# **Author's response to reviews**

**Title:** arriba-lib: Uptake of an electronic library of decision aids in primary care physicians

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Version: 2 Date: 19 March 2012

Author's response to reviews: see over

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Adrian Aldcroft, BioMed Central Executive Editor

19/03/12

Dear Dr. Aldcroft

Thank you very much for your kind consideration of our manuscript. We also would like to thank the reviewers for their comments which helped us to clarify the objective of our manuscript.

Please find attached the revised version of our manuscript "Uptake of an electronic library of decision aids in primary care physicians".

It underwent a major revision and we hope that we heeded all of your and the reviewers' recommendations. The manuscript was copy edited by a native speaker (www.jrautenberg.com). We hope that our manuscript is now suitable for publication in "BMC Medical Informatics and Decision Making".

Yours sincerely

Oliver Hirsch, Ph.D.

Reviewer's report

Title: arriba-lib: Uptake of an electronic library of decision aids and its association

with decision making in primary care physicians

Version: 1 Date: 26 September 2011

Reviewer: Jill Thistlethwaite

**Reviewer's report:** 

Thank you for this interesting paper on the important topic of decision aids for shared decision making. The question and design of the research were ambitious. I think that the paper needs to add more clarification about the methodology and data before publication.

### Major compulsory revisions:

The introduction states quite rightly that there is not a lot of literature on patients' and doctors' attitudes to using decision aids. The research in this paper focuses on the physician uptake rather than the patients. While I think you did to some extent answer the first part of your research question (evaluate uptake), I do not think you addressed the association of this uptake to decision making. Only the doctors were asked if decisions had been shared or not - and this opinion was not correlated with any patient opinion or outcome. Was any management plan decided in the consultation adhered to by the patient afterwards? This is a good measure of how well the decision had been shared and concordance achieved within the consultation. We deleted the association to decision making. The adherence to the management plan in patients is presented in another publication.

In the results you mention that patients were phoned two months after the consultation - this is data gathering and therefore should be included in the method. In fact no results of this data collection are given so we know nothing about the patient response. I am not sure why this sentence was included without further data and analysis.

This sentence was deleted. Results of the telephone interviews with patients are presented in another publication.

While I understand that the qualitative data will be discussed in more depth in another paper, I do think that there are concerns about including some of this here with minimal explanation. By mentioning the focus groups you do need to give more details about how the questions were constructed and what sort of analysis was undertaken.

We deleted the qualitative data from our manuscript as also another reviewer proposed this.

In Germany what would be the length of an average consultation in general practice? On average, how much longer did they become with the use of the decision aids? This is important because as you say a major barrier to uptake is the concern about consultation length.

The analysis of log files showed that the average consultation time was 8 minutes. In Germany, primary care physicians are mainly paid for patient contacts of 10 minutes. Therefore, the use of decision aids did not extend the average consultation time.

You only mention in passing the training of doctors to use this system. Training is important but adds extra time. Please comment further on how this is/might be done and whether this was of benefit to the doctors.

We added further details on how training was done. We did not systematically evaluate the training but unstandardised feedback was positive.

In the discussion you include new information that does not arise from your data - ie concerns about the comprehensiveness of the decision aids and whether they are up-to-date. Was this a concern of your doctors and how do you keep your programme up-to-date?

Some doctors raised concerns against certain modules, e.g. atrial fibrillation, because there was a discrepancy between the evidence base and German guidelines. Our experts regularly scan the new literature relevant to each module and propose refinements.

Patient values are a major influence on decisions - how does the programme incorporate values and evidence to help patients choose between options? During training physicians were instructed to explicitly ask for patients' values. Evidence is presented in a balanced way not to push the patients in a certain direction. Weigh scales can be used to balance pros and cons and can also motivate to discuss other pros and cons relevant to the specific patient.

Another paper on GP registrars' opinions about decision aids also adds to the field and again shows doctors are broadly supportive but may not use the DAs in consultations: Thistlethwaite JE, Heal C, Nan Tie R, Evans R. Shared decision making between registrars and patients. Web based decision aids. Australian Family Physician 2007; 36: 537-540.

Thank you very much for the advice. We also cited this paper.

### Minor essential revisions

The English is patchy in places; on p5:For example, only half of the family physicians who indicated that they will use the presented decision aid on hormone replacement therapy actually used it in their clinical practice. Will should be would in this sentence.

Corrected. The manuscript was copy edited by a native speaker (www.jrautenberg.com).

#### **Reviewer's report**

Title: arriba-lib: Uptake of an electronic library of decision aids and its

association with decision making in primary care physicians

Version: 1 Date: 20 December 2011

Reviewer: Nananda F. Col

Reviewer's report:

General Comments: This is a very interesting paper that should be of interest to many people interested in the fields of shared decision making and decision support. Parts of the manuscript were difficult to understand, presumably because of language translation.

I would suggest that the sections describing the physician focus groups be omitted entirely because insufficient detail on either the methods used or their findings were presented, and mention is made about this data being published elsewhere. We deleted the qualitative data from our manuscript.

The manuscript would benefit from reorganization and tightening of the language. Specific suggestions to improve clarity are included below.

The manuscript was copy edited by a native speaker (www.jrautenberg.com).

# Major Compulsory Revisions

abstract: It is unclear what the phrase " its association to decision making in primary care" means in the following sentence: "The aim of our study was to evaluate the acceptance of arriba-lib and its association to decision making in primary care" More specificity in the objective would be helpful. A main focus of the paper seemed to be on acceptability of decision aids in terms of physician time, and this does not come across clearly in either the title or the abstract.

