Reviewer’s report

Title: The Sydney Triage to Admission Risk Tool (START) to improve patient flow in an Emergency Department: A model of care implementation pilot study

Version: 0 Date: 18 Oct 2019

Reviewer: Mikkel Brabrand

Reviewer's report:

Thank you for allowing me to review this paper. The topic is highly relevant and the potential for the method interesting. However, after having read the paper several times, I have some areas of which I am uncertain.

Major issues:

- I am unsure what the paper is testing. Is it the use of START, an experienced decision maker early on, the combination or something else? I simply cannot deduct this out of the paper.

- Likewise, I really struggled to see the difference between intervention and control, but believe that the explanation on lines 210-218 gave some insight. May I suggest moving this to the introduction so the reader can understand the study?

- On line 104, it is stated that the intervention was used on "selected patients". What is meant by this? To me, this opens a door to selection bias, but I must have misunderstood it.

- On lines 117-123, the selection of controls is stated. But as I read this, the only difference between the groups were the experienced consultants. It this correct?

- Could you add information on the rest of the population. How many were admitted, what were their LOS? This would make it easier to understand the effect of the intervention. Also, because, as I read the paper, the most experienced staff looked after the intervention patients, and this must have affected the care of the rest of the population.

- I do not understand the numbers presented in the results section. 155 patients were evaluated using START. But I thought both controls and intervention must have START calculated?

Minor issues:

- The aim of accuracy of decision making is not mentioned in the abstract. I take it this is due to word constraints.

- On line 129, what is meant by "correctly assigned as an admission"?
- Were patients initially seen by an experienced consultant later followed up by the same consultant?

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

No

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

No

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Unable to assess

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable

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