



# Effective Health Care

Comparative Safety and Effectiveness of  
Invasive and Noninvasive Strategies for Managing Stable Angina

## Nomination Summary Document

### Results of Topic Selection Process & Next Steps

While a systematic review on this topic is feasible, given the existing systematic reviews, the primary benefit for additional evidence synthesis would be for individual patient data meta-analysis to examine questions about subgroups. Programmatic resource constraints limit the ability to conduct the additional analysis needed. Thus, *Comparative Safety and Effectiveness of Invasive and Noninvasive Strategies for Managing Stable Angina* will not go forward for refinement as an evidence synthesis product.

### Topic Description

**Nominator(s):** Stakeholder panel convened by the Duke Evidence-based Practice Center

**Nomination Summary:** The topic was identified as a priority for systematic review based on a cardiovascular topic identification stakeholder meeting held at the Duke EPC. The nominators are concerned that there is insufficient clarity regarding the most effective treatment options for stable angina. A review of the evidence on stable angina could aid in the development of clear guidance for its management and treatment.

#### Key Questions from Nomination:

1. What are the comparative safety and effectiveness of noninvasive and invasive strategies in the management of patients with chronic stable angina?
2. How do the following specific treatment options compare: beta blockers, nitrates, calcium channel blockers, ranolazine, exercise programs, coronary stents, coronary artery bypass grafting, intraaortic balloon counterpulsation?
3. Is there any additional insight about the treatment of subgroups including patients with comorbidities, those aged 65 years or older, and/or those with atypical angina?

#### Staff-Generated PICO

**Population(s):** Patients with stable angina, additional subgroups include the elderly, patients with atypical anginas, and those with comorbidities

**Intervention(s):** Pharmaceuticals (e.g., beta blockers, nitrates, calcium channel blockers, ranolazine), surgical procedures (e.g.,

	coronary stents, intraaortic balloon counterpulsation) and exercise programs
<b>Comparator(s):</b>	Those listed above (i.e. compared to each other), usual care
<b>Outcome(s):</b>	Morbidity, mortality, hospitalizations, development of heart failure, occurrence of adverse events, and quality of life

## Considerations

- Stable angina is the presentation of recurrent chest pain, often triggered by physical exertion or stress. The pain is caused by poor or restricted blood flow through the coronary arteries and is often associated with the presence of coronary artery disease. The American Heart Association estimates that 9.1 million Americans are affected by stable angina.
- There are a variety of treatment options including both noninvasive and invasive approaches. Noninvasive treatment options include both exercise programs and medical therapies. Invasive treatment options include stenting and revascularization procedures.
- Although a scan of the literature identified relevant systematic reviews and evidence-based guidelines these sources focused on some but not all aspects of the nomination. We did not identify a systematic review that summarized all interventions of interest. A scan of the most recent literature yielded a number of new studies that could be included in a systematic review, though the scope was quite broad.