Effective Health Care
Noninvasive Technologies for the Diagnosis of CAD in Women
Nomination Summary Document

Results of Topic Selection Process & Next Steps

- Noninvasive diagnosis of coronary artery disease in women will be developed as a systematic review by the Effective Health Care (EHC) Program.

- When key questions have been drafted, they will be posted on the AHRQ Web site and open for public comment. To sign up for notification when this and other Effective Health Care Program topics are posted for public comment, please go to http://effectivehealthcare.ahrq.gov/index.cfm/join-the-email-list1/.

Topic Description

Nominator: Individual

Nomination Summary: The nominator is interested in the comparative effectiveness and accuracy of noninvasive technologies for the diagnosis of coronary artery disease (CAD) in women. She is particularly interested in women who present with chest pain. The nominator states that there is a lack of studies done on women. She asserts that an answer to her research question will help provide the best quality of care for women, taking into account influences that prompt their care to be different from that of the male population for CAD diagnosis. The nominator suggests that this should be a priority area of research due to the rising prevalence of CAD in women.

Population(s): Women presenting with chest pain
Intervention(s): Noninvasive technologies for the diagnosis of CAD including echocardiography, MIBI-SPECT, pharmacologic testing, stress testing, etc.
Comparator(s): Noninvasive technologies for the diagnosis of CAD including echocardiography, MIBI SPECT, pharmacologic testing, stress testing, etc.
Outcome(s): Diagnostic accuracy and improvements in mortality, and risks associated with undiagnosed CAD and subsequent acute coronary events. Additionally, reduction in cost and unnecessary repeat testing.

Key Questions from Nominator: None

Considerations

- The topic meets EHC Program appropriateness and importance criteria. (For more information, see http://effectivehealthcare.ahrq.gov/index.cfm/submit-a-suggestion-for-research/how-are-research-topics-chosen/.)

- Cardiovascular disease is the leading cause of mortality for women in the US. The literature suggests that compared to men, women present with more advanced disease due to the lack of early recognition and management, and noninvasive diagnosis of CAD in women is particularly challenging for many reasons.

- Two AHRQ systematic reviews published in 2003 are relevant to this topic

  - Grady D, Chaput L, Kristof M. Results of Systematic Review of Research on Diagnosis and Treatment of Coronary Heart Disease in Women. Evidence Report/Technology Assessment No. 80. (Prepared by the University of California, San Francisco-Stanford Evidence-based Practice Center under Contract No 290-97-0013.) AHRQ Publication No. 03-0035. Rockville, MD: Agency for Healthcare Research and Quality. May 2003. http://www.ahrq.gov/downloads/pub/evidence/pdf/chdwom/chdwom.pdf

  - Grady D, Chaput L, Kristof M. Diagnosis and Treatment of Coronary Heart Disease in Women: Systematic Reviews of Evidence on Selected Topics. Evidence Report/Technology Assessment No. 81. (Prepared by the University of California, San Francisco-Stanford Evidence-based Practice Center under Contract No 290-97-0013.) AHRQ Publication No. 03-E037. Rockville, MD: Agency for Healthcare Research and Quality. May 2003. http://www.ahrq.gov/downloads/pub/evidence/pdf/chdwomtop/chdwmtop.pdf

- The feasibility of a full systematic review exclusively in women was initially felt to be uncertain due to limited comparative studies in this population; however, during topic refinement the stakeholders consulted felt very strongly that a systematic review was feasible and needed. In addition to analyzing the existing research, the final report will focus on defining the evidence gaps in order to guide future research.