Reviewer's report

Title: Shortening the Current Opioid Misuse Measure via computer-based testing: a retrospective proof-of-concept study

Version: 1 Date: 1 September 2013

Reviewer: Seung W Choi

Reviewer's report:

The objective of this study was to apply curtailment and stochastic curtailment to reduce the respondent burden of the COMM while maintaining the sensitivity and specificity of the assessment. This is a very clearly written manuscript. I only have a few minor issues.

1. The COMM is composed of 17 Likert scale items, which may take less than 5 minutes to complete. Is the respondent burden really an issue? The author may provide info on the average amount of time to complete the questionnaire.

2. The Positive Stopping thresholds for SC-99 for 3 items completed (9) and for 4 items completed (8) seem unexpected. Is this a typo? If not, the authors may want to explain as to how that can happen.

3. Is the order of items presented in the COMM considered significant? Is there a statistical/psychometric method to determine the most optimal order of items if shortening the test length is critical?

4. Is the COMM amenable to IRT modeling and computer adaptive testing? Can CAT further reduce the test length without compromising sensitivity and specificity.

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

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests