Evolent Clinical Guideline 7333 for Tilt Table Testing

Guideline Number: Evolent_CG_7333	Applicable Codes	
"Evolent" refers to Evolent Health LLC and Evolent Specialty Services, Inc.		
Original Date: August 2011	Last Revised Date: July 2025	Implementation Date: January 2026

TABLE OF CONTENTS

STATEMENT

General Information

- ***It is an expectation that all patients receive care/services from a licensed clinician. All appropriate supporting documentation, including recent pertinent office visit notes, laboratory data, and results of any special testing must be provided. If applicable: All prior relevant imaging results and the reason that alternative imaging cannot be performed must be included in the documentation submitted.***
- ***Where a specific clinical indication is not directly addressed in this guideline, medical necessity determination will be made based on widely accepted standard of care criteria. These criteria are supported by evidence-based or peer-reviewed sources such as medical literature, societal guidelines and state/national recommendations.***
- ***The guideline criteria in the following sections were developed utilizing evidence-based and peer-reviewed resources from medical publications and societal organization guidelines as well as from widely accepted standard of care, best practice recommendations.***

Purpose

Indications for determining medical necessity for Tilt Table Testing.

Clinical Reasoning

All criteria are substantiated by the latest evidence-based medical literature. To enhance transparency and reference, Appropriate Use (AUC) scores, when available, are diligently listed alongside the criteria.

This guideline first defaults to AUC scores established by published, evidence-based guidance endorsed by professional medical organizations. In the absence of those scores, we adhere to a standardized practice of assigning an AUC score of 6. This score is determined by considering variables that ensure the delivery of patient-centered care in line with current guidelines, with a focus on achieving benefits that outweigh associated risks. This approach aims to maintain a robust foundation for decision-making and underscores our commitment to upholding the highest standards of care. [1–5]

INDICATIONS

If initial testing results were unclear or not diagnostic, tilt-table testing may be appropriate for:

- **Suspected vasovagal syncope (especially if syncope is recurrent) [6]**
- **Syncope and suspected orthostatic hypotension [6–8]**

- Suspected POTS (postural orthostatic tachycardia syndrome) [7,8]
- Distinguishing convulsive/myoclonic syncope from epilepsy [6,8]
- Distinguishing psychogenic pseudosyncope from vasovagal syncope [6,8]

CODING AND STANDARDS

Codes

93660

Applicable Lines of Business

☒	CHIP (Children's Health Insurance Program)
☒	Commercial
☒	Exchange/Marketplace
☒	Medicaid
☒	Medicare Advantage

BACKGROUND

Definitions

Tilt table testing is used to evaluate the autonomic nervous system control of cardiovascular function in patients with syncope, generally after other, potentially more harmful, likely, or readily managed causes have been ruled out by history, physical examination or other appropriate tests. The test utilizes a specialized table which passively takes the patient from a supine position to a head-up position (60 or 90 degrees). Heart rate, blood pressure and ECG are continuously monitored.

AUC Score

A reasonable diagnostic or therapeutic procedure care can be defined as that for which the expected clinical benefits outweigh the associated risks, enhancing patient care and health outcomes in a cost-effective manner. [3]

- Appropriate Care - Median Score 7-9
- May be Appropriate Care - Median Score 4-6
- Rarely Appropriate Care - Median Score 1-3

SUMMARY OF EVIDENCE

2017 ACC/AHA/HRS Guideline for the Evaluation and Management of Patients With Syncope [6]

Study Design: The document is a clinical practice guideline developed by the American College of Cardiology (ACC), American Heart Association (AHA), and Heart Rhythm Society (HRS) for the evaluation and management of patients with syncope. It was created in collaboration with the American College of Emergency Physicians and Society for Academic Emergency Medicine and endorsed by the Pediatric and Congenital Electrophysiology Society.

Target Population: The guideline is intended for healthcare providers managing adult and pediatric patients with suspected syncope. It aims to provide contemporary, accessible, and succinct guidance on the management of these patients in various clinical settings.

Key Factors: It discusses the prevalence and incidence of syncope in different populations, noting that syncope can occur at any age but has a trimodal distribution with peaks around 20, 60, and 80 years. Recommendations for history taking, physical examination, and electrocardiography (ECG) are provided to identify the prognosis, diagnosis, and comorbidities. The guideline emphasizes the importance of assessing the cause of syncope and underlying comorbidities to guide treatment and prevent long-term morbidity and mortality. It includes recommendations for blood testing, cardiovascular testing, cardiac monitoring, in-hospital telemetry, electrophysiological study (EPS), and tilt-table testing. The guideline reviews evidence for managing syncope in patients with various cardiac conditions, including arrhythmic conditions, structural heart disease, and inheritable arrhythmic conditions. Recommendations for managing vasovagal syncope, carotid sinus syndrome, and other reflex conditions are provided. The guideline discusses the evaluation and management of neurogenic orthostatic hypotension and dehydration-related syncope. It includes recommendations for pediatric patients, adults with congenital heart disease, and geriatric patients.

