

# COMPUTERIZED DYNAMIC POSTUROGRAPHY

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#### INSTRUCTIONS FOR USE

This Medical Policy provides assistance in interpreting UnitedHealthcare benefit plans. When deciding coverage, the enrollee specific document must be referenced. The terms of an enrollee's document (e.g., Certificate of Coverage (COC) or Summary Plan Description (SPD) and Medicaid State Contracts) may differ greatly from the standard benefit plans upon which this Medical Policy is based. In the event of a conflict, the enrollee's specific benefit document supersedes this Medical Policy. All reviewers must first identify enrollee eligibility, any federal or state regulatory requirements and the enrollee specific plan benefit coverage prior to use of this Medical Policy. Other Policies and Coverage Determination Guidelines may apply. UnitedHealthcare reserves the right, in its sole discretion, to modify its Policies and Guidelines as necessary. This Medical Policy is provided for informational purposes. It does not constitute medical advice.

UnitedHealthcare may also use tools developed by third parties, such as the  $MCG^{TM}$  Care Guidelines, to assist us in administering health benefits. The  $MCG^{TM}$  Care Guidelines are intended to be used in connection with the independent professional medical judgment of a qualified health care provider and do not constitute the practice of medicine or medical advice.

# BENEFIT CONSIDERATIONS

### **Essential Health Benefits for Individual and Small Group:**

For plan years beginning on or after January 1, 2014, the Affordable Care Act of 2010 (ACA) requires fully insured non-grandfathered individual and small group plans (inside and outside of Exchanges) to provide coverage for ten categories of Essential Health Benefits ("EHBs"). Large group plans (both self-funded and fully insured), and small group ASO plans, are not subject to the requirement to offer coverage for EHBs. However, if such plans choose to provide coverage for benefits which are deemed EHBs (such as maternity benefits), the ACA requires all dollar limits on those benefits to be removed on all Grandfathered and Non-Grandfathered plans. The determination of which benefits constitute EHBs is made on a state by state basis. As such, when using this guideline, it is important to refer to the enrollee's specific plan document to determine benefit coverage.

# **COVERAGE RATIONALE**

Computerized dynamic posturography (CDP) testing, also called balance board testing or equilibrium platform testing (EPT) is unproven and not medically necessary for evaluating balance disorders.

The overall quality of the evidence on the efficacy of computerized dynamic posturography (CDP) for evaluation of vestibular disorders is weak. There is a lack of well-designed, prospective, randomized controlled trials using blind assessment to demonstrate the diagnostic utility of CDP compared with standard tests. There are no reliable data demonstrating any consistent, beneficial effect of CDP testing on patient outcomes.

# **APPLICABLE CODES**

The Current Procedural Terminology (CPT®) codes and Healthcare Common Procedure Coding System (HCPCS) codes listed in this policy are for reference purposes only. Listing of a service code in this policy does not imply that the service described by this code is a covered or non-covered health service. Coverage is determined by the enrollee specific benefit document and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claims payment. Other policies and coverage determination guidelines may apply. This list of codes may not be all inclusive.

	Description
92548 Computerized dynamic posturography	

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## **Coding Clarification**

Computerized dynamic posturography is unproven and not medically necessary for all diagnosis codes.

# **DESCRIPTION OF SERVICES**

Computerized dynamic posturography (CDP), also known as moving platform posturography or dynamic posturography, uses a platform device for evaluating a patient's ability to maintain balance. CDP has been used to measure a patient's ability to maintain balance under varying conditions when the usual cues that one relies upon to remain upright, vision, proprioception, and vestibular function, are manipulated. The goal of testing is to isolate vestibular symptoms to a specific cause that can often be treated. (Hayes, 2008)

Standard diagnostic tests include electronystagmography and rotational chair tests, which evaluate eye movements in response to a number of different stimuli including the position and rotation of the head.

#### **CLINICAL EVIDENCE**

The clinical evidence was reviewed on February 5, 2014 with no additional information identified that would change the unproven and not medically necessary conclusions.

The evidence in the published peer-reviewed medical literature examining the safety and effectiveness of CDP includes older studies, some poorly designed, with varying results (Morgan, et al., 2002; El Kashian, et al., 1998; Di Fabio, 1996; Di Fabio, 1995). A systematic review by Piirtola and Era (2006) evaluated prospective studies (n=9 studies) and reported that measures related to dynamic posturography (i.e., moving platforms) were not found to be predictive of falls among elderly populations. It was found that while certain aspects of force platform data may have predictive value for subsequent falls, the small number of available studies made it difficult to draw conclusions.

