Medical Coverage Policy

Effective Date.....12/15/2025
Next Review Date.....12/15/2026
Coverage Policy Number..... 0270

Tilt Table Testing

Table of Contents

Related Coverage Resources

Ambulatory External and Implantable Electrocardiographic Monitoring
Autonomic Nerve Function Testing
Electrodiagnostic Testing (EMG/NCV)
High-Tech Imaging Guidelines
Transthoracic Echocardiography in Adults

INSTRUCTIONS FOR USE

The following Coverage Policy applies to health benefit plans administered by Cigna Companies. Certain Cigna Companies and/or lines of business only provide utilization review services to clients and do not make coverage determinations. References to standard benefit plan language and coverage determinations do not apply to those clients. Coverage Policies are intended to provide guidance in interpreting certain standard benefit plans administered by Cigna Companies. Please note, the terms of a customer's particular benefit plan document [Group Service Agreement, Evidence of Coverage, Certificate of Coverage, Summary Plan Description (SPD) or similar plan document] may differ significantly from the standard benefit plans upon which these Coverage Policies are based. For example, a customer's benefit plan document may contain a specific exclusion related to a topic addressed in a Coverage Policy. In the event of a conflict, a customer's benefit plan document always supersedes the information in the Coverage Policies. In the absence of a controlling federal or state coverage mandate, benefits are ultimately determined by the terms of the applicable benefit plan document. Coverage determinations in each specific instance require consideration of 1) the terms of the applicable benefit plan document in effect on the date of service; 2) any applicable laws/regulations; 3) any relevant collateral source materials including Coverage Policies and; 4) the specific facts of the particular situation. Each coverage request should be reviewed on its own merits. Medical directors are expected to exercise clinical judgment where appropriate and have discretion in making individual coverage determinations. Where coverage for care or services does not depend on specific circumstances, reimbursement will only be provided if a requested service(s) is submitted in accordance with the relevant criteria outlined in the applicable Coverage Policy, including covered diagnosis and/or procedure code(s). Reimbursement is not allowed for services when billed for conditions or diagnoses that are not covered under this Coverage Policy (see "Coding Information" below). When billing, providers must use the most appropriate codes as of the effective date of the submission. Claims submitted for services that are not accompanied by covered code(s) under the applicable Coverage Policy

will be denied as not covered. Coverage Policies relate exclusively to the administration of health benefit plans. Coverage Policies are not recommendations for treatment and should never be used as treatment guidelines. In certain markets, delegated vendor guidelines may be used to support medical necessity and other coverage determinations.

Overview

This Coverage Policy addresses tilt table testing for the diagnosis and evaluation of select individuals with syncope.

Coverage Policy

Tilt table testing with or without the administration of provocative agents (e.g., isoproterenol) is considered medically necessary for the evaluation of syncope for ANY of the following indications:

- individual with or without structural heart disease, when the cause of syncope has not been established following a complete history and physical examination and appropriate diagnostic testing, including a twelve-lead electrocardiogram (ECG), echocardiogram, and formal exercise tolerance testing
- individual in whom the suspected cause of syncope, such as asystole or high-degree atrioventricular (AV) block, has already been established, but results of tilt table testing are needed to determine the treatment plan
- differentiation of convulsive syncope from epilepsy

Tilt table testing is not covered or reimbursable for ANY other indication including the following:

- single syncopal episode, when clinical features support a diagnosis of vasovagal syncope
- syncope in which a specific alternate cause has been established and in which the potential demonstration of neurally mediated syncope would not alter treatment plan
- evaluation of an individual with unexplained recurrent falls, without a history of symptoms associated with vasovagal syncope
- recurrent near syncope or dizziness presumed to be neurally mediated in origin
- evaluation of unexplained syncope, when neuropathies or dysautonomias may contribute to symptomatic hypotension
- follow-up evaluation of therapy to prevent syncope recurrences
- chronic fatigue syndrome
- recurrent vertigo
- recurrent transient ischemic attacks

Coding Information

Notes:

1. This list of codes may not be all-inclusive since the American Medical Association (AMA) and Centers for Medicare and Medicaid Services (CMS) code updates may occur more frequently than policy updates.
2. Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement.

