Author’s response to reviews

Title: The patient safety culture as perceived by staff at two different emergency departments before and after introducing a flow-oriented working model with team triage and lean principles: a repeated cross-sectional study

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Author’s response to reviews: see over
Response to Reviewer 2, 2014-02-04

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<tr>
<th>Reviewer 2</th>
<th>Answer</th>
<th>Location in manuscript</th>
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<tbody>
<tr>
<td>Thank you for your valuable comments.</td>
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<tr>
<td><strong>Abstract and Background</strong></td>
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<td>1. Consider modifying the statement about ‘… project that was aimed to enhance patient safety’ to include ‘in the ED’.</td>
<td>Done.</td>
<td>Pages 2 and 5, second paragraph.</td>
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<td>2. There was an abundance of interview citations that caused distraction while reading. While I appreciate the value of clinician quotes, I would ask the authors to revisit the results section to see if they would be comfortable tightening this up a bit and dropping some of the quotes.</td>
<td>We have removed the quotes. We have kept the dimensions in italics to make them easy to read.</td>
<td>Page 2 (Abstract), pages 8, 9, and 11-18.</td>
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<tr>
<td><strong>Methods:</strong></td>
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<td>1. The description of the intervention and timeline is confusing. For example, the county hospital description includes several different extensions of the model. Consider modifying figure 1 to include more details, a time range rather than single point for the intervention (to reflect the model extensions) and add months to the x axis.</td>
<td>Thank you for your suggestion. We have made a new figure, which clearly indicates when the changes happened and when the measurements were made.</td>
<td>Figure 2, suggested to be inserted at page 7. A figure legend is included appropriately.</td>
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<td>2. It is really difficult to understand who saw the patients before and after the interventions. The authors should also consider a figure to better describe how patient flow changed as a result of the intervention.</td>
<td>We have made two figures instead of one. One for each hospital to show how the organization was before and after the quality improvement at the County hospital (figure 1a) and for the University hospital (figure 1b).</td>
<td>Figures 1a and 1b, suggested to be inserted at page 7. The figure legend has accordingly been changed.</td>
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<td>3. HSOPSC description. The authors say each dimension includes 2-4 items yet Figure 2 suggests dimension 15 only has one item. Please clarify.</td>
<td>It was a mistake, it is changed.</td>
<td>Page 8, in the middle of the page. The sentence is now: Each dimension includes one to four items with a 5-point Likert scale from 1 to 5.</td>
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<td>4. Delete language re ‘statistically significant improvement in outcomes between baseline and follow up is described as a higher score or a positive score.</td>
<td>The phrase is removed from the places where the expression is wrong.</td>
<td>Page 2 (Abstract, results). Page 13, Discussion, first paragraph, last sentence.</td>
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<td>5. Data collection and statistical methods: tables 2,3 have ‘n=xx’ which actually represents targeted providers (not # responses) as described in this section. Add rows to table 2, 3 to reflect # targeted providers and actual # responses.</td>
<td>Thank you. We have changed it as suggested.</td>
<td>We have added an additional row in Table 2 and 3. One row presents the number of the target group, and the other row presents the number of responses.</td>
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### Results:

1. The biggest missing data here are time to first contact with a physician and length of stay in the county hospital; total time visit and time to see a physician in the university hospital. While the culture scores are the primary focus of the manuscript, the authors repeatedly say improvements in these measures were the primary goal of the interventions. Can the authors briefly provide any insights into these results?

   It could have been interesting. But, the aim of this study was to describe the patient safety culture as perceived by staff before and after quality improvement. We therefore suggest not including the suggested measures, especially as they partly have been presented in a previous publication.

### Discussion:

1. Please edit existing language to say ‘improvement for the dimensions… can likely be explained by the QI project…’

   Done.

2. Delete short paragraph beginning with ‘transforming care from the culture….’ And ending with ‘in addition, …. paramount for safe care’.

   Done.
3. Limitations: the authors spend a 
ton of time speculating why 
culture scores improved, didn’t 
 improve, or decreased’. I suspect 
the authors could have gained 
important, ‘real world’ insights by 
conducting focus groups with 
providers that were impacted by 
the QI project. Please clarify if 
any discussions with frontline 
staff occurred to gain this 
understanding or add a as 
limitation if not conducted.

A paragraph is added that describes the results of a study in 
which the focus group was used. This study was conducted 
in parallel with the present study.

Page 14, second paragraph. “One 
factor that may have complicated 
the implementation process could 
be the steady increase in patient 
numbers at both EDs during 
recent years. It was shown in a 
previous study that staff 
frustration was accentuated when 
the waiting time at the ED is 
considered non-acceptable. In the 
same study it was shown that 
much of this frustration also were 
connected to issues concerning 
leadership, work organization, and 
lack in patient safety culture, 
which also could have been a 
complicating factor for the 
implementation.”. Reference 
number 33.

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<th>Conclusions:</th>
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<td>1. I don’t think the authors should downplay the results they achieved with language like ‘only minor changes’. Culture change is challenging and takes time. While we may not completely understand the causal relationship between the intervention and the changes in culture recognized, improvements in any domain are worth celebrating, exploring further to understand, and sharing</td>
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<td>Your comment is relevant and important. Further studies and discussions would be of great value. Therefore, we have added a clarifying sentence in Conclusion.</td>
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<td>Page 19, the last sentence in Conclusion. “Further, a cultural change is challenging and takes time, and the time from implementation to follow-up may have been too short for the staff to experience any effect on patient safety”.</td>
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<td>Minor improvements in the manuscript</td>
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<td>One mistake</td>
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