Additional evidence evaluating the use of CDP is primarily in the form of prospective and retrospective case series and validation studies with patient populations ranging from 26–216 (Ebersbach, et al., 2011; Mockford, et al., 2010; Gouveris, et al., 2007; Mbongo, et al., 2005; Sataloff, et al., 2005; Soto, et al., 2004; Artuso, et al., 2004; Amin; et al., 2002). Studies have included patients with a various disorders including vertigo, vestibular schwannoma, and Ménière's disease. Overall, small sample sizes and poor study design have limited the generalizability of these study results. The data have not reliably demonstrated any beneficial effects of CDP evaluation on patient outcomes.

Insufficient evidence exists in the form of well-designed, large-population, prospective, randomized, controlled trials to draw definitive conclusions regarding the accuracy of computerized dynamic posturography (CDP) and the impact of CDP testing results on health outcomes. The diagnostic utility of CDP has not been demonstrated. Qualitative data provided by CDP testing serves as a supplement to established alternatives. (Hayes, 2008)

#### **Professional Societies**

# American Academy of Otolaryngology - Head and Neck Surgery (AAO-HNS)

AAO-HNS recognizes that the following tests or treatments are medically indicated and appropriate in the evaluation or treatment of persons with suspected balance or dizziness disorders:

- rotational chair step velocity testing
- harmonic acceleration testing
- vestibular rehabilitation therapy including the use of therapy devices
- dynamic platform posturography

This statement is not part of a formal guideline and is not supported by clinical evidence. (AAO-HNS, 2007)

## **U.S. FOOD AND DRUG ADMINISTRATION (FDA)**

The EquiTest® most frequently discussed CDP system in the medical literature, received FDA approval (K851744) on August 5, 1985. See the following Web site for more information: <a href="http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfPMN/pmn.cfm">http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfPMN/pmn.cfm</a>. Accessed January 29, 2014.

Devices for testing vestibular dysfunction are captured in the FDA 510(k) database under Product Code LXV (Vestibular Analysis Apparatus), IKN (Electromyograph, Diagnostic) and/or Product Code KHX (Force-Measuring Platforms). Note that devices in product categories LXV and KHX are Class I, 510(k) exempt devices. Devices in product category IKN are class II devices which are also 510(k) exempt. Although many manufacturers have voluntarily submitted product information via the 510(k) process, it is not a requirement. All manufacturers are, however, required to register their establishment and submit a "Device Listing" form; these records can be viewed in the Device Listing Database. See the following Web sites for more information:

- <a href="http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfPCD/classification.cfm">http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfPCD/classification.cfm</a>. Accessed January 29, 2014.
- http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfRL/rl.cfm. Accessed January 29, 2014...

Another device mentioned in the literature is the Balance Quest<sup>™</sup> (also known as System 2000; Vorteq) (Micromedical Technologies Inc.), which is listed as an unclassified device. See the following Web sites for more information:

<a href="http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfRL/rl.cfm">http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfRL/rl.cfm</a>. (Search: Micromedical as Establishment Name). Accessed January 29, 2014.

# **CENTERS FOR MEDICARE AND MEDICAID SERVICES (CMS)**

Medicare does not have a National Coverage Determination (NCD) for Computerized Dynamic Posturography. Local Coverage Determinations (LCDs) do exist. Refer to the LCDs for <a href="Computerized Dynamic Posturography">Computerized Dynamic Posturography</a> and <a href="Vestibular Function Test">Vestibular Function Test</a>.

(Accessed February 13, 2013)

#### **REFERENCES**

American Academy of Otolaryngology - Head and Neck Surgery (AAO-HNS) [Internet]. Posturography guideline. December 2007. Available at: <a href="http://www.entnet.org/Practice/policyPosturography.cfm">http://www.entnet.org/Practice/policyPosturography.cfm</a>. Accessed January 29, 2014...

Amin M, Girardi M, Konrad HR, et al. A comparison of electronystagmography results with posturography findings from the BalanceTrak 500. Otol Neurotol. 2002 Jul;23(4):488-93.

Artuso A, Garozzo A, Contucci AM, et al. Role of dynamic posturography (Equitest) in the identification of feigned balance disturbances. Acta Otorhinolaryngol Ital. 2004 Feb;24(1):8-12.

Di Fabio RP. Meta-analysis of the sensitivity and specificity of platform posturography. Arch Otolaryngol Head Neck Surg. 1996;122(2):150-156.

