Evolent Clinical Guideline 7272 for Coronary Artery Calcium Scoring by Electron Beam Computed Tomography (EBCT) or Non-Contrast Coronary Computed Tomography (CCT)

Guideline Number: Evolent_CG_7272	**Applicable Codes**	
"Evolent" refers to Evolent Health LLC and Evolent Specialty Services, Inc. 		
Original Date: January 2026	**Last Revised Date:** February 2026	**Implementation Date:** July 2026

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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

This guideline includes clinical criteria for coronary artery calcium (CAC) scoring, by either EBCT or non-contrast CCT. CAC testing provides a quantitative assessment of coronary artery calcium content in Agatston units, as an adjunct to the estimation of global risk (see **Background**) for coronary or cardiovascular events over the next 10 years. A CAC Score > 0 is a highly specific feature of coronary atherosclerosis. [1,2]

Special Note

See Legislative Language for specific mandates in: **State of New Mexico**, **State of Texas**, and **State of Washington**.

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. [3–7]

INDICATIONS FOR CORONARY ARTERY CALCIUM (CAC) TESTING

CAC testing is for cardiovascular risk assessment in individuals aged 40-75 years who have an intermediate (5-19.9%) 10-year ASCVD risk based upon the ACC/AHA pooled cohort risk calculator. Documentation is required that the results of the study will affect decision making for preventative actions (i.e., statin therapy).

Patients, regardless of age, can be considered for CAC testing when there is well-documented evidence of one of the following [8–12]:

- For asymptomatic patients, without known coronary disease, at intermediate global risk (7.5%-19.9%), with or without risk-enhancing factors **(AUC 8)** [12]
- For asymptomatic patients without known coronary disease who are at low to borderline risk, but suspected to be at higher risk due to one or more risk enhancers (listed below) **(AUC 7)** [12]
    - Atherosclerotic cardiovascular disease (ASCVD) risk enhancing factors include any of the following [1,8,10,12–15]:
        - Family history of premature ASCVD (male age <55 years, female age < 65 years)
        - Primary hypercholesterolemia (LDL-C > 160 mg/dl or non-HDL-C > 190 mg/dl)
        - Chronic kidney disease
        - Metabolic syndrome
        - Conditions specific to women (e.g., pre-eclampsia, premature menopause) [12]
        - Inflammatory diseases (HIV, psoriasis, rheumatoid arthritis (RA))
        - Noncoronary vascular disease (e.g. ABI < 0.9)
        - Ethnicity (e.g., South Asian ancestry)
        - Persistently elevated triglycerides (> 175 mg/dl)
        - hsCRP > 2 mg/L
        - Lp(a) levels > 50 mg/dl
        - apoB > 130 mg/dl
- For asymptomatic patients, without known coronary disease, where there is a need for alternative lipid-lowering strategies when statin therapy is contraindicated, due to adverse effects or patient reluctance [14]
- CAC testing may be repeated indefinitely for re-assessment of the asymptomatic patient without known coronary disease after a minimum of 5 years until the calcium score breaches 400 or up to twice if the calcium score remains zero.
- Aortic valve calcium scoring to further define stenosis severity in suspected low-flow, low-gradient severe aortic stenosis (AS) with normal or reduced left ventricular ejection

fraction (LVEF) [16]

LEGISLATIVE LANGUAGE

State of New Mexico

59A-23-7.16 [17]

Applicable to: Commercial and Medicaid

Be it enacted by the legislature of the state of New Mexico:

Section 1. A new section of the Health Care Purchasing Act is enacted to read:

"[New Material] Heart Artery Calcium Scan Coverage.--

- A group health plan, other than a small group health plan or a blanket health insurance policy or contract that is delivered, issued for delivery or renewed in this state shall provide coverage for eligible insureds to receive a heart artery calcium scan.
- Coverage provided pursuant to this section shall:
  - be limited to the provision of a heart artery calcium scan to an eligible insured to be used as a clinical management tool;
  - be provided every five years if an eligible insured has previously received a heart artery calcium score of zero; and
  - not be required for future heart artery calcium scans if an eligible insured receives a heart artery calcium score greater than zero.
- As used in this section:
  - "eligible insured" means an insured who:
    - is a person between the ages of forty-five and sixty-five; and
    - has an intermediate risk of developing coronary heart disease as determined by a health care provider based upon a score calculated from an evidence-based algorithm widely used in the medical community to assess a person's ten-year cardiovascular disease risk, including a score calculated using a pooled cohort equation;

State of Texas

HB 1290 Sec 1376.003 [18]

Applicable to: Commercial, Market, and Exchange

- A health benefit plan that provides coverage for screening medical procedures must provide the minimum coverage required by this section to each covered individual:
  - who is:

- a male older than 45 years of age and younger than 76 years of age; or
- a female older than 55 years of age and younger than 76 years of age; and

  - who:
    - is diabetic; or
    - has a risk of developing coronary heart disease, based on a score derived using the Framingham Heart Study coronary prediction algorithm, that is intermediate or higher.

- The minimum coverage required to be provided under this section is coverage of up to $200 for one of the following noninvasive screening tests for atherosclerosis and abnormal artery structure and function every five years, performed by a laboratory that is certified by a national organization recognized by the commissioner by rule for the purposes of this section:
  - computed tomography (CT) scanning measuring coronary artery calcification; or
  - ultrasonography measuring carotid intima-media thickness and plaque.

State of Washington

20091120A *(19)*

Number and Coverage Topic

20091120A – Coronary Artery Calcium Scoring

HTCC Coverage Determination

Cardiac Artery Calcium Scoring is a **non-covered benefit.**

HTCC Reimbursement Determination

- **Limitations of Coverage**
  - Not Applicable
- **Non-Covered Indicators**
  - Coronary Artery Calcium Scoring

CODING AND STANDARDS

Codes

75571, S8092, +0722T

Applicable Lines of Business

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

BACKGROUND

General Overview

CAC testing is for cardiovascular risk assessment in individuals aged 40-75 years who have an intermediate (5-19.9%) 10-year ASCVD risk based upon the ACC/AHA pooled cohort risk calculator. Documentation is required that the results of the study will affect decision making for preventative actions (i.e., statin therapy). CAC testing is a cardiovascular risk assessment tool, applicable only to the patient without known cardiovascular disease, for the purpose of primary prevention. It is not for the patient with suspected or known cardiovascular disease, coronary or otherwise, who already requires aggressive risk factor modification. This test is not to be utilized for symptomatic patients in active ischemic evaluation.

CAC score > 100 can also provide support for aspirin therapy and statin therapy. [1,15]

Calcium scores are used to help determine the use and dosage of statin therapy in patients with various risks of developing clinically symptomatic atherosclerotic disease. Once symptomatic coronary disease has been established or once the patient is considered high risk, the usefulness of calcium scoring falls away as patients should be on high dose therapy and the results of a calcium score would add no further benefit. If a patient is symptomatic, non-invasive or invasive testing should remain first line.

Global risk of CAD is defined as the probability of an asymptomatic patient without known CAD developing CAD, including myocardial infarction or CAD death, over a given period of time. Risk categories include:

- Low risk (<5%)
- Borderline risk (5% - 7.4%)
- Intermediate risk (7.5% to 19.9%)
- High risk (≥ 20%)

*Websites for Global Cardiovascular Risk Calculators** *(2,8,9,20,21)*

Risk Calculator	Website for Online Calculator
Framingham Cardiovascular Risk	**https://reference.medscape.com/calculator/framingham-cardiovascular-disease-risk**
Reynolds Risk Score Can use if no diabetes Unique for use of family history	**http://www.reynoldsriskscore.org/**
Pooled Cohort Equation	**http://clincalc.com/Cardiology/ASCVD/PooledCohort.aspx?example**
ACC/AHA Risk Calculator	**http://tools.acc.org/ASCVD-Risk-Estimator/**

*Patients who have already manifested cardiovascular disease are already at high global risk and are not applicable to the calculators.

