Reviewer’s report

Title: Chest pain in the emergency department: a risk-stratified approach

Version: 3 Date: 9 October 2014

Reviewer: Ulf Ekelund

Reviewer’s report:

Thank you for allowing me to review this paper again.

Major

Title: The HEART score (and now also the Manchester triage system) should be mentioned in the title. As it is now, the title leaves the reader wondering what the article is about. There are many possible phrasings, but one suggestion might be: “Risk stratification of chest pain patients in the emergency department with the Manchester triage system and the HEART score.”

Line 73: Omit the sentence “Chest pain has an extensive differential diagnosis with very different levels of severity.” I fail to see its purpose, we all know this already. Put in a sentence regarding the Manchester triage system instead, to mirror the aim on line 54.

Line 127: Should be changed to “The HEART score was retrospectively applied to the population according to the information available in the ALERT system and the common electronic health records of our hospital.”

Line 331: Change to: “We are unaware of studies where the HEART score has been applied prospectively in real time, but such studies are of course necessary to confirm the prognostic value of the score.”

Figure 2: This figure is good to see, but it is not sufficiently detailed. Please insert how many were admitted or discharged from the ED, and please also insert how many were excluded (in each arm) from the analyses due to lacking data.

Minor

Line 256: Change the word “validated” into “retrospectively tested”

Line 262: Change the wording to “…population showed that more than a half of the patients were stratified with a green or a yellow level of severity, in accordance with the high incidence of potentially….”

Line 278: The sentence starting with “If we take…” should be changed and shortened into “This diagnosis is thus probably the most frequent one in an unselected population.”

Line 294: Delete the words “namely in the time from arrival to ECG acquisition”.
STEMI patients are few in the ED nowadays - they often go directly to the angio lab. I think that the big problem with under-triage is the general delay in the work-up of NSTEMI and UA patients.

Line 303: Exchange the word “define” for “create”

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests