

CRITICAL REVIEW FORM: ECONOMIC ANALYSIS

Citation:

Schleinitz M, Heidenreich P. A Cost-Effectiveness Analysis of Combination Antiplatelet Therapy for High-Risk Acute Coronary Syndromes: Clopidogrel plus Aspirin versus Aspirin Alone. *Ann Intern Med.* 2005;142:251-259.

1. Clinical Question: Does combined antiplatelet therapy of Aspirin plus Clopidogrel compared to Aspirin alone improve clinical outcomes at an acceptable rate of adverse events and expenditure of resources?
2. The search strategy should include the following terms: “Antiplatelet therapy”, “aspirin” (Boolean) OR “clopidogrel” combined with (Boolean AND) “acute coronary syndrome”, “myocardial infarction” (Boolean) OR “unstable angina”. The results of this search should be combined with (Boolean AND) “cost-analysis”, “cost benefit” (Boolean) OR “cost utility”. You can start by searching for a clinical practice guideline that includes explicit consideration of cost data. You know that clinical practice guidelines to date have not dealt with this problem to complete satisfaction. The next step could be to search the Cochrane Database to see whether a systematic review on the topic exists. You can then switch to Best Evidence on the OVID interface or you could consider searching MEDLINE/Pubmed for original articles.

| Guide | | Comments |
|-----------|---|----------|
| I | Are the results valid? | |
| 1. | Did the recommendations consider all relevant patient groups, management options, and possible outcomes? | |
| 1a | Did the investigators adopt a sufficiently broad viewpoint? | |
| 1b | Are the results reported separately for patients whose baseline risk differs? | |
| 2. | Is there a systematic review linking options to outcomes for each relevant question? | |
| 2a | Were costs measured accurately? | |
| 2b | Did investigators consider the timing of costs and outcomes? | |
| II | What were the results? | |
| 1. | What were the incremental costs and effects of each strategy? | |

| Guide | | Comments |
|------------|---|----------|
| 2. | Do incremental costs and effects differ between subgroups? | |
| 3. | How much does allowance for uncertainty change the results? | |
| III | How can I apply the results to my patient care? | |
| 1. | Are the treatment benefits worth the harms and the costs? | |
| 2. | Could my patients expect similar health outcomes? | |
| 3. | Can I expect similar costs in my setting? | |

Conclusion: You discussed this article with the cardiologist who is fairly happy that the strategy is providing patient benefit (for most patients) at an acceptable cost for society. However, she wonders about the effects of using a lower dose of aspirin. You believe that this might not influence the result negatively (in terms of the critical appraisal). As the clinical director you decide to send a memo and discuss this with the residency director for the internal medicine residency program (as a journal club) as well as with the director of the cardiology training program for consideration at the program's journal club. Finally, you will discuss these results briefly at the monthly meeting with the case managers and discharge planners of your hospital.