Considered Medically Necessary when criteria in the applicable policy statements listed above are met:

Note: Code 93660 should not be billed to describe autonomic nerve testing

CPT®* Codes	Description
93660	Evaluation of cardiovascular function with tilt table evaluation, with continuous ECG monitoring and intermittent blood pressure monitoring, with or without pharmacological intervention

ICD-10-CM Diagnosis Codes	Description
R55	Syncope and collapse

Not Covered or Reimbursable:

ICD-10-CM Diagnosis Codes	Description
	All other codes

***Current Procedural Terminology (CPT®) ©2024 American Medical Association: Chicago, IL.**

General Background

Syncope (also called "fainting" or "passing out") is a transient loss of consciousness triggered by a period of inadequate oxygen delivery to the brain, most frequently caused by a period of systemic hypotension. The differential diagnosis of syncope most often involves vascular and cardiac causes. Vascular causes of syncope, particularly reflex-mediated syncope and orthostatic hypotension, are the most common causes and account for at least one third of all syncopal episodes. Causes of reflex-mediated syncope include carotid sinus hypersensitivity, neurally mediated syncope (common faint, vasodepressor, neurocardiogenic, vasovagal), glossopharyngeal syncope, and situational (acute hemorrhage, cough, defecation, laugh, micturition, sneeze) syncope. Syncope due to orthostatic hypotension can be associated with primary autonomic failure, secondary autonomic failure (diabetes, amyloidosis, uremia, spinal cord injuries), drug-induced orthostatic hypotension, or volume depletion (Benditt, 2024; Calkins and Zipes, 2019; Benditt and Adkisson, 2013).

Syncope can peak in late adolescence to early adulthood, with a second peak later in older age and a sharp rise after age 70 years. The increased risk of syncope in older adult patients appears to be due to age- and disease-related abnormalities that impair the ability to respond to physiologic stresses that would ordinarily not cause syncope. Syncope/collapse appears to be slightly more common among females depending upon the population studied. Males are more likely than females to have a cardiac cause of syncope, possibly due to the increased risk of cardiovascular disease in males (Benditt, 2024).

Cardiac causes of syncope, particularly tachyarrhythmias and bradyarrhythmias, are the second most common causes of syncope and account for 10% to 20% of all syncopal episodes. Anatomic

causes of syncope include obstruction of blood flow, such as massive pulmonary embolism, atrial myxoma, or aortic stenosis (Benditt, 2024; Calkins and Zipes, 2019).

The evaluation of syncope begins with a careful history, physical examination, supine and upright blood pressure, and a 12-lead electrocardiogram (ECG). Additional testing may be needed in select patients, which can include carotid sinus massage, echocardiography, ECG monitoring, and tilt-table testing. The cause of syncope may be accurately determined in a majority of patients by a detailed history and physical exam. In some patients, the hemodynamic response to standing may be sufficient to identify postural orthostatic tachycardia syndrome or orthostatic hypotension, which may be treated without further testing. An ECG provides important information about the heart rhythm and atrioventricular (AV) conduction. An echocardiogram may be helpful if a diagnosis is not provided by history, physical examination and ECG, or if underlying heart disease is suspected. Exercise-tolerance testing, Holter monitoring, electrophysiological testing and loop-event monitoring may also be used. A diagnosis of reflex (neurally mediated) syncope is considered when there is no structural heart disease and the ECG is normal. Although syncope is not associated with excess mortality in the absence of underlying heart disease, physical harm may occur with recurrent syncope. Determining the origin of syncope can be challenging. The clinician must consider and exclude conditions that mimic syncope but are not true syncope. The most common of these conditions are seizures, sleep disturbances, accidental falls, and some psychiatric conditions (e.g., psychogenic nonepileptic seizures and pseudoseizures). Tilt table testing may be considered for a select subset of individuals when the diagnosis remains uncertain (Benditt, 2024; Calkins and Zipes, 2019; Brignole, et al., 2018; Shen, et al., 2017).

