Effective Health Care

Cardiac Resynchronization Therapy
Nomination Summary Document

Results of Topic Selection Process & Next Steps

- The topic, *Cardiac Resynchronization Therapy,* will be sufficiently addressed by a planned AHRQ Technology Assessment, *Use of Cardiac Resynchronization Therapy in the Medicare Population.* Given that this technology assessment will cover this nomination, no further activity will be undertaken on this topic.

- To view a description and status of the technology assessment, please go to: http://www.ahrq.gov/research/findings/ta/index.html.

Topic Description

Nominator(s): Organization

Nomination Summary: The nominator is interested in identifying the predictors of response for cardiac resynchronization therapy.

Staff-Generated PICO
Population(s): Patients currently indicated for CRT by severe left ventricular dysfunction, New York Heart Association (NYHA) Class III-IV symptoms, QRS duration > 120 msec, on optimal medical therapy; subgroups of interest are women versus men, and the elderly
Intervention(s): Cardiac resynchronization therapy (CRT)
Comparator(s): Additional criteria, beyond the eligibility criteria used in clinical trials of CRT (see Population criteria above)
Outcome(s): Reduction in all-cause mortality, all-cause hospitalizations, six minute walk distance, quality of life, other benefits, and harms

Key Questions from Nominator: What are predictors of therapeutic benefit with cardiac resynchronization therapy?

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/.)

- Heart failure is a major public health problem in the US. It results in high rates of hospitalization and poor quality of life, and accounts for an estimated 300,000 deaths each year. Targeted interventions for this commonly encountered condition are needed, aimed at improving quality of life, decreasing mortality, and reducing hospitalizations.
- It is estimated that left ventricular (LV) activation delay, as indicated by widening of the QRS complex on a 12 lead electrocardiogram, is present in approximately one-quarter to one-third of heart failure patients. Cardiac resynchronization therapy (CRT) is a pacing modality utilizing an LV pacing lead with the goal of re-synchronizing myocardial contraction in patients with heart failure and significant LV activation delay.
- This topic was found to be addressed by an upcoming AHRQ Technology Assessment titled *Use of Cardiac Resynchronization Therapy in the Medicare Population.*