Author's response to reviews

Title: Prehospital triage accuracy in a Criteria Based Dispatch centre

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Version: 2
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Author's response to reviews: see over
Reviewer's report

Title: Prehospital triage accuracy in a Criteria Based Dispatch centre and proposal for a common template for further studies

Version: Date: 3 July 2015
Reviewer: Alexander Olaussen

Reviewer's report:

- Major Compulsory Revisions - The author must respond to these before a decision on publication can be reached. For example, additional necessary experiments or controls, statistical mistakes, errors in interpretation.
  1. The retrospective review is good. The template needs more work. In its current state, I do not believe the template is ready for publication. The author can either improve the template, or leave it out of this paper, and consider it for another publication. For instance, spinal trauma, severe burns and severe fractures would according to the current template be regarded as low-acuity.
  2. A sentence about the 1.9% with NACA 7, but not P1 would be necessary.
  3. The authors argue against using ED decisions, but rather use NACA which is determined at the end of the case. Ideally, for future studies a NACA score was determined at arrival. For this study, the argument against using ED decision needs to be changed.
  4. The 3rd paragraph of the discussion is cumbersome to read. A table would more clearly demonstrate the rates in other settings.

4. The calculated predictive values need to include one decimal, as well as confidence intervals.
• Minor Essential Revisions - The author can be trusted to make these. For example, missing labels on figures, the wrong use of a term, spelling mistakes.
  1. Page 10, NPP should be NPV.
  2. Also on page 10, towards the end, please use NPV and PPV instead of spelling it out as it has been previously defined.
  4. The conclusion needs some work. Please avoid references. Secondly, instead of saying “we aim to propose”, say we have.

• Discretionary Revisions - These are recommendations for improvement which the author can choose to ignore. For example clarifications, data that would be useful but not essential.
  1. It would be interesting to look at P1,P2, and P3, in addition to simply dichotomise into L&S or no L&S. This would enable a receiver operating curve to be produced, would could better guide the cut-off between sensitivity and specificity. Although the P1,2,3 are only based on dispatcher’s opinion, the methods argue well in favour of the dispatcher’s expertise and ongoing development, and as such should be given some value.

Level of interest: An article of importance in its field
Quality of written English: Acceptable
Statistical review: Yes, and I have assessed the statistics in my report.
Declaration of competing interests:
Reviewer's report

Title: Prehospital triage accuracy in a Criteria Based Dispatch centre and proposal for a common template for further studies

Version: 1
Date: 22 June 2015
Reviewer: Georgios Giannakopoulos

Reviewer’s report:

Minor Essential Revisions

Dear editor,

Thank you for inviting me to review this article. It concerns an excellent piece of work and a well- and clearly written paper. The authors describe a well known phenomenon in daily emergency care: triage errors. Due to the heterogeneity of the patients but also medical systems in (prehospital) emergency care it is very difficult to conduct a well designed study.

Over- and undertriage will always be existing in every system. As the American College of Surgeons – Committee on Trauma states: An amount of 50% overtriage is necessary to minimize (< 10%) undertriage. I personally think that this can be stated for whole the emergency care. We must not forget that, as the authors correctly state in their conclusion, triage sensitivity and specificity are inversely related. Therefore we must be careful with reducing overtriage because of the danger of increasing undertriage.

The authors used the NACA score for evaluating the triage capabilities of their dispatch centre. It would be more useful to assess more outcome measures (ISS in trauma, LOS and in-hospital mortality). For a
retrospective study as this, including a high amount of patients it would almost be impossible to collect all this data. Besides this, I wonder if it would change the accuracy of the dispatches.

**Level of interest:** An article of importance in its field

**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' below. If your reply is yes to any, please give details below.