Postural orthostatic tachycardia syndrome (POTS) is a multisystem disorder of the autonomic nervous system, defined as the presence of symptoms of orthostatic intolerance for more than six months, accompanied by a heart rate increase of more than 30 beats per minute within ten minutes of standing upright, in the absence of orthostatic hypotension. The syndrome must occur in the absence of prolonged bed rest, medications that impair autonomic regulation (e.g., diuretics, vasodilators, sympatholytics or certain antidepressants) or other conditions that may cause tachycardia (e.g., dehydration, anemia, or hyperthyroidism). The etiology of POTS is not clear, and may be heterogeneous. Symptoms of orthostatic intolerance are brought on by standing and relieved by sitting down. Symptoms can include lightheadedness, palpitations, fading vision, presyncope, difficulty concentrating, shortness of breath, tremulousness, chest discomfort, headache, mental clouding and nausea. The diagnosis of POTS is established from patient history which demonstrates a heart rate increase of > 30 beats per minute (bpm) over baseline (or ≥40 beats/min in those 12-19 years old) or > 120 bpm within 10 minutes of assuming an upright posture (Cheshire, 2025; Calkins and Zipes, 2019; Shen, et al., 2017).

Tilt Table Testing
Tilt table testing is performed by using a tilting table with a footboard. The patient rests in the supine position for 20–45 minutes before beginning the test. At least three ECG leads record simultaneously during the study, and continuous blood pressure readings are recorded. The table rapidly moves to an upright position (60–90°). A tilt test response is considered positive for vasovagal syncope if sudden drops in heart rate, blood pressure or both are induced during the test in association with syncope or near syncope. Provocative agents are intravenous medications that can cause venous pooling or increase adrenergic stimulation, such as isoproterenol, may be used to induce a positive test result if syncope is not produced by tilt table testing alone (Cheshire, 2025; Benditt, 2024).

U.S. Food and Drug Administration (FDA): Powered tables used for tilt testing are electrically-operated flat surface tables that can be adjusted to various positions. They are considered Class I devices, and thus are exempt from premarket notification.

Literature Review: Evidence evaluating tilt table testing is primarily in the form of prospective case series, observational studies, retrospective reviews and review articles (Joo, et al., 2018; Furukawa, 2017; Saal, et al., 2016). The pretest probability of reflex (neurally mediated) syncope is high in a patient without evidence of ischemia or structural heart disease, and even if the test is negative, reflex syncope remains the most likely diagnosis. The sensitivity of tilt table testing can be increased, along with an associated fall in specificity, by the use of longer tilt durations, steeper tilt angles, and provocative agents such as isoproterenol or nitroglycerin (Calkins and Zipes, 2019; Shen, et al., 2017).

Tilt table testing has become an established procedure in the clinical evaluation of patients with syncope. Tilt table testing is used when the cause of syncope cannot be established based on a detailed history, physical examination and routine diagnostic testing. It is also used to discriminate between suspected reflex syncope and orthostatic hypotension syncope, to evaluate for postural tachycardia syndrome, to differentiate between convulsive syncope and epilepsy, or to establish a diagnosis of psychogenic nonepileptic seizures. The procedure may also be used when the cause of syncope has been established but the results of tilt table testing will contribute to establishing appropriate treatment. Numerous other applications for tilt table testing have emerged, including evaluation of near syncope, frequent falls, evaluation of therapy to prevent syncope recurrence, and evaluation of syncope related to neuropathies or dysautonomias.

Other conditions for which tilt table testing has been proposed include evaluation of chronic fatigue syndrome to determine if neurally mediated hypotension and bradycardia are contributing factors, and evaluation of recurrent vertigo and recurrent transient ischemic attacks. The use of tilt table testing for these indications has not gained widespread acceptance, and the diagnostic utility of tilt table testing to evaluate these conditions has not been demonstrated in the published medical literature (Nelson, et al., 2019).

