Reviewer’s report

Title: Development of a percutaneous coronary intervention patient level composite measure for a clinical quality registry

Version: 1 Date: 23 Apr 2019

Reviewer: Susan Brandis

Reviewer's report:

Thank you for the comprehensive response to the reviewer's feedback. I have taken some time to go through the revisions and am satisfied that the majority of my previous comments have been addressed. The authors have also provided quite a detailed response to my previous comments. One of the reasons I enjoy reviewing manuscripts is that I always learn something new, and I appreciate your thorough explanations.

The structure of the paper now flows much better and is clear to follow.

I will address some minor edits, and then talk more broadly about how I believe the paper could be strengthened.

Lines 57- 60: as a direct quote please reference appropriately
Line 88: should read "they capture" as measures are plural
Lines 101 - 104: I feel uncomfortable with this wording in relation to patients NOT being treated in a patient centred manner. Sounds a bit harsh, and other disciplines may disagree! Please reword this section something like - "PCI patient pathways have traditionally had a focus on treatment efficacy and safety with a consequent lack of emphasis on PROMS in recent PCI and Acute Coronary Syndrome guidelines etc...."
Line 107: thanks for this explanation
Line 135: please label your figures
Line 140 - 143: I will come back to this
Line 147: I am not sure that this figure adds anything (in my opinion)

Overall the paper is much better organised, and I thank the authors for their efforts to date. My final suggestions relate to the method and provision of additional detail regarding the procedure time lines and enhancing the linkages between the two studies.

No time frame is given for either study one or two; and it is not stated whether the studies were concurrent or sequential parts of one project. Please provide timeframes for each component. If they were sequential, then perhaps it may read better to call each component a "phase" so that phase one contributed to meeting objective 1 listed in lines 140 - 143, and phase 2 contributed to objectives 2 and 3. It would also provide some gel to the separate studies / phases or components if the links between the two could be emphasised and how each part assisted in achieving the overall purpose "of developing a composite measure for an established cardiac registry ..." as stated in your background.

While you have explained in your response that this is not a mixed method study, it is multi- method and the links between the two, and why you took this approach need explanation. This would enhance the structure of the paper and inform your discussion on the lessons learned from using a dual approach. At the moment you have undersold the complexity of what you have done, and missed the
opportunity of better explaining the process to the reader. This would add an academic rationale to your choice of method and assist other who might look to your experience to guide their efforts, for example in other clinical areas. I trust this is useful in shaping your final paper.

All the very best with your work; as always happy to review the revisions.

**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.

Yes

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

Yes

**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 recommend additional statistical review

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

Acceptable

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