Author's response to reviews

Title: Deploying a clinical innovation in the context of actor-patient consultations in general practice: A prelude to a formal clinical trial.

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Author's response to reviews: see over
20/04/2009

Dear Editor,

Thank you for the opportunity to respond to the reviewers comments. Our comments are shown in red below.

BW,

Jiwa et al.

Reviewer’s report

Title: Deploying a clinical innovation in the context of actor-patient consultations in general practice: A prelude to a formal clinical trial.

Version: 1 Date: 23 January 2009

Reviewer: Mark Harris

Reviewer’s report:

Major Compulsory Revisions

Nil

Minor essential revisions:

The paper could be improved a clearer relationship between the theoretical framework, the methods and findings. The authors make a point of the disruption that can be caused by repeated switching between tasks in the consultation. It is unclear to what extent the LAP detects this as this is more a global measure of consultation performance in the three categories studied used predominantly in medical education.

Thank you. In this study we did not aim to detect ‘how’ the new software program impacted on the flow of the consultation. We were interested in the overall performance of the general practitioners in the three domains of history-taking, problem solving and patient management. We realised that the small number of practitioners in this study were volunteers and therefore not necessarily ‘typical’ in terms that could be reliably described. However we were able to study differences in the performance of the practitioners on the same ‘before and after’ measure. Within the theoretical framework described we anticipated that if the software was causing a major disruption to the consultation then a follow up study would be required to determine if it was the ‘switching between tasks’ which was the cause of the problem. In framing the study within this context we present reasons why such an intervention needs to be studied in controlled conditions before being deployed in practice with ‘real’ patients even within a clinical trial.
It would be useful for some discussion of other measures of the consultation process such as the Roter and the reasons for selecting the LAP.

Our interest was in the impact of the intervention on the cognitive process of the participating practitioners. Roter’s RIAS focuses on behaviours in the consultation and offers no insight into practitioners’ thinking. We acknowledge that the insight to participants’ thinking offered by the LAP via the post encounter questionnaire is indirect and imperfect; this can be partially verified by consideration of whether responses to the post encounter are congruent with the practitioners’ behaviour. While we acknowledge the limitations of this insight into participants’ thinking we are unaware of any other observational instrument which can provide any.

Regarding the technical difficulties that occurred in video-taping the consultations, it would be useful to discuss the advantages of using video rather than audio recording of consultations – as the latter is technically easier and less intrusive. Obviously this would not capture the amount of time spent looking at the screen rather than the patient However with the exception of one item - detecting “non-verbal cues” the LAP does not seem to capture non verbal activities very well.

Every consultation measure has limitations and we accept that the LAP is not free of such and also that there are other measures available in the literature (eg RIAS). Nevertheless, other behavioural measures are also best used against video recording rather than audio recordings. While the reviewer makes a good point that only one LAP competence is dependent on visual inspection, this is critical as we were concerned that excessive attention to a computer screen could have impaired detection of nonverbal cues and consequently history taking and patient management. Video recordings allowed us to observe the practitioners’ interactions with the actor-patient in a way that audio could not. We make this point in the revision submitted with this letter.

The results are not very easy to understand. Why was inter-rater agreement assessed by a Bland-Altman plot rather than using a Kappa or ICC?

We were interested in the agreement on continuous outcomes using two raters. The ICC remains the method of choice when there are more than two raters, however in the case of only two raters, the limitations of the ICC become more apparent. We used the alternative approach suggested by Bland and Altman (Bland JM, Altman DG. A note on the use of the intraclass correlation coefficient in the evaluation of agreement between two methods of measurement. Comput Biol Med. 1990;20(5):337-40). From the Bland-Altman plot it is possible to easily assess the magnitude of disagreement (both error and bias) between the two observers, see outliers, and spot any trends. However, we take on board that the results may not have been easily understood and have attempted to clarify the issue in the results section by explaining the plot results in more detail and adding more detail to the discussion. The figure legend was also changed to increase understanding.

Kappa statistics are used to assess agreement on nominal or ordinal (weighted kappa) outcomes and are not appropriate here.
It would be interesting to include some qualitative data in the results. This might help us to understand why one GP's LAP score decreased.

We did not collect qualitative data. As reviewer 2 suggests in comment 2 below: The use of a computerised cancer referral module is only a vehicle to provide context for this method of evaluating an intervention prior to a formal mixed methods trial. In the first instance we set out to demonstrate that the software did not cause a major disruption of core activity, namely the consultation within a relatively safe environment of an actor-patient setting.

The discussion and suggestions for improvement to this approach was generally very good. The problem of making the consultations as realistic as possible could have been explored in a little more detail (quite apart from the issue of physical examination). The basis on which the role plays were developed could be described in a little detail (eg were these based on real cases) and there might then be more discussion about how this could be improved.

We will include the following text on this issue: ‘The role plays in this study were crafted with reference to the general practitioner members of the team (MJ, RMcK, MS). The scenarios were therefore developed by practitioners with substantial clinical, educational and research experience in the field of the consultation in general practice ……The development of the role plays for future studies using this methodology would be improved by video recording ‘actual’ GP-patient interactions and using these as a basis for the role plays. Such an approach was impractical in this study as cancer consultations are relatively rare in general practice and therefore not easily captured on video without recording a large number of consultations in general practice.’

Discretionary Revisions
Nil

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests: I declare that I have no competing interests

Reviewer’s report

Title: Deploying a clinical innovation in the context of actor-patient consultations in general practice: A prelude to a formal clinical trial.

Version: 1 Date: 22 March 2009

Reviewer: Kieran J McGlade

Reviewer’s report:
1. This is an interesting and well written paper that makes a significant contribution to the literature with respect to assessing the impact of innovations on practitioner performance in the consultation. In particular the paper describes the execution of an innovative methodological technique to attempt to standardise the conditions under which an innovation is initially assessed in a manner akin to clinical trials of drugs.

Thank you, no comment required.

2. The main interest of the paper is the description of the technique of using standardised patient actors and standardised conditions to test whether a particular innovation has an impact on practitioner performance. The use of a computerised cancer referral module is of less interest given the likely idiosyncrasies of deployment in different health care systems. However this has been used as a useful vehicle to provide context.

Thank you, no comment required.

3. The modelling has appropriately taken into account possible clustering effects by GP and observer.

Thank you, no comment required.

4. The authors have discussed the limitations of the study adequately

Thank you, no comment required.

5. Page 7, last paragraph, line 3 Typographical error - should read "consultations were not captured...."

Corrected.

6. A number of the references are probably superfluous. For example references 9 and 11 are duplicates. I would suggest that references 8,9,10,11,12 and 14 are probably not required.

Number of references have been reduced. However, original reference 8 is on validity (the others are reliability) and 9 and 12 the utility of the LAP outside the UK which are of relevance to this paper. These have therefore been retained.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests: I declare I have no competing interests