Professional Societies/Organizations
American College of Cardiology (ACC)/American Heart Association (AHA)/Heart Rhythm Society (HRS): In 2017, the ACC/AHA/HRS issued guidelines for evaluating and managing patients with syncope. These guidelines included the following recommendations for the use of tilt table testing (Shen, et al., 2017):

- If the diagnosis is unclear after initial evaluation, tilt-table testing can be useful for patients with suspected vasovagal syncope (VVS).
- Tilt-table testing can be useful for patients with syncope and suspected delayed orthostatic hypotension (OH) when initial evaluation is not diagnostic.
- Tilt-table testing is reasonable to distinguish convulsive syncope from epilepsy in selected patients.
- Tilt-table testing is reasonable to establish a diagnosis of pseudosyncope.
- Tilt-table testing is not recommended to predict a response to medical treatments for VVS.

The guidelines also stated that exercise stress testing can be useful to establish the cause of syncope in select patients who experience syncope or presyncope during exertion (Shen, et al., 2017).

The 2024 HRS expert consensus statement on arrythmias in athletes stated that tilt table testing is not recommended in athletes with syncope, due to the high prevalence of false positives leading to inappropriate interventions (Lampert, et al., 2024).

Health Equity Considerations

Health equity is the highest level of health for all people; health inequity is the avoidable difference in health status or distribution of health resources due to the social conditions in which people are born, grow, live, work, and age.

Social determinants of health are the conditions in the environment that affect a wide range of health, functioning, and quality of life outcomes and risks. Examples include safe housing, transportation, and neighborhoods; racism, discrimination and violence; education, job opportunities and income; access to nutritious foods and physical activity opportunities; access to clean air and water; and language and literacy skills.

Medicare Coverage Determinations

	Contractor	Determination Name/Number	Revision Effective Date
NCD		No Determination found	
LCD		No Determination found	

Note: Please review the current Medicare Policy for the most up-to-date information.
(NCD = National Coverage Determination; LCD = Local Coverage Determination)

References

1. Benditt D. Syncope in adults: Epidemiology, pathogenesis, and etiologies. In: UpToDate, Yeon SB (Ed). Dec 3, 2024. UpToDate, Waltham, MA. Accessed Oct 27, 2025.

2. Benditt DG, Adkisson WO. Approach to the patient with syncope. Venues, presentations, diagnoses. Cardiol Clin. 2013 Feb;31(1):9-25.

3. Brignole M, Moya A, de Lange FJ, Deharo JC, Elliott PM, Fanciulli A, et al. 2018 ESC Guidelines for the diagnosis and management of syncope. Eur Heart J. 2018 Jun 1;39(21):1883-1948.

4. Calkins H, Zipes DP. Hypotension and Syncope. Electrophysiological Testing. In: Libby P, Zipes DP, Bonow RO, Braunwald E. Braunwald's Heart Disease. A Textbook of Cardiovascular Disease. 11th ed. St. Louis, MO: W.B. Saunders Company; 2019. Ch 43. pgs 848-58.

5. Centers for Medicare and Medicaid Services (CMS). Medicare Coverage Database. Accessed Oct 27, 2025. Available at URL address: https://www.cms.gov/medicare-coverage-database/search.aspx

6. Cheshire WP. Postural tachycardia syndrome. In: UpToDate; Goddeau RP (Ed). Aug 4, 2025. UpToDate, Waltham, MA. Accessed Oct 27, 2025.

7. Cheshire WP, Freeman R, Gibbons CH, Cortelli P, Wenning GK, Hilz MJ, et al. Electrodiagnostic assessment of the autonomic nervous system: A consensus statement endorsed by the American Autonomic Society, American Academy of Neurology, and the International Federation of Clinical Neurophysiology. Clin Neurophysiol. 2020 Dec 22:S1388-2457(20)30585-X.

8. Furukawa T. Role of head-up tilt table testing in patients with syncope or transient loss of consciousness. J Arrhythm. 2017;33(6):568-571.

9. Joo BE, Koo DL, Yim HR, Park J, Seo DW, Kim JS. Seizure-like activities in patients with head-up tilt test-induced syncope. Medicine (Baltimore). 2018 Dec;97(51):e13602.

10. Lampert R, Chung EH, Ackerman MJ, Arroyo AR, Darden D, Deo R, Dolan J, Etheridge SP, Gray BR, Harmon KG, James CA, Kim JH, Krahn AD, La Gerche A, Link MS, MacIntyre C, Mont L, Salerno JC, Shah MJ. 2024 HRS expert consensus statement on arrhythmias in the athlete: Evaluation, treatment, and return to play. Heart Rhythm. 2024 Oct;21(10):e151-e252.

