Reviewer's report

Title: Evaluating implementation of methicillin-resistant Staphylococcus aureus (MRSA) prevention guidelines in spinal cord injury centers using the PARIHS framework: a mixed-methods study

Version: 2  Date: 30 April 2015

Reviewer: Samuel Pannick

Reviewer's report:

1. Is the question posed by the authors new and well defined?

As per the other reviewer's comment, this combination of setting and the type of guidelines is a novel one. The time period is now better specified.

2. Are the methods appropriate and well described, and are sufficient details provided to replicate the work?

Both reviewers picked up on the absence of MPC data. The rationale for excluding MPC data from the manuscript is given in the authors' response letter. Given that the focus of the manuscript is the factors affecting guideline implementation, the MPC data would still seem pertinent, although the authors are in the best position to judge this. A brief explanation of their decision should feature in the manuscript itself (Methods), as readers are likely to question this too.

3. Are the data sound and well controlled?

Both reviewers had some questions about the Chi square tests in the original manuscript. The authors have tried to address my concern that the significant difference across staff groups was prematurely attributed to differences in the nurse data. However, they have done so in a way (using nurse data as a reference point and then comparing that to other groups) that still does not account for multiple post-hoc comparisons and the increased likelihood of false positive results. If anything, this is introducing further post-hoc comparisons. A single post-hoc adjustment would be appropriate, and not particularly onerous. I have conferred with colleagues who agree. A statistical review would be appropriate.

Using a similar method, the authors describe "a mild trend showing that physical therapists & assistants were less likely to be aware of the guidelines compared to nurses". The p-value may reflect a chance finding of multiple comparisons, and phrases like "mild trend" should be avoided in any case. The authors could still retain their point that further investigation of targeting efforts to hands-on providers might be helpful, especially in view of their interview findings that therapists/assistants generally didn't learn about the guidelines.
4. Do the figures appear to be genuine, i.e. without evidence of manipulation?  
No figures.

5. Does the manuscript adhere to the relevant standards for reporting and data deposition?  
Yes

6. Are the discussion and conclusions well balanced and adequately supported by the data?  
Yes (with proviso as above)

7. Do the title and abstract accurately convey what has been found?  
Yes

8. Is the writing acceptable?  
Yes

Minor essential revisions:
- Abstract Background: should read "...prevention guidelines in VA SCI/D Centers approximately 2-3 [YEARS] after the guidelines were released."
- remove references to "mild trends" where p values are >0.05
- 2nd paragraph of Background: should read "patients with chronic and complex health needs, such as those [WITH] SCI/D..."
- 5th paragraph of Results: remove "approximately" if quoting survey results to one decimal place (36.8%)
- 4th paragraph of Discussion: should read "a key lesson from this and other studies is that [IMPROVING] perceptions and attitudes alone may not be sufficient"

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

**Quality of written English:** Acceptable

**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.