COVERAGE:

Dynamic posturography is considered experimental or investigational.

DESCRIPTION:

Dynamic posturography tests a patient's balance control in situations intended to isolate the factors that affect balance in everyday experiences. The patient, wearing a harness to prevent them from falling, 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.

This test is composed of 6 parts in its standard form. 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. Two of the six tests (No. 5 and No. 6) attempt to isolate the contribution of the vestibular system in maintaining balance.

The NeurCom EquiTest is a U.S. Food and Drug Administration (FDA) approved dynamic posturography device.

Tilt table testing is a distinct technology designed to evaluate syncope.

RATIONALE:

This policy is based on a 1996 TEC assessment, which offered the following conclusions:

- There is insufficient evidence to determine whether dynamic posturography detects vestibular dysfunction or whether dynamic posturography distinguishes between peripheral and central vestibular dysfunction. In particular, the available studies fail to evaluate sensitivity and specificity relative to a reliable and valid reference standard.

- In the absence of a valid reference standard, the usefulness of dynamic posturography could be assessed by whether its use improves
treatment decision-making and health outcomes. However, no studies are available that address the health outcome effects of treatment decisions based on dynamic posturography.

A literature search to identify additional studies (published since the 1996 TEC assessment) failed to identify any study that would address the issues raised by the 1996 TEC assessment.

REFERENCES:


A search of the literature was completed through the MEDLINE database for the period of June 1997 through June 1999.

This policy was reviewed without a current literature search.