11. Miller JM, Tomaselli GF, Zipes DP. Diagnosis of cardiac arrhythmias. In: Libby P, Zipes DP, Bonow RO, Braunwald E. Braunwald's Heart Disease: A Textbook of Cardiovascular Medicine. 11th ed. Philadelphia, PA: Elsevier; 2019. Ch 35 pgs 648-69.

12. Nelson MJ, Bahl JS, Buckley JD, Thomson RL, Davison K. Evidence of altered cardiac autonomic regulation in myalgic encephalomyelitis/chronic fatigue syndrome: A systematic review and meta-analysis. Medicine (Baltimore). 2019;98(43):e17600.

13. Raj SR, Guzman JC, Harvey P, Richer L, Schondorf R, Seifer C, Thibodeau-Jarry N, Sheldon RS. Canadian Cardiovascular Society Position Statement on Postural Orthostatic Tachycardia Syndrome (POTS) and Related Disorders of Chronic Orthostatic Intolerance. Can J Cardiol. 2020 Mar;36(3):357-372.

14. Saal DP, Thijs RD, van Dijk JG. Tilt table testing in neurology and clinical neurophysiology. Clin Neurophysiol. 2016 Feb;127(2):1022-1030.

15. Sheldon RS, Grubb BP, Olshansky B, Shen WK, Calkins H, Brignole M. 2015 heart rhythm society expert consensus statement on the diagnosis and treatment of postural tachycardia syndrome, inappropriate sinus tachycardia, and vasovagal syncope. Heart Rhythm. 2015 Jun;12(6):e41-63. Reaffirmed Nov 2020.

16. Shen WK, Sheldon RS, Benditt DG, Cohen MI, Forman DE, Goldberger ZD, et al. 2017 ACC/AHA/HRS Guideline for the Evaluation and Management of Patients With Syncope: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines and the Heart Rhythm Society. J Am Coll Cardiol. 2017 Aug 1;70(5):e39-e110.

17. Thijs RD, Brignole M, Falup-Pecurariu C, Fanciulli A, Freeman R, Guaraldi P, et al. Recommendations for tilt table testing and other provocative cardiovascular autonomic tests in conditions that may cause transient loss of consciousness: Consensus statement of the European Federation of Autonomic Societies (EFAS) endorsed by the American Autonomic Society (AAS) and the European Academy of Neurology (EAN). Auton Neurosci. 2021 Jul;233:102792.

18. U.S. Food and Drug Administration (FDA). 510(k) premarket notification database. Product code: INQ. Page Last Updated: Oct 27, 2025. Accessed Oct 27, 2025. Available at URL address: http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfPMN/pmn.cfm

19. van Campen CLMC, Rowe PC, Visser FC. Cerebral Blood Flow Is Reduced in Severe Myalgic Encephalomyelitis/Chronic Fatigue Syndrome Patients During Mild Orthostatic Stress Testing: An Exploratory Study at 20 Degrees of Head-Up Tilt Testing. Healthcare (Basel). 2020 Jun 13;8(2):169.

20. van Campen CLMC, Rowe PC, Visser FC. Low sensitivity of abbreviated tilt table testing for diagnosing postural tachycardia syndrome in adults with ME/CFS. Front Pediatr. 2018;6:349

Revision Details

Type of Revision	Summary of Changes	Date
Annual Review	• No clinical policy statement changes.	12/15/2025
Annual Review	• Removed policy statement for computerized dynamic posturography. • Title updated.	12/15/2024
Annual Review	• Combined with Tilt Table Testing policy; title updated.	12/15/2023

"Cigna Companies" refers to operating subsidiaries of The Cigna Group. All products and services are provided exclusively by or through such operating subsidiaries, including Cigna Health and Life Insurance Company, Connecticut General Life Insurance Company, Evernorth Behavioral Health, Inc., Cigna Health Management, Inc., and HMO or service company subsidiaries of The Cigna Group. © 2025 The Cigna Group.