Reviewer's report

**Title:** Graduates of UK medical schools show substantial differences in performance on MRCP(UK) Part 1, Part 2 and PACES examinations

**Version:** 1  **Date:** 4 July 2007

**Reviewer:** Lambert Schuwirth

**Reviewer's report:**

Comments concerning manuscript Graduates of UK medical schools show substantial differences in performance on MRCP(UK) Part 1, Part 2 and PACES examinations by McManus et al.

Thank you for asking me to review this manuscript. I have read it several times with great interest. First I want to compliment the authors for being able to make sense of such large and diverse data sets. I am also impressed in the way they have been able to make sense of it for me as a reader who is far less well-versed in statistics.

This brings me to a first disclaimer with respect to the review. I do realize very well that the knowledge of statistics of the authors exceeds my -basic-understanding by far. If in this report I would make comments that are flawed due to my ignorance in this domain I do apologise beforehand.

1 I assume for example that in the analyses all the individual diets have been analysed separately and that not the data have been pooled into one giant data set. If the latter is the case, I wonder whether this would be the most appropriate procedure and I would suggest to the editor to seek specific statistical advice on this. (Discretionary)

My main concerns, however, lie in totally different areas.

2 The study is very strongly orientated on a possible specific problem in the UK. As such it may not very scientifically interesting for that part of the readership who do not live in the UK. I may be too strict in my opinion here, but it does not help me to understand the problems in medical education better, nor does it help me to improve medical education or to advance medical education as a science. This is not to say that the study was not performed excellently, quite the contrary, but I wonder whether a scientific journal is the best forum for these results or that it should be more perceived as a project report to a funding institution. I write these words down with some hesitations as it is only fair to say that this might be to much of a bias on my side, and that the principal author and I have already had some discussion about this (in all good friendship). I do not want to create the impression that I am continuing this discussion in an unfair way, but I would not be doing my task as a reviewer very well if I had not written my concerns about this here. I hope to have made clear that I would have had the same reservations if the study had dealt with a Dutch local problem and another
colleague would have the author.\`(Major Compulsory)

3 I have not been able to find any reference as to whether ethical approval was sought or not. Of course the data were anonymous at the individual student's level, but from any future applicant it is known to a future employer from which medical school he or she graduated. As the schools have not been anonymised in the study this may have harmful consequences for individual student. I would strongly advise to anonymise schools if the paper is published, because it is apparently also a highly political study. (Major Compulsory)

4 I missed in the discussion a more detailed expose about the limitations of the study. By necessity national examination (and Royal College examination) focus on a very limited aspect of medical competence. For example, most of the competences as defined by for a such as the CanMeds, the GMC and the ACGME cannot and will not be addressed by such types of testing. Another issue could be the detrimental effects of national examinations on local curricula and specific study strategy of students (and all kind of commercial institutes). This is not to say that national examinations are unwanted, but that the discussion of this paper would be the most suitable place to discuss such pro and cons to allow the reader to interpret the results in a broader context. They do not discuss, for example, why this is an argument in favour of national examinations and not for a accrediting/visiting committee of educational experts who visit schools, perform a quick scan and give detailed feedback on how to improve teaching and learning. The feedback of national examinations in this respect is limited, as it only tells that on average students of certain schools are underperforming in a certain area and not on how to improve the situation. Again, I think such a broader discussion would be needed. (Major Compulsory)

5 The paper could be improved if a more detailed description of the different tests were given. How were they constructed, what was the quality control, what where the test characteristics and perhaps provide some sample items to allow the reader to form an opinion about the type of measure on which these comparisons were made. After all, the tests were the major instrument in the comparison (Minor essential)

6 I found the description of all the different formats sometimes hard to follow. Perhaps a figure could help here. The PACES design is not clear to me. Am I to understand that per station two different clinical presentations were administered and that both examinees scored both presentations? (discretionary)

**Which journal?:** Too insignificant to warrant publication in BMC Medical Education

**What next?:** Reject because too insignificant for publication in any BMC journal

**Quality of written English:** Acceptable
Statistical review: Yes

Declaration of competing interests:

I have stated already that the principal author and I have had a discussion about the general interest of the topic on the basis of another paper (most likely based on the same data) with a slightly different scope. I do repeat that this discussion was in the friendliest of intentions, but we do differ substantially about whether such issues are of interest to the wider medical education scientific community or not. For the sake of honesty I want to mention this. This is also the reason for my selection in some of the questions above, although I think it is the prerogative of the editor to make such a decision and not mine.

Sincerely,

Lambert Schuwirth