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. (4)

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

Acronyms / Abbreviations

AS: Aortic stenosis

ASCAD: Atherosclerotic coronary artery disease

ASCVD: Atherosclerotic cardiovascular disease

CAC: Coronary artery calcium

CAD: Coronary artery disease

CCT: Cardiac computed tomography

EBCT: Electron beam computed tomography

LVEF: Left ventricular ejection fraction

SUMMARY OF EVIDENCE

ACC/AHA/ASE/ASNC/ASPC/HFSA/HRS/SCAI/SCCT/SCMR/STS 2023 Multimodality Appropriate Use Criteria for the Detection and Risk Assessment of Chronic Coronary Disease [12]

Study Design: The study is a report by the American College of Cardiology (ACC) Solution Set Oversight Committee, in collaboration with several other cardiovascular societies. It updates the prior AUC for various cardiovascular imaging modalities, including radionuclide imaging, stress echocardiography, calcium scoring, coronary computed tomography angiography (CCTA), stress cardiac magnetic resonance (CMR), and invasive coronary angiography.

Target Population: The target population includes patients with known or suspected CCD, which encompasses stable ischemic heart disease (SIHD). The clinical scenarios cover both symptomatic and asymptomatic patients, with and without prior testing or revascularization.

Key Factors:

Clinical Scenarios: The document outlines 64 clinical scenarios for the detection and risk assessment of CCD, drawn from common applications and current clinical practice guidelines.

Rating Process: The clinical scenarios were rated by an independent panel using a modified Delphi process. Ratings were categorized as Appropriate (7-9), May Be Appropriate (4-6), or Rarely Appropriate (1-3).

Updates and Changes: Key changes include the removal of preoperative testing scenarios, simplification of clinical scenario tables, and incorporation of new evidence and guidelines.

Assumptions: The study assumes that each test is performed and interpreted by trained professionals, and that patients are receiving optimal standard care.

Advantages and Limitations: The document provides a table outlining the advantages and limitations of various imaging modalities, such as echocardiography, SPECT, PET, CMR, CCTA, and invasive angiography.

2013 ACC/AHA Guideline on the Assessment of Cardiovascular Risk [8]

Study Design: The guideline is based on systematic evidence reviews conducted by expert panels convened by the National Heart, Lung, and Blood Institute (NHLBI). The evidence was reviewed and recommendations were crafted by the ACC/AHA Task Force on Practice Guidelines. The methodology included the development of new pooled cohort equations for the prediction of 10-year risk of atherosclerotic cardiovascular disease (ASCVD) events.

Target Population: The target population for the guideline includes non-Hispanic African-American and non-Hispanic white men and women aged 40 to 79 years who are free from ASCVD at the beginning of the period. The guideline also provides recommendations for other populations, including Hispanic-American and Asian-American populations, although specific risk algorithms for these groups are not yet developed.

Key Factors

Risk Assessment: The guideline emphasizes the importance of assessing traditional ASCVD risk factors every 4 to 6 years in adults aged 20 to 79 years who are free from ASCVD. It also recommends estimating 10-year ASCVD risk every 4 to 6 years in adults aged 40 to 79 years.

Pooled Cohort Equations: The guideline introduces race- and sex-specific pooled cohort equations to predict the 10-year risk of a first hard ASCVD event. These equations include variables such as age, total cholesterol, high-density lipoprotein cholesterol, systolic blood pressure, diabetes, and smoking status.

Novel Risk Markers: The guideline discusses the potential utility of novel risk markers such as high-sensitivity C-reactive protein (hs-CRP), coronary artery calcium (CAC) score, and ankle-brachial index (ABI) in improving risk assessment.

Long-Term Risk Assessment: The guideline suggests assessing long-term (≥15 years) or lifetime risk of ASCVD in adults aged 20 to 59 years who are free from ASCVD and are not at high short-term risk.

