Reviewer’s report

Title: Teaching trainers to incorporate evidence-based medicine (EBM) teaching in clinical practice: the EU-EBM project.

Version: 6 Date: 27 January 2009

Reviewer: Peter Wyer

Reviewer’s report:

- Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached)

This is the latest report of an ongoing project in EBM education which entails a multiplicity of novel features. Notable among these are the multi-national context, the support of corresponding agencies and stakeholders involved with medical education in the European Union countries and the use of e-learning tools as a mainstay of the approach. Previous reports, cited by the authors, outline the development of the curriculum, including a set of learning modules, the development of the e-learning modules and some preliminary field testing of these materials. I find the current report hard to follow in several respects. It took me quite some time to figure out what amidst that which is being presented here goes beyond the prior publications, and neither the abstract nor the body of the text served as my friends in this effort.

The new element in the current manuscript appears to be the identification of specific candidate teaching-learning venues within which the curriculum and the e-learning tools could be adapted to enhance focused learning objectives particularly appropriate to those venues. I also gather that this proposed allocation of the elements of the curricular design and corresponding materials is itself yet to be field tested. The concept of allocating different aspects of an EBM skill-based curriculum to different clinical teaching venues is not, in itself, original to this project; such a concept has been elaborated elsewhere in ways quite analogous to the approach being described here. (1,2) What is new here, therefore, is the specific application of e-learning tools in connection with differentiated learning goals in these contexts in a fashion that traverses multiple settings across multiple countries and health systems. I believe that the latter needs to be made the central focus of this report and that the redundant descriptions of the overall curriculum and the development of the e-learning tools be referred back to the prior reports. Whether this new aspect of the project is in fact sufficiently developed to justify an additional report at this time is unclear to this reviewer. Perhaps a more detailed description of the process of developing a multi-national application of a single curricular design might make the difference. Again, and in summary, this report pertains to a project that is unchallengeably unique and reportable. What is in question in this reviewer’s mind is whether this particular manuscript stands on its own feet at this stage in the development of the overall project.


- Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

The following detailed comments identify specific places in the text in which clarifications may serve to achieve what is otherwise being called for as “necessary change” in the overall manuscript.

P2. Abstract: Methods: I believe this paragraph is misleading. I suggest that you consider language such as: “We adapted a previously developed e-learning CPD course for the purpose of interjecting integrating focused EBM teaching into various clinical settings.” The wording of the next to last sentence in this paragraph is very confusing. Please replace the phrase “…teachers of EBM to learn in the workplace…” with language the conveys the true focus of your effort. Who were the ‘teachers’ and who were the ‘learners’ in this project? The issue of well defined learner developmental level is fundamental in an education research report and it is not clearly and consistently articulated in this manuscript.

P. 4, Par 1, L. 1: This is a very hyperbolic way of introducing a report of this nature. It sends a message: “If you are not a true believer, read no further.” I suggest starting with a statement pertaining to the challenges facing EBM as we know it from the standpoint of integration into the fabric of teaching and practice of medicine.

P. 4, Par 2, Sentence 4-5: This is poorly worded and framed. “CPD courses” calls up images of EBM in what is called “continuing medical education” in the US and pertains to practicing clinicians, i.e. education of such practitioners for their own needs. However, the second of these sentences implies that your real target is clinical teachers, not just practitioners. These imply very different learner targets and goals. This reviewer is in fact not at all clear what the true target learner population of your effort is. This needs to be clearly stated and described consistently throughout the manuscript.

P. 5, Par. 2: For a reader who has not read the prior reports of this project this looks like a vast and sweeping undertaking. As a paragraph in the “methods” section of a study report, this description is much to vague and undifferentiated. The reader would be much more engaged if this multinational process, and the way it informed the development of your curricular allocations, were articulated in some detail. Are the venues you are describing uniformly structured and defined
across all of the participating EU countries? Are they uniformly so in both teaching and non-teaching facilities? Readers outside the EU will find the context in which you are operating entirely foreign. Much of your methodology has been developed in conjunction with this unique context and will need to be elaborated for your report to speak effectively to a wider audience.

P. 6, Par. 2, Sentence 1: This appears to clearly identify your target audience as “clinical teachers”, presumably faculty members in accredited teaching programs. Earlier, and in your abstract and introduction, you identify the uniqueness of your curriculum as being aimed at the CPD consumer. In North America, for example, the latter constituency is largely identified with working, NON-academic, practitioners, generally practicing in non-academic, non-teaching, settings. Once more, standard EBM workshops and curricula to date have been directed at clinical teachers, and not as much at working practitioners. You need to clarify the nature of your target learner constituency in a way that will allow readers outside of the EU to understand the nature of your initiative and how it relates to ‘traditional’ EBM teaching targets and venues.

A second point on this same section of your manuscript: “Aims, objectives and learning outcomes” generally suggests material that one would expect to find in a “Methods” section, not in a “Results” section. The content of this section therefore appears incongruous as part of the methods section of your manuscript. Please rethink this and reorganize and/or clarify your presentation accordingly.

P. 7, Par. 2: This is where this reviewer perceives the “results” of your effort to begin to emerge. However, as noted previously in this review, these settings (with some exceptions such as “Audit” which needs to be explained to readers not part of the EU community) as venues for customized approaches to integrated EBM teaching have been previously identified in mainstream EBM literature. Please consider carefully how the identification of these settings constitutes reportable ‘results’ of an original education research endeavor.

P. 9, Par. 3: The choice of terminology describing your target audience is confusing here. You alternate between the term “participant” and “learner” in a way that is very confusing to the reader.

P. 10, Par. 2: This one sentence paragraph is ungrammatical. The syntax needs to be corrected. It would also seem salient to suggest that you begin this section with a summary of the goals and objectives of the ENTIRE project and then immediately succinctly summarize the state of the project as reported in your previous 2 articles in BMC Educ and then, finally, summarize the contribution being uniquely reported in this manuscript.

P. 10, Par. 2 and following: there needs to be a limitations paragraph in this report. High on the list of acknowledged limitations should be the fact, assuming the correctness of my interpretation of this and the prior reports, that the specific,
‘venue-tailored’, use of the e-learning modules in the targeted settings you have identified is yet to be field tested. The ultimate value of your project will, of course, rest or fall upon such testing.

**Declaration of competing interests:**

I declare that I have no competing interests