Reviewer's report

**Title:** Using video-cases to assess student reflection: Development and validation of an instrument

**Version:** 1  **Date:** 25 October 2011

**Reviewer:** Andrew Grant

Reviewer's report:

Major Compulsory Revisions
The abstract needs to give the reader a clear idea of the model of reflection being used in this study.

The authors claim to have found a way of summatively assessing reflection by undergraduate medical students. As this study is based on students' comments and reflections after watching a video of a simulated consultation. I believe this to be sufficiently different from most reflective work done with medical students which involves a consultation with a real patient that the student have seen for themselves to make this claim invalid.

I believe that all the authors can claim is that they have found a way of assessing an observed, video recorded, simulated consultation.

I am also concerned however that the learning related to the authenticity of a one to one patient encounter as well as the opportunity to reflect on interpersonal skills will, necessarily, be lost in the reflective model used here.

The authors would need to carry out further work to determine how well scores in this situation correlate to assessments of reflection on live patients seen by the student themselves.

The manuscript needs to be assessed by an expert statistician but the authors appear to have carried out the statistical analysis rigourously.

My concern is with the validity of this assessment
The authors have used a perfectly valid 3 point model of reflection.
1. Awareness of self
2. Critical analysis of both the self and the situation
3. Development of new perspectives to perform future actions
This model has been used to develop both the questions to guide the students’ reflections and the marking guide.

In this context, where the student plays only a vicarious role I believe that the clearer guidance is required. for instance, what aspects of awareness of self should students be attending to when watching a simulated consultation? I believe that this model could work, at least to guide students to examine their own knowledge levels (this could follow Kolb's experiential learning model).
Question 3 of the students' reflective questions does not seem appropriate here. It asks for "Searching questions that help analyse your own actions/thoughts during the consultation process." This does not seem appropriate for students observing simulated consultations.

The authors say that the two teachers who scored the students' reflections had 30 minutes training. They do not state whether they had any previous training in marking reflective work or whether any attempt was made to explain to them the concepts underlying this assessment.

In analysing the marks the authors state that the evaluation instrument, STaRS, discriminated between students. Without comparison with another, validated measure of reflection I do not see that any inference can be drawn from this.

Minor essential revisions
On page 3, 2nd paragraph,
..persisting clarity to educate and assess it. Educate should be replaced with teach.
page 7, 1st line
...we two teachers should read we asked two teachers.

**Level of interest:** An article of limited interest

**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 I have no competing interests