Top Ten Things To Know
Cardiac Computed Tomography

1. Cardiac computed tomography or cardiac CT is a noninvasive test that uses an x-ray machine to take clear, detailed pictures of the heart.

2. In 2007, it was estimated that 72 million scans were performed in the United States.\(^1\)

3. The purpose of this update is to provide new information on the appropriate use of CV imaging for selected patient indications and to establish common scenarios in contemporary practice that support its appropriate use.

4. Gives guidance on use of cardiac CT for diagnosis and risk assessment in patients with low or intermediate risk or pre-test probability for CAD.

5. Use caution in utilizing cardiac CT in high risk patients, routine repeat testing, and general screening.

6. It is appropriate to use non-contrast CT for calcium scoring in intermediate and selected low-risk patients.

7. In its use within heart failure, CT angiography was appropriate or uncertain as a test across both normal (new to this document) and abnormal left ventricular ejection fraction, where reduced left ventricular ejection fraction with low or intermediate pre-test CAD probability is diagnosed.

8. CT angiography is viewed as a potential option among patients undergoing heart surgery for non-coronary indications (e.g., valve replacement surgery or atrial septal defect closure) when the pre-test CAD risk was either intermediate (appropriate) or low (uncertain).

9. There were only two indications that were ranked uncertain: 1) Detection of CAD in the setting of a low pre-test probability for CAD when the ECG is interpretable and the patient is able to exercise and 2) preoperative coronary assessment prior to non-coronary cardiac surgery in the setting of a low pre-test probability for CAD.

10. There have been many advances in CT Technology and these new findings in Cardiac CT with these results will have an impact on physician decision making and performance, will have an impact on reimbursement policy, and will help guide future research.

Taylor AJ, et al. ACCF/SCCT/ACR/AHA/ASE/ASNC/NASCI/SCAI/SCMR 2010 appropriate use criteria for cardiac computed tomography: a report of the American College of Cardiology Foundation Appropriate Use Criteria Task Force, the Society of Cardiovascular Computed Tomography, the American College of Radiology, the American Heart Association, the American Society of Echocardiography, the American Society of Nuclear Cardiology, the North American Society for Cardiovascular Imaging, the Society for Cardiovascular Angiography and Interventions, and the Society for Cardiovascular Magnetic Resonance. *Circulation* 2010; published online before print October 25, 2010, 10.1161/CIR.0b013e3181fcae66.

http://circ.ahajournals.org/cgi/reprint/CIR.0b013e3181fcae66