

March 16, 2007

Catherine A. Dolfi  
Medical Policy and Payment Department  
Highmark Medical Programs  
P.O. Box  
Camp Hill, PA 17089-0089

RE: CT Angiography for the evaluation of coronary arteries: PaACC Position Statement

Dear Ms. Dolfi,

As president of the Pennsylvania Chapter of the American College of Cardiology (PaACC), I am writing in response to your request for a brief opinion or position statement from our organization concerning CT angiography for the evaluation of coronary arteries. I understand, as mentioned in your letter, that Highmark currently considers CT angiography for the evaluation of coronary arteries eligible for the assessment of suspected congenital anomalies of coronary circulation. All other applications are considered experimental and/or investigational at this time. I also understand that this topic is scheduled for formal presentation and discussion at your next Medical Affairs Committee meeting and that you are reevaluating your position on CT angiography at that time.

The PaACC appreciates the opportunity to offer an opinion on this topic. As you may know, this chapter represents over 1000 practicing cardiologists in the state of Pennsylvania who's purpose is to advocate for quality cardiovascular care, education, research promotion, and the development and application of standards and guidelines to responsibly influence health-care policy. We are proud to be an active chapter of the American College of Cardiology which represents more than 90% of the cardiologists practicing in the United States.

Please know that the opinions expressed here-in represent not only comments solicited from members of the PaACC, but also those put forth in the Appropriateness Criteria for CT angiography published by the American College of Cardiology Foundation (ACCF), in collaboration with other professional societies, in the October 3, 2006 issue of the Journal of American College of Cardiology. This publication represents an unprecedented effort by the ACCF to define what constitutes reasonable usage of technology while ensuring that patients receive the highest quality cardiovascular care based on science and practice experience. In general, the ACCF's Appropriateness Criteria exist to ensure that patient indications drive the referral decision for testing; that there is appropriate guidance on the frequency of testing; that inappropriate testing is identified and appropriately excepted from reimbursement; and that variations in the use of tests and procedures are minimized all in an attempt to enhance the effectiveness of healthcare resources. Tests are considered appropriate, uncertain, or inappropriate based on these criteria. I have enclosed an overview of the ACCF's Appropriateness Criteria

Program as well as a reprint of the specific publication concerning CT angiography for review by your Medical Affairs Committee.

The following indications for CT angiography for the evaluation of the coronary arteries have been identified as **appropriate** by members of the PaACC chapter as well as the ACCF as noted in the Appropriateness Criteria publication. “Appropriate” in this context is defined as an imaging study in which the expected incremental information, combined with clinical judgment, exceeds the expected negative consequences by a sufficiently wide margin for the specific indication. As such, the procedure is generally considered acceptable care and a reasonable approach for the indication.

1. For the detection of obstructive coronary artery disease in the evaluation of a patient with chest pain who has an intermediate pretest probability of the same, an EKG that is uninterpretable or is unable to exercise.
2. For the detection of obstructive coronary artery disease in the evaluation of a patient who presents with the acute onset of chest pain who has an intermediate pretest probability of the same, no EKG changes, and serial cardiac enzymes that are negative.
3. For the detection of obstructive coronary artery disease in the evaluation of a patient with chest pain who has uninterpretable or equivocal stress test results.
4. For the evaluation of the coronary arteries in patients with new onset heart failure to assess etiology.
5. For the evaluation of complex congenital heart disease including anomalies of coronary circulation, great vessels and cardiac chambers and valves.
6. For the evaluation of suspected coronary anomalies.
7. For the evaluation of coronary arterial mapping, including internal mammary arteries, prior to repeat cardiac surgical revascularization.
8. For the evaluation of suspected aortic dissection especially to exclude coronary arterial involvement.

While the following indications have been classified as “uncertain” by the ACCF Appropriateness Criteria document for CT angiography (defined as indications that may be generally acceptable and may be a reasonable approach) there is generally strong support from the PaACC membership to include these indications as acceptable for the use of CT angiography in the evaluation of our patients:

1. For the detection obstructive coronary artery disease in the evaluation of a patient with a chest pain syndrome who has an intermediate pretest probability of the same, an EKG that is interpretable and is able to exercise.
2. For the detection of obstructive coronary artery disease in the evaluation of a patient with the acute onset of chest pain, regardless of the pretest probability of the same, no EKG changes and negative serial enzymes.
3. For the detection obstructive coronary artery disease in the evaluation of a patient with a high pretest probability of the same, no EKG changes and negative serial enzymes.

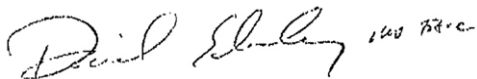
4. For the detection of obstructive coronary artery disease, aortic dissection, and pulmonary embolism in the evaluation of a patient with the acute onset of chest pain and an intermediate pretest probability for one of these in the setting of no ST segment elevation on EKG and negative initial cardiac enzymes.
5. For the assessment of native coronary anatomy and bypass graft anatomy in the patient with a chest pain syndrome after coronary revascularization (PCI or CABG).

The PaACC's support of these indications for CT angiography for the evaluation of coronary arteries assumes that the following criteria are also met:

1. CT imaging equipment and personnel are available that have been minimal technical capabilities required for the indication (i.e. the number of detector rows, spatial and temporal resolution, and acquisition protocols.)
2. Patients do not present with cardiac rhythm abnormalities that preclude the acquisition of interpretable images.
3. Patients do not have severe renal insufficiency generally described as a creatinine greater than 1.8 mg/dl.
4. Patients are able to hold still and follow breathing instructions for the acquisition of interpretable images.

It is clear that the field of cardiac imaging is progressing rapidly and offers us unprecedented opportunities to gather information about our patients. It is also clear that these technologies come with a high price and that the financial implications for uncontrolled use are significant. The members of the PaACC appreciate the opportunity to offer input on what we perceive to be appropriate applications of this technology to improve the health of our patients. As such, we advocate for the reimbursement of CT angiography for the evaluation of the coronary arteries in these scenarios. Please do not hesitate to contact me directly if there are any questions.

Sincerely,

A handwritten signature in cursive script that reads "Daniel Edmundowicz".

Daniel Edmundowicz, MD, FACC  
Western Pennsylvania Governor and President,  
American College of Cardiology, Pennsylvania Chapter.