Reviewer's report

Title: Direct hospital costs of chest pain patients attending the emergency department: a retrospective study

Version: 1 Date: 31 January 2006

Reviewer: Isabelle Durand-Zaleski

Reviewer's report:

General
This is a single-institution cost study of patients presenting with chest pain at the emergency department of Lund’s hospital in 1997. The authors estimate form the hospital of Lund’s accounting system the cost of patients with acute coronary syndrome vs patients discharged or ruled out for AMI via triage decision in the emergency department. The authors present cost information by diagnosis and a cost-effectiveness analysis of their current triage policy-----------------------------------------------

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

I have reservation regarding the cost-effectiveness analysis because the mortality data was obtained from a small sample and compared to the mortality in a different population and setting (USA large urban tertiary care centres). The confidence interval for the 5.3% mortality used as baseline is 2-8%. It would be interesting to know the actual mortality and confidence interval for the mortality comparator chosen. The statement that the mortality was divided by two after admitting patients is too imprecise. If a cost-effectiveness analysis is to be presented at all it should be supported with stronger mortality data and include a sensitivity analysis.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

In the methods section, the authors should describe the diagnostic categories that they are going to use in the ‘results’ section.
New possibilities in the management of patients with ACS include coronary scanner, which is not too invasive and might be a good triage test. This should be included in the discussion.

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:
I do not have any competing interest