Reviewer’s report

Title: Measuring patient safety culture in Dutch primary care: psychometric characteristics of the SCOPE-PC questionnaire

Version: 3 Date: 3 February 2013

Reviewer: Carl de Wet

Reviewer’s report:

Dear Editor,

BMC Health Services Research

MANUSCRIPT: Measuring patient safety culture in Dutch primary care: psychometric characteristics of the SCOPE-PC questionnaire

Date of review: 26th January 2013

Thank you for the opportunity to review this manuscript.

Major Compulsory Revisions

1. Whilst the reported methodology and methods seems appropriate and robust, it is possible that readers may be uncertain why this study was undertaken in the first place. It would be helpful if the authors could better justify and expand on the need for this specific, adapted instrument. By its very definition, culture is ‘different’ within and especially between organisations and teams. This is often used as the rationale for the many different instruments available internationally. The transferability (or not) of instruments between clinical and geographical settings should therefore be considered.

2. It would be helpful if the authors could add and expand on the potential usefulness of SCOPE-PC, how they hope it will be used and by whom. For example one implication to consider is whether general practice teams will have to do two surveys, e.g. SCOPE and SCOPE-PC?

3. One potential use of SCOPE-PC is to compare perceptions of safety culture of different primary care providers. Given that the authors chose to include the mean scores with standard deviations in Table 2 for individual survey items, it would be very interesting if they consider and describe this further in the results and add the potential insights and implications in the discussion section. Could a comparison be included between different provider groups, for example as a separate table providing mean culture scores overall and for each factor (dimension)? What is the ‘overall’ perception of safety culture for Dutch primary care? How does his compare to other settings and previous research?

4. A minimum number of three items are normally required before they can be
bundled together as a ‘factor’. The single retained item appears to have face validity and intuitively seems important. If this is important, shouldn’t it be developed into a ‘factor’? Conversely, if it isn’t that important maybe it shouldn’t be included?

5. Factor correlation is a difficult concept. Inter-correlation between factors is almost inevitable, as they all measure aspects of the main object of interest (in this case, safety culture). The practical usefulness of factors is that they allow researchers and health care providers, teams and organisations to focus on specific aspects. It helps them to ‘untangle’ and simplify a complex phenomenon. From this perspective, high correlation isn’t necessarily ‘good’ as it can limit the overall usefulness of the instrument. Whilst Table 4 is very useful I would appreciate the authors reconsidering their description and discussion of it to make this clearer.

Minor Essential Revisions

1. The word ‘patient’ should be deleted in the title. Quantitative instruments such as SCOPE-PC aim to measure perceptions of ‘safety culture’. Whilst safety culture impacts on ‘patient safety’ it is technically broader and include ‘...values, attitudes, norms, beliefs, practices, policies and behaviours...’ as the authors rightly point out.

2. The ‘limitations’ sections should include the main, known limitations of the ‘quick and dirty’ survey method.

3. Consider inclusion of the ‘overall’ mean score (SD) for the survey at the end of Table 2. Consider adding the factor-level mean scores (SD) as well. I think aggregating respondent perceptions to the factor and overall level may be of interest to many readers.

4. The abstract mentions ‘...921 questionnaires were returned...’ but Table 1 has 615 total respondents, as it accounts for those respondents that did not meet the inclusion criteria. In my opinion this should be reflected in the abstract.

Discretionary Revisions


2. In the abstract ‘results’ section the main findings could be better summarized, for example: ‘...The final, validated instrument has xxx items and xxx factors...’ This is the main output of this study and should be given more prominence.

3. How many different ‘models’ were considered during confirmatory factor analysis?

Summary

The authors aimed to adapt a previously validated instrument to measure perceptions of safety culture in primary care. They used an appropriate ‘gold standard’ method and robust analytical methods. Whilst they acknowledge the
response rate was ‘low’, it is comparable to or better than similar studies and their overall sample size exceeded the necessary requirements for factor analysis. Overall, the psychometric properties of SCOPE-PC therefore appear to be sound and it is apparent that the study is of a high quality and required considerable effort. It is therefore with considerable regret that I had to suggest a relatively large number of ‘major’ revisions. I sincerely believe that it is possible to address all of these issues and that it would make their work more meaningful to a wider readership.

Please let me know if I can be of further assistance or if any comments require clarification.

Dr. Carl de Wet

**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'