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) [8]

Study Design: The document is a consensus statement from the European Federation of Autonomic Societies (EFAS), endorsed by the American Autonomic Society (AAS) and the European Academy of Neurology (EAN). It aims to provide recommendations for tilt-table testing (TTT) and other provocative cardiovascular autonomic tests in conditions that may cause transient loss of consciousness (TLOC).

Target Population: The consensus statement is intended for healthcare providers diagnosing and managing patients with disorders that may cause TLOC, including reflex syncope, orthostatic hypotension (OH), postural orthostatic tachycardia syndrome (POTS), and psychogenic pseudosyncope.

Key Factors: The primary aim of TTT is to obtain a pathophysiological correlate for orthostatic intolerance and TLOC. It is indicated when initial evaluation does not yield a definite diagnosis but raises suspicion of reflex syncope, OH, POTS, or psychogenic pseudosyncope. The document outlines various TTT protocols, including classic TTT, active standing test, Valsalva maneuver, deep breathing, carotid sinus massage, venepuncture, meal provocation, and tailored provocations. Basic equipment for TTT includes a tilt table, continuous beat-to-beat blood pressure monitor, at least one ECG lead, and trained staff. Additional equipment may include video, EEG, respiratory recordings, blood sampling, transcranial Doppler, and near-infrared spectroscopy.

ANALYSIS OF EVIDENCE

Analysis [6,8]:

Both articles provide comprehensive evidence for the evaluation and management of syncope, with a focus on different aspects of the condition. The ACC/AHA/HRS guidelines offer a broad overview of syncope management, including specific recommendations for various cardiovascular conditions. The EFAS consensus statement provides a detailed discussion on the use of TTT and other autonomic tests, highlighting their diagnostic and therapeutic utility.

In conclusion, while both articles share common ground in their approach to syncope evaluation and management, they differ in their focus and specific recommendations. The ACC/AHA/HRS guidelines provide a broader perspective on syncope management, while the EFAS consensus statement offers a more detailed discussion on the use of TTT and other autonomic tests.

Shared Conclusions:

- **Syncope Evaluation and Management: Both articles emphasize the importance of a thorough initial evaluation, including history taking, physical examination, and ECG, to diagnose and manage syncope. They agree that syncope can have various causes, including cardiovascular, neurological, and reflex-mediated conditions.**
- **Tilt Table Testing (TTT): Both documents recognize the value of Tilt Table Testing (TTT) in diagnosing syncope, particularly for conditions like vasovagal syncope (VVS) and orthostatic hypotension (OH). They agree that TTT can help identify the pathophysiological mechanisms underlying syncope and provide a clinical-pathophysiological correlate.**
- **Orthostatic Hypotension (OH): Both articles discuss the different forms of OH, including initial, classic, and delayed OH. They agree that OH can be diagnosed through TTT or active standing tests and that it is essential to distinguish between neurogenic and non-neurogenic causes.**

POLICY HISTORY

Date	Summary
July 2025	• Added a Summary of Evidence and Analysis of Evidence
May 2025	• No substantial clinical content changes • Added in general information statement regarding guideline criteria development by reputable sources, standard of care, and best practices
December 2024	• This guideline replaces UM 1159 Tilt Table Testing • Added guidance for distinguishing between convulsive syncope and epilepsy • Added guidance for distinguishing between pseudosyncope and vasovagal syncope

LEGAL AND COMPLIANCE

Guideline Approval

Committee

Reviewed / Approved by Evolent Specialty Services Clinical Guideline Review Committee

Disclaimer

Evolent Clinical Guidelines do not constitute medical advice. Treating health care professionals are solely responsible for diagnosis, treatment, and medical advice. Evolent uses Clinical Guidelines in accordance with its contractual obligations to provide utilization management. Coverage for services varies for individual members according to the terms of their health care coverage or government program. Individual members' health care coverage may not utilize some Evolent Clinical Guidelines. Evolent clinical guidelines contain guidance that requires prior authorization and service limitations. A list of procedure codes, services or drugs may not be all inclusive and does not imply that a service or drug is a covered or non-covered service or drug. Evolent reserves the right to review and update this Clinical Guideline in its sole discretion. Notice of any changes shall be provided as required by applicable provider agreements and laws or regulations. Members should contact their Plan customer service representative for specific coverage information.

Evolent Clinical Guidelines are comprehensive and inclusive of various procedural applications for each service type. Our guidelines may be used to supplement Medicare criteria when such criteria is not fully established. When Medicare criteria is determined to not be fully established, we only reference the relevant portion of the corresponding Evolent Clinical Guideline that is applicable to the specific service or item requested in order to determine medical necessity.

REFERENCES

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