Di Fabio RP. Sensitivity and specificity of platform posturography for identifying patients with vestibular dysfunction. Phys Ther. 1995 Apr;75(4):290-305.

Ebersbach G, Gunkel M. Posturography reflects clinical imbalance in Parkinson's disease. Mov Disord. 2011 Feb 1;26(2):241-6. Doi: 10.1002/mds.23189. Epub 2010 Dec 13.

ECRI Institute. Custom Hotline Response. Dynamic Posturography for Balance Disorders. March 2007. Archived.

El-Kashlan HK, Shepard NT, Asher AM, et al. Evaluation of clinical measures of equilibrium. Laryngoscope. 1998 Mar;108(3):311-9.

Fife TD, Tusa RJ, Furman JM, et al. Assessment: vestibular testing techniques in adults and children: report of the Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology. Neurology. 2000 Nov 28;55(10):1431-41. Available at: <a href="http://www.neurology.org/cgi/reprint/55/10/1431.pdf">http://www.neurology.org/cgi/reprint/55/10/1431.pdf</a>. Accessed January 29, 2014.

Gouveris H, Helling K, Victor A, et al. Comparison of electronystagmography results with dynamic posturography findings in patients with vestibular schwannoma. Acta Otolaryngol. 2007 Aug;127(8):839-42.

Hayes, Inc. Technology Brief. Computerized Dynamic Posturography (CDP) for Diagnosis of Vestibular Disorders. Lansdale, PA: Hayes, Inc.; June 2008. Last updated June 2010. Archived July 2011.

Mockford KA, Mazari FA, Jordan AR, et al. Computerized Dynamic Posturography in the Objective Assessment of Balance in Patients with Intermittent Claudication. Ann Vasc Surg. 2010 Oct 2. [Epub ahead of print]

Morgan SS, Beck WG, Dobie RA. Can posturography identify informed malingerers? Otol Neurotol. 2002 Mar;23(2):214-7.

Mbongo F, Patko T, Vidal PP, et al. Postural Control in Patients with Unilateral Vestibular Lesions Is More Impaired in the Roll than in the Pitch Plane: A Static and Dynamic Posturography Study. Audiol Neurootol. 2005 May 30;10(5):291-302.

National Institute on Deafness and Other Communication Disorders (NIDCD) [Internet]. Balance disorders. January 2000. Updated December 2009. Available at: <a href="http://www.nidcd.nih.gov/health/balance/balance/balance disorders.asp">http://www.nidcd.nih.gov/health/balance/balance/balance disorders.asp</a>. Accessed February 13, 2013.

Piirtola M, Era P. Force platform measurements as predictors of falls among older people - a review. Gerontology. 2006;52(1):1-16.

Sataloff RT, Hawkshaw MJ, Mandel H, et al. Abnormal computerized dynamic posturography findings in dizzy patients with normal ENG results. Ear Nose Throat J. 2005 Apr;84(4):212-4.

Soto A, Labella T, Santos S, et al. The usefulness of computerized dynamic posturography for the study of equilibrium in patients with Meniere's disease: correlation with clinical and audiologic data. Hear Res. 2004 Oct;196(1-2):26-32.

Vestibular Disorders Association (VEDA) [Internet]. 2011. Available at: http://www.vestibular.org/. Accessed January 29, 2014.

# POLICY HISTORY/REVISION INFORMATION

Date	Action/Description
Date	Reorganized policy content
05/01/2014	<ul> <li>Added benefit considerations language for <i>Essential Health Benefits for Individual and Small Group</i> plans to indicate:         <ul> <li>For plan years beginning on or after January 1, 2014, the Affordable Care Act of 2010 (ACA) requires fully insured non-grandfathered individual and small group plans (inside and outside of Exchanges) to provide coverage for ten categories of Essential Health Benefits ("EHBs")</li> <li>Large group plans (both self-funded and fully insured), and small group ASO plans, are not subject to the requirement to offer coverage for EHBs; however, if such plans choose to provide coverage for benefits which are deemed EHBs (such as maternity benefits), the ACA requires all dollar limits on those benefits to be removed on all Grandfathered and Non-Grandfathered plans</li> <li>The determination of which benefits constitute EHBs is made on a state by state basis; as such, when using this guideline, it is important to refer to the enrollee's specific plan document to determine benefit coverage</li> </ul> </li> <li>Updated coverage rationale; added language to indicate the unproven service is "not medically necessary"</li> <li>Updated supporting information to reflect the most current description of services, clinical evidence, FDA and CMS information, and references</li> <li>Archived previous policy version 2013T0208J</li> </ul>