Reviewer's report

Title: Script Concordance Tests: Guidelines for Construction

Version: 2 Date: 4 January 2008

Reviewer: Clarence Kreiter

Reviewer's report:

Major Compulsory Revisions:

While many of the guidelines are based on research that is far from definitive, overall this article is useful for those considering the development of an SCT. One of the weakest aspects of the paper relates to the advice regarding score scales and scoring of the SCT. The recommended scoring, using the aggregate method, has many implications for implementing a classical theory test model for instance. The role of uncertainty and the response scale have not been well researched and the guidelines should indicate this. Also, the current status of the research regarding panel size, level of consensus, score scale, and the relationship with a discrimination index does not provide a solid evidence basis for making test construction decisions. It is important to acknowledge this so that those developing new SCT-types of tests understand that experimenting with variations on the SCT are justified, especially since current 'best' methods have not been proven. I think the article does a good job of detailing how the SCT can play an important role in medical education testing, but I would encourage the authors not to present the guidelines as the product of a strong research tradition. It seems more accurate to state that these are the current practices, however much psychometric research remains to be done. Also, they should state that validity research is required to understand the SCT's relationship with more traditional knowledge item formats, performance assessments, and clinical reasoning.

What next?: Accept after minor essential revisions

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'