Reviewer's report

Title: Ambulance officers' use of online clinical evidence

Version: 1 Date: 19 June 2006

Reviewer: Saverio Maviglia

Reviewer's report:

General

This report focuses on an under-researched area, namely the use of online medical evidence by ambulance officers. The study was a survey comparing users and non-users of a particular online medical evidence program (CIAP).

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

None.

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

1) The methods state that the "findings were interpreted in relation to previously published results...", and the conclusion directly refers to these comparisons. Therefore, these findings should be part of the results section (with corresponding statistical tests of comparisons), rather than part of the discussion section. Alternatively, the authors may choose to leave the comparisons with other health professionals in the discussion, but then should edit the methods and conclusions (in the abstract) appropriately. 2) The attribution of low usage to lack of access and to a difference in culture remains a hypothesis, as there is not enough data to conclude that the association is a cause-effect relationship. The statement in the Discussion section, for example, should probably state “Thus lack of access to CIAP may be a major contributing factor.”

3) Please provide more information about the survey, or a reference with this information. For example, was it paper based or electronic? How were people invited to take the survey? Were non-responders re-invited? Were there any incentives to complete the survey?

4) The main weakness is the low response rate. Although 278 surveys were completed, the analyses were based on only the subset of responses from those who knew of CIAP (n=135). This is discussed, but a more thorough discussion is warranted of the possible biases that this may introduce. Responders and non-responders may be systematically different. The authors note that CIAP users may be more likely to complete surveys than non-users; further, satisfied (or unsatisfied) users may be more likely than the average user to take the time to give their opinion about CIAP. The fact that the gender distribution matched that of the overall ambulance population is absolutely no assurance against bias since one would not expect gender to have any relationship with either the exposure or the outcome, a requirement for any confounder.

5) The statement in the Abstract and Background that there have been no previous studies may be too definitive. Either provide details of the literature search algorithm that was used to make this conclusion, or tone down the sentence.

6) Spell out the acronym "MIMS" the first time it is used.

7) Calling CIAP-using ambulance officers "dedicated" implies that non-CIAP users are not "dedicated". Please change the wording to make these statements in the Abstract and Discussion less inflammatory.

8) Please clarify how an ambulance officer who heard of but never used CIAP might report that the reason for non-use was “difficult to use” or “too slow”.

9) Grammatical error in last sentence of second paragraph of Background section - Ambulance officers were all have passwords..."

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Discretionary Revisions (which the author can choose to ignore)

1) Table 2: Since the method was to compare users to non-users, I would eliminate the "Total" column.
2) The authors wonder if the selection of resources in CIAP not being tailored to pre-hospital emergency care might have reduced the relevance of CIAP to ambulance officers. I agree, but then why would ambulance officers report finding answers to their questions more frequently than nurses?
3) Another reference to support the claim that easy access to online evidence can improve patient care is J Am Med Inform Assoc. 2006 Jan-Feb;13(1):67-73.

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: Needs some language corrections before being published

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests.