

Five Things Physicians and Patients Should Question

1

Avoid performing stress cardiac imaging or advanced non-invasive imaging in the initial evaluation of patients without cardiac symptoms unless high-risk markers are present.

Asymptomatic, low-risk patients account for up to 45 percent of unnecessary “screening.” Testing should be performed only when the following findings are present: diabetes in patients older than 40-years-old; peripheral arterial disease; or greater than 2 percent yearly risk for coronary heart disease events.

2

Avoid performing annual stress cardiac imaging or advanced non-invasive imaging as part of routine follow-up in asymptomatic patients.

Performing stress cardiac imaging or advanced non-invasive imaging in patients without symptoms on a serial or scheduled pattern (e.g., every one to two years or at a heart procedure anniversary) rarely results in any meaningful change in patient management. This practice may, in fact, lead to unnecessary invasive procedures and excess radiation exposure without any proven impact on patients’ outcomes. Exceptions to this rule include patients more than five years after a bypass operation, more than 2 years after a stenting procedure, or after having a stent placed in the left main coronary artery.

3

Avoid performing stress cardiac imaging or advanced non-invasive imaging as a pre-operative assessment in patients scheduled to undergo low-risk non-cardiac surgery.

Non-invasive testing is not useful for patients undergoing low-risk non-cardiac surgery (that is, with a <1% combined clinical/surgical perioperative risk of myocardial infarction or death, e.g., cataract removal, endoscopy). These types of tests do not change the patient’s clinical management or outcomes and could result in increased costs and unnecessary downstream procedures.

4

Avoid performing echocardiography as routine follow-up for mild, asymptomatic native valve disease in adult patients with no change in signs or symptoms.

Patients with native valve disease usually have years without symptoms before the onset of deterioration. An echocardiogram is not recommended yearly unless there is a change in clinical status.

5

Avoid performing routine electrocardiography (ECG) screening as part of pre-operative or pre-procedural evaluations for asymptomatic patients undergoing low-risk surgical procedures.

Despite potential value in having a pre-operative ECG to identify unsuspected cardiac abnormalities or as a comparison after a perioperative event, the likelihood of benefit for patients at low (<1%) risk of major cardiovascular events (death or myocardial infarction) is very small. Unnecessary ECGs can lead to needless consults, delays and changes to operative plans, which may counterbalance any potential benefit for the patient. In the absence of scientific studies establishing the value of a pre-operative ECG in a low cardiovascular risk population, the routine ordering of pre-operative ECGs prior to low-risk procedures should be discouraged.

How This List Was Created

The American College of Cardiology (ACC) asked its standing clinical councils to recommend between three and five procedures that should not be performed or should be performed more rarely and only in specific circumstances. ACC staff took the councils' recommendations and compared them to the ACC's existing appropriate use criteria (AUC) and guidelines, choosing items for the five things list that were either Rarely Appropriate AUC recommendations or Class III guideline recommendations. The ACC's Science and Quality Committee then reviewed and approved the final five items. ACC's disclosure and conflict of interest policy can be found at www.acc.org/about-acc/industry-relations/principles-for-relationships-with-industry

Sources

- 1 Wolk MJ, Bailey SR, Doherty JU, Douglas PS, Hendel RC, Kramer CM, Min JK, Patel MR, Rosenbaum L, Shaw LJ, Stainback RF, Allen JM. ACCF/AHA/ASE/ASNC/HFSA/HRS/SCAI/SCCT/SCMR/STS 2013 Multimodality Appropriate Use Criteria for the Detection and Risk Assessment of Stable Ischemic Heart Disease. *Journ Am Coll Cardiol*. 2014 Feb;63(4):380-406.
- 2 Wolk MJ, Bailey SR, Doherty JU, Douglas PS, Hendel RC, Kramer CM, Min JK, Patel MR, Rosenbaum L, Shaw LJ, Stainback RF, Allen JM. ACCF/AHA/ASE/ASNC/HFSA/HRS/SCAI/SCCT/SCMR/STS 2013 Multimodality Appropriate Use Criteria for the Detection and Risk Assessment of Stable Ischemic Heart Disease. *Journ Am Coll Cardiol*. 2014 Feb;63(4):380-406.
- 3 Wolk MJ, Bailey SR, Doherty JU, Douglas PS, Hendel RC, Kramer CM, Min JK, Patel MR, Rosenbaum L, Shaw LJ, Stainback RF, Allen JM. ACCF/AHA/ASE/ASNC/HFSA/HRS/SCAI/SCCT/SCMR/STS 2013 Multimodality Appropriate Use Criteria for the Detection and Risk Assessment of Stable Ischemic Heart Disease. *Journ Am Coll Cardiol*. 2014 Feb;63(4):380-406.
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Or download the [ACC Guideline Clinical App](#)

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