Reviewer's report

Title: Psychometric properties of the AHRQ hospital survey on patient safety applied on a large Swedish health care sample

Version: 1 Date: 2 April 2013

Reviewer: Joann Sorra

Reviewer's report:

This is a nicely done paper and is based on very large data sets. The application in Sweden will be of broad interest. Specific comments below:

1. Note the spelling of Cronbach (not Chronbach)

2. On page 7 and page 10 and the abstract it is a little confusing about what the total sample N and response rate are. The abstract and page 7 report a 60% response rate but page 10 says a 47% response rate. It is best to report consistent numbers throughout (perhaps based on complete surveys).

3. On page 10 under response rates, it is not interesting to see response rates by item and there is no need to talk about relatively low response at the item level since one assumes missing values are due to the item not applying to the respondent or that they simply did not know the answer (and it would be best to leave the item blank). Perhaps instead, and more interestingly, it would be good to report the Average percent positive response to each item at the hospital level compared to the primary care level.

4. Indicate Additional File 1, Appendix 1 on page 10 since it was not clear if those were 2 separate things.

On page 10, under construct validity,

5. Since the complete, hospital and primary care samples indicated 9 factors do not use the term “both” in the first sentence.

6. This phrase is hard to understand: “Dimensions seeming to constitute one single factor were for the total and hospital samples” so perhaps rephrase as “A number of items across the 14 dimensions loaded onto one single factor for the total, hospital, and primary care samples.” Maybe even say how many items loaded onto Factor 1.

7. In some cases you say a dimension loaded onto Factor 1, but only half of the items in the dimension loaded on Factor 1, not all items, so you will need to clarify/specify.

8. The dimension numbers don’t have meaning so you might also need to use a dimension label.

9. There are either errors in Appendix 1 or errors in the references to items (I may not have caught all errors so a thorough check is needed)

a. Factor loadings below 0.4 (NOT A15, A17); not A9 in primary care but A11
b. Loading on more than one factor (NOT F7 in both total and hospital—only in total) and NOT A17 in the primary care sample.

10. On page 11, five items below the 0.3 limit were NOT A5 or A15, but included A9 and A17. Again, need to check to correct any errors.

11. On page 13, it says there was a low factor loading for item A15, but that is not the case in Appendix 1. Please correct.

12. The discussion is missing a drawback of having one instrument for both hospitals and primary care and that is that by adapting the hospital version the information may not provide enough detail for patient safety improvement for primary care.

Discretionary revisions

13. In terms of organization, I wanted to see the conclusion on page 13—-that the CFA of the 9-factor modified version did not have better fit than the original 14-factor version—earlier on page 11 before Table 2. I think it might be better to organize each of your analyses by comparing the findings for the 9-factor vs. 14-factor versions for each analysis, rather than summarizing all results for the 9-factor and then all results for the 14-factor. The comparison is what is interesting.

14. Discussion page 14, second sentence “In this study....” reads as if you are discussing the prior cited article so change to “In our study....”

15. Discussion page 14, 3rd sentence should say the confirmatory factor analysis generally showed a better fit with the 14-factor/dimension version than with the 9-factor (specifically use the term “better” compared to the 9-factor).

16. In the conclusion first sentence use the term “Swedish version” because the term modification confuses the reader with the modified 9-factor model.

17. In appendix 1, label the dimensions because item numbers do not carry meaning. Maybe even use short item descriptions in addition to item numbers if there is room.

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:

'I declare that I have no competing interests'