant Advisory Panel meeting 6/21/04. No changes to policy criteria. Reference source added.
1/29/07	Specialty Matched Consultant Advisory Panel meeting 6/1/06. No changes to policy criteria. Reference sources added. (pmo)
7/28/08	Description section revised with additional information. Policy Guidelines, Key Words, Medical Term Definitions and Reference Sources added. Specialty Matched Consultant Advisory Panel review 6/23/08. Policy criteria changed from investigational to not medically necessary. Under "When Not Covered" - "It is not covered. It is considered not medically necessary, based on more than 10 years of research that has not shown dynamic posturography to provide incremental improvement in health outcomes over standard physical therapy. BCBSNC does not cover services that are not medically necessary." (pmo)
6/22/10	Policy Number(s) removed. (amw)
7/6/2010	Description section revised. Not Covered section revised slightly to read: "Dynamic Posturography is not covered. It is considered not medically necessary." The following added to Policy Guidelines section: "An updated literature review did not identify any studies that demonstrated in any improvement in health outcomes over standard physical

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- therapy, and it has not been shown to be clinically appropriate for diagnosis or treatment.”
References updated. Specialty Matched Consultant Advisory Panel review 5/24/10. No change to policy statement. (adn)
- 3/15/11 Policy Statement changed from “not medically necessary” to “investigational.” Rationale in the Policy Guidelines section extensively rewritten. Specialty Matched Consultant Advisory Panel review 2/23/11. No change in medical coverage/non-coverage criteria. (adn)
- 3/20/12 Specialty Matched Consultant Advisory Panel Review 2/29/12. No change in medical coverage/non-coverage criteria. (sk)
- 1/15/13 Reference added. No change to policy statement. (sk)
- 3/12/13 Specialty Matched Consultant Advisory Panel review 2/20/2013. No change to Policy statement. (sk)
- 4/1/14 Reference added. Specialty Matched Consultant Advisory Panel review 2/25/2014. Senior Medical Director review. No change to Policy statement. (sk)
- 3/10/15 Reference added. Specialty Matched Consultant Advisory Panel review 2/25/2015. (sk)
- 4/1/16 Specialty Matched Consultant Advisory Panel review 2/24/2016. Reference added. Policy Guidelines updated. (sk)
- 3/31/17 Specialty Matched Consultant Advisory Panel review 2/22/2017. (sk)
- 6/30/17 Reference added. (sk)
- 3/9/18 Reference added. Specialty Matched Consultant Advisory Panel review 2/28/2018. (sk)
- 3/12/19 Specialty Matched Consultant Advisory Panel review 2/20/2019. (sk)
- 5/14/19 Reference added. (sk)
- 1/28/20 CPT code 92549 added to Billing/Coding section. (sk)
- 3/10/20 Specialty Matched Consultant Advisory Panel review 2/19/2020. (sk)
- 8/25/20 Reference added. (sk)
- 7/13/21 Specialty Matched Consultant Advisory Panel review 2/17/2021. (sk)
- 3/8/22 Reference added. Specialty Matched Consultant Advisory Panel review 2/16/2022. (sk)
- 3/7/23 Specialty Matched Consultant Advisory Panel review 2/15/2023. (sk)

Medical policy is not an authorization, certification, explanation of benefits or a contract. Benefits and eligibility are determined before medical guidelines and payment guidelines are applied. Benefits are determined by the group contract and subscriber certificate that is in effect at the time services are rendered. This document is solely provided for informational purposes only and is based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. Medical practices and knowledge are constantly changing and BCBSNC reserves the right to review and revise its medical policies periodically.