Author's response to reviews

Title: Barriers to the Acceptance of Electronic Medical Records by Physicians From Meta-analysis to Taxonomy and Interventions

Authors:

Albert Boonstra (albert.boonstra@rug.nl)
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Version: 2 Date: 2 July 2010

Author's response to reviews: see over
Cover letter of the research article

Barriers to the Acceptance of Electronic Medical Records by Physicians. From Systematic Review-analysis to Taxonomy and Interventions

MS 2037397350362574

July 2nd, 2010

Dear Dr Edmunds,

We would like to resubmit the attached research article, "Barriers to the Acceptance of Electronic Medical Records by Physicians. From Systematic Review-analysis to Taxonomy and Interventions", for possible publication in BMC Health Services Research.

We viewed the comments from you and the reviewers as justified and constructive, and we have endeavored to thoroughly address them in our revisions.

We detail our responses to the comments from you and each of the reviewers below in tabular form (see Table 1).

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<tr>
<th>From</th>
<th>Comment</th>
<th>Response</th>
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<tbody>
<tr>
<td>Associate editor</td>
<td>1. In the study, 372 articles were excluded due to availability in e-file. These should be reviewed. Otherwise, the systematic review is incomplete.</td>
<td>We have reviewed those 372 articles that were first excluded. We reviewed them now based on title and abstract. After screening 354 were excluded because they did not meet the selection criteria. We tried to find the full text of the missing articles by searching again in additional search systems and extended our search field by making use of library systems of other universities as well. This was successful. Of the remaining 18 relevant articles 16 were excluded based on study design. Therefore, we have now included 2 extra articles in our systematic review (#21 and #22), and we adjusted the data in the first two paragraphs of the results section and in Figure 1.</td>
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<td></td>
<td>2. Grey literature should be searched and results should be considered in the paper.</td>
<td>We have looked in Google Scholar for articles that met our search criteria. One article (Lum &amp; Zuiderveen, 2001) seemed to meet most of the criteria but was excluded due to its study design.</td>
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3. Authors discussed methods of overcoming these barriers. However, the discussion is broad. Concrete examples should be provided for overcoming barriers. That means what strategies have been implemented to promote EMR utilizations in the real world. For example, in Canada, InfoWay was established and financial incentive has been provided for EMR implementation. In UK, EMR has been widely utilized. The reasons for the successful stories should be discussed. In the discussion section, we have now included specific national EMR implementation programs in Canada, USA, and Australia. We relate these programs to the barriers and possible interventions suggested in this paper. We also refer to lessons to be learnt from successful cases.

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<td>The only exception I would take with the authors is in their Category F: Legal. The author’s state, “there is a lack of clear security standards which can be followed by those who are involved in the use of EMRs”, and “there is a lack of clear security standards that could help ensure patient privacy and confidentiality.” (page 11) In the US, the HIPAA security and privacy rules do provide these standards and the EU has similar standards. We agree with this reviewer that there are regulatory frameworks for EMRs in various countries. However, several studies continue to point out that there are still many privacy and security issues which are not yet resolved. We address this in the discussion section.</td>
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<td>1. This is not a meta-analysis, as stated in the title. Rather it is an extremely detailed review of the literature. A true meta analysis would use data from each of the studies to produce overall estimates of the number of physicians citing each barrier. Authors must recast this as a review of the literature or conduct the necessary statistical analyses for a meta analysis. Agree, we have reformulated the title in accordance with this comment.</td>
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<td>2. There is no information given on how the quality of each of the included studies was assessed. Was the study regional or national in scope? If a questionnaire was used, it the study employ a defensible sampling strategy, and what was the response rate? The authors should provide this information to the readers, if not in the text, than in a technical appendix. Agree, in this revised version we have been more precise in defining our scope. Where questionnaires were used, we have expanded Table 1 to show the sampling strategy and the response rate.</td>
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<td>3. The authors should do more in the conclusion to discuss the policy implications of their findings. Is the current policy push going to be enough to overcome these barriers? Are some barriers more important to target than others? In the discussion and conclusions, we now discuss the practical implications of this study, both for policymakers and for implementers and change managers.</td>
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<td>The authors should consider using a copy editor. The language in the paper is somewhat difficult to read and could use some clarifying. We have had our paper checked by our regular native speaker/editor who, based on many years of experience, now feels the paper is sufficiently clear for the intended audience. However, if you feel some parts are still difficult, and could highlight these, we will ask him to look again</td>
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Reviewer 1

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In the paper, we have highlighted the major changes in yellow.

This version now follows the journal style. We found the Prisma guidelines very useful in make additional clarifications to the article. Where they were applicable, we clarified our paper accordingly.

We have also have included statements on: competing interests, financial competing interests, and authors’ contributions, plus an acknowledgement.

As we already noted with our first submission, both authors have read the manuscript and agree with its content. The materials will be freely available to any scientist wishing to use them for non-commercial purposes. The manuscript is original, has not already been published in another journal, and is not currently under consideration by any other journal. No other papers using the same dataset have been published.

We are looking forward to your response. We are happy to answer any questions.

Sincerely,

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