Reviewer's report

Title: Practice effects in medical school entrance testing with the Undergraduate Medicine and Health Sciences Admission Test (UMAT)

Version: 4 Date: 4 March 2014

Reviewer: Jon Dowell

Reviewer's report:

I think the article has improved and the responses are reasonable. However I still believe the authors have taken a tightly psychometric approach and not adequately acknowledged the potential impact of the difference between those retaking and those only sitting once due to their success. This is touched upon in the last section of the discussion but not raised as a weakness (which I see it as). I appreciate they did not have access to this information but it remains a concern that they cannot estimate the impact of this effect. It seems to me that for a variety of reasons (including graduates moving on to GAMSST in Australia) mean there is a real question over the similarity between the groups and good reason for expecting them to behave, prepare and score differently.

So, though item level analysis is important, I believe there are other steps required to understand this issue.

Happy to accept as is, but also suggest the authors may be asked to consider this broader critique.