INSTRUCTIONS FOR USE

This Medical Policy provides assistance in interpreting UnitedHealthcare benefit plans. When deciding coverage, the federal, state or contractual requirements for benefit plan coverage must be referenced. The terms of the federal, state or contractual requirements for benefit plan coverage may differ greatly from the standard benefit plan upon which this Medical Policy is based. In the event of a conflict, the federal, state or contractual requirements for benefit plan coverage supersedes this Medical Policy. All reviewers must first identify member eligibility, any federal or state regulatory requirements, and the contractual requirements for benefit plan 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™ Care Guidelines, to assist us in administering health benefits. The MCG™ 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

Before using this policy, please check the federal, state or contractual requirements for 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 any condition including but not limited to balance disorders.

Overall, there is weak evidence in the peer-reviewed literature regarding the efficacy of CDP for evaluating vestibular and other disorders. There is a lack of well-designed, randomized controlled trials (RCTs) with blinded assessments to demonstrate the diagnostic utility of CDP compared with standard tests. Furthermore, there is insufficient evidence demonstrating any consistent and beneficial effect of CDP testing on patient relevant outcomes. Therefore, CDP is considered unproven and not medically necessary.

APPLICABLE CODES

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this policy does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by federal, state or contractual requirements 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 claim payment. Other Policies and Coverage Determination Guidelines may apply.
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.

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 evidence in the published peer-reviewed medical literature examining the safety and effectiveness of CDP includes mostly older studies, some poorly designed, with inconsistent results (Morgan, et al., 2002; El Kashian, et al., 1998; Di Fabio, 1996; Di Fabio, 1995). 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 20 to 216 (Palm et al., 2014; 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 included patients with various disorders including vertigo, vestibular schwannoma, and Ménière’s disease. Overall, small sample sizes and poor study design limit the generalizability of study results. The data do not reliably demonstrate beneficial effects of CDP evaluation on patient outcomes.

Smoot et al (2015) conducted a feasibility study with ten children; five with autism spectrum disorder (ASD) and five with typical development (TD) using posturography to monitor changes following vestibular input. Each child participated in a 10 min vestibular swing activity with pre- and post-intervention evaluations under four different sensory testing conditions. Sway ranges, mean sway velocity, sway root mean square (RMS), and sample entropy were calculated from center of pressure (COP) data. All five children with ASD demonstrated decreased mean sway velocity in the eyes open/flat plate condition post-intervention. Four of the five children with ASD demonstrated an increase in RMS and a decrease in anterior/posterior sample entropy post-intervention in the eyes closed, foam pad condition and eyes open, flat plate condition respectively. The authors concluded that using posturography with sensory integration warrants further investigation. This is an uncontrolled study with a small sample size.

Due to limited studies, small sample sizes, and weak study designs, there is insufficient evidence to conclude that CDP is useful for evaluating any condition. Further clinical trials demonstrating the clinical usefulness of CDP are needed.

**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

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


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 websites for more information:

Another device is the Balance Quest™ (also known as System 2000; Vorteq (Micromedical Technologies Inc.), which is listed as an unclassified device. See the following website for more information (search: Micromedical as Establishment Name): [http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfRL/rl.cfm](http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfRL/rl.cfm). Accessed March 17, 2016.

## CENTERS FOR MEDICARE AND MEDICAID SERVICES (CMS)

Medicare does not have a National Coverage Determination (NCD) for computerized dynamic posturography. Local Coverage Determinations (LCDs) exist; see the LCDs for Computerized Dynamic Posturography, Outpatient Occupational Therapy, Outpatient Physical Therapy and Vestibular Function Testing. (Accessed March 23, 2016)

## REFERENCES

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| 07/01/2016 | • Reformatted and reorganized policy; transferred content to new template  
• Revised coverage rationale to indicate computerized dynamic posturography (CDP) testing, also called balance board testing or equilibrium platform testing (EPT), is unproven and not medically necessary for evaluating **any condition including but not limited to** balance disorders  
  o Overall, there is weak evidence in the peer-reviewed literature regarding the efficacy of CDP for evaluating vestibular and other disorders  
  o There is a lack of well-designed, randomized controlled trials (RCTs) with blinded assessments to demonstrate the diagnostic utility of CDP compared with standard tests  
  o Furthermore, there is insufficient evidence demonstrating consistent and beneficial effects of CDP testing on patient-relevant outcomes  
  o Therefore, CDP is considered unproven and not medically necessary  
• Removed coding clarification notation reiterating computerized dynamic posturography is unproven and not medically necessary for all diagnosis codes  
• Updated supporting information to reflect the most current clinical evidence, CMS information and references  
• Archived previous policy version CS012.C |