2019 ACC/AHA Guideline on the Primary Prevention of Cardiovascular Disease [9]

Study Design: The guideline is based on a comprehensive review of existing literature, including randomized controlled trials (RCTs), systematic reviews, meta-analyses, and observational studies. The evidence was gathered from various databases such as Ovid MEDLINE, PubMed, Cochrane Library, and others, covering research published between May and July 2018. The recommendations are evidence-based and supported by extensive evidence tables included in the online data supplement.

Target Population: The guideline addresses the primary prevention of cardiovascular disease (CVD) in adults aged 18 years and older. It focuses on outcomes related to atherosclerotic cardiovascular disease (ASCVD), heart failure, and atrial fibrillation. The recommendations are applicable to patients with or at risk of developing CVD, with a particular emphasis on those in the United States, although they are relevant globally.

Key Factors:

Lifestyle Factors: Recommendations on nutrition and diet, exercise and physical activity, weight management, and tobacco cessation.

Medical Interventions: Use of statins, antihypertensive medications, and aspirin for primary prevention.

Patient-Centered Approaches: Emphasis on team-based care, shared decision-making, and assessment of social determinants of health.

Risk Assessment: Use of tools like the pooled cohort equations (PCE) to estimate 10-year ASCVD risk and the coronary artery calcium score for risk stratification.

Cost and Value Considerations: Discussion on the cost-effectiveness of various preventive strategies.

ANALYSIS OF EVIDENCE

Shared Findings

All three articles focus on cardiovascular disease (CVD) and its prevention, assessment, and management. They emphasize the importance of lifestyle modifications, risk assessment, and appropriate use of diagnostic tools.

1. **Lifestyle Modifications**:
    - **Arnett et al 2019 JACC**: This article highlights the significance of promoting a healthy lifestyle throughout life to prevent atherosclerotic cardiovascular disease (ASCVD), heart failure, and atrial fibrillation. It recommends a diet rich in vegetables, fruits, nuts, whole grains, lean proteins, and fish, along with regular physical activity. (9)
    - **Goff et al 2014 Circ**: Similarly, this article underscores the importance of lifestyle modifications, including diet and exercise, in reducing cardiovascular risk. It provides guidelines for assessing cardiovascular risk and emphasizes the role of lifestyle changes in managing blood cholesterol and obesity. (8)
    - **Winchester et al 2023 JACC**: This article also stresses the importance of lifestyle modifications in managing chronic coronary disease (CCD). It includes recommendations for exercise and diet as part of the appropriate use criteria for various diagnostic tests. (12)
2. **Risk Assessment**:
    - **Arnett et al 2019 JACC**: The article provides a comprehensive guideline for the primary prevention of cardiovascular disease, including risk assessment tools like the pooled cohort equations to estimate 10-year ASCVD risk. (9)
    - **Goff et al 2014 Circ**: This article focuses on the development of new pooled cohort ASCVD risk equations and provides recommendations for assessing 10-year risk of a first hard ASCVD event. (8)
    - **Winchester et al 2023 JACC**: The article includes risk assessment as part of the appropriate use criteria for detecting and managing CCD. It provides guidelines for using various diagnostic tools based on the patient's risk profile. (12)

POLICY HISTORY

Date	Summary
February 2026	• Adjusted language for clarity for asymptomatic patients indications
July 2025	• This guideline merges two Evolent guidelines with identical clinical criteria: ECG 7272-01 for Electron-Beam Tomography or Non-Contrast Coronary Computed Tomography and ECG 029 for Electron-Beam Tomography or Non-Contrast Coronary Computed Tomography into Evolent Clinical Guideline 7272 for Coronary Artery Calcium Scoring by Electron Beam Computed Tomography (EBCT) or Non-Contrast Coronary Computed Tomography (CCT) ○ This guideline also merges Procedure Codes from these two Evolent guidelines • Added new bullet-point to the General Statement section • Clarified indications for CAC testing • Added a Summary of Evidence and Analysis of Evidence

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.

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