We deleted the association to decision making in physicians. We examined several aspects that might influence the uptake and acceptance of decision aids in physicians (time, decision making, prior experience with decision aids).

p. 2 Methods--this sentence is confusing: "how detailed steps of the shared decision making process were discussed,...". Perhaps 'detailed' should be replaced by 'specific'?

We indeed mean detailed in the sense of extensive or at length. Physicians subjectively estimated how much time was spent in each step of the shared decision making process.

- p. 4: This sentence is confusing: Decision aids should not substitute personal counseling because uncertain patients would then be left alone [3]. Reformulated: "Decision aids should not substitute personal counselling because uncertain patients would then have no possibility for direct discussions with medical experts in order to be able to make a sound decision."
- p This sentence is confusing: Decision aids should be interactive so that individual risk data can be entered and the effects of certain treatments can immediately be seen. The potential benefits of this type of interactivity is as implied (but could be more clearly stated), but the downside is that it takes time to enter data, there is the possibility of inaccurate data entry and thus inaccurate risk projections, that the risk that patients may not understand these risks, etc. I do not think it is as simple as is implied.

The qualitative feedback of the participating physicians regarding data entry was mostly positive. It was criticised that the programme does not have an interface to practice software so that the data could not be entered automatically. Inaccurate data entry is always a danger but most physicians said that this was safe in their opinion. Data were presented in natural frequencies which were shown to result in highest comprehension (Gigerenzer). Physicians were instructed to explicitly ask patients if they understood the presented risk information and/or to let them paraphrase what they were told. The majority of patients appreciated the risk presentation in our library.

p 6. This sentence is very confusing: Our study corresponds to Phase II of the model for complex interventions by the British Medical Research Council. Reworded: Based on the new Medical Research Council guidance on complex interventions, our study can be regarded as an evaluation study.

This sentence should be reworded to improve clarity: In our programme, this process comprises the following successive steps: definition of the problem, discussion of the individual risk, discussion of treatment options, deliberation, and plan for future actions where "no treatment" is also a possible choice.

Reworded.

- p 6-7 use of the term 'smiley' --this is not the usual term for these types of charts. Replaced with "Emoticon".
- p. 7 This sentence is unclear: Risk reducing effects can be demonstrated after choosing between evidence-based treatment options.

  Reworded.
- p. 7--omit this: Detailed results of these analyses will be presented separately. Deleted.
- p.7: Please give more detail on this: The participating physicians received a personal introduction into the programme and the philosophy of shared decision making by seminars, outreach visits, and a brochure explaining details of the programme. For example, how was this done, low long did it take, who did it, how many visits, what was participation like, how long was the brochure, how did docs respond to it?

  More details were given in the text.
- p.8 Questions about using a four point scale ("not at all", "hardly", "detailed", "very detailed"). This scale seems to be missing the middle point between hardly and detailed. This was done intentionally to avoid too many middle point scorings. ("unacceptably extended", "acceptably extended", "neither nor", "shortened". I find these terms a bit problematic--how long is acceptably extended? how long is unacceptably extended?

This is indeed not unproblematic but we intended to get a subjective appraisal of physicians regarding duration of consultations because this might be an implementation barrier. This certainly was interpreted differently.

p. 9. I would suggest you delete section: "qualitative approach" here and elsewhere in the manuscript. Not enough information is given to be able to determine how data were analyzed, nor what the findings were. If you choose not to delete it, then please add much more detail on the methods and please provide findings from these groups.

We deleted the section "qualitative approach" as proposed.

p. 9. I am puzzled by this statement: Due to the exploratory nature of our evaluation study, we decided not to adjust for multiple testing. This has to be considered when interpreting the results [34]. Why not simply do the adjustment? If not, can you report how many subgroups you examined to help the reader assess the magnitude of the potential error involved?

As we did 10 different analyses the adjusted significance level would be  $\alpha$ =.05/10=.005 according to the Bonferroni method. This was added in "Data analyses".

p.13. How were analyses performed? Who did the coding, 1 person or 2, etc? However, rather than go into this detail, I think better to completely delete the qualitative section. See comment above.

Ditto for this sentence: Initial analysis classified the data into two major categories.... The detailed findings are published explicitly elsewhere. [ref?] Maybe not include this section at all.

We deleted the section "qualitative approach" as proposed.

- p. 13. It is not clear how the following conclusion is related to the data presented. Maybe the results section is not the best place to put this sentence? our results suggest that such complex decision aids on the basis of shared decision making (SDM) need to be offered as an integral part of the communication and counselling process in order to be used most effectively.

  Sentence was deleted.
- p. 14: This is an awkward sentence: The subjective duration of consultations was independent from how detailed the steps of the SDM process were discussed, in 8.9% of consultations physicians said they were unacceptably extended.

  Reworded.
- p. 14, 2nd paragraph: no need to reiterate the main findings in the discussion section.

Please excuse us, but other journals we published in explicitly demand that the discussion is started with the main findings. That's why we would like to leave it as it is.

- p. 14. Not sure what this sentence means: no consistent consecutive patient recruitment was done by the participating physicians.
- We asked physicians to do consecutive patient recruitment but it may be that this was not consistently done.
- p.15. There seems to be a threshold in physicians' perceptions of how a decision can be reached. Threshold for what?

  Reworded to "when a decision can be made.".
- p. 15 This seems to be an important finding--present this in results and methods (how interactions are monitored): We found discrepancies between these subjective appraisals of the detailedness of shared decision making steps and log data which represents user interactions with our electronic library of decision aids.

This piece (after being edited for clarity) belongs in the methods section, not the discussion section: It was possible to record the time that was spent with a certain option within the modules (e.g. smileys) and we were therefore able to calculate the proportion of consultation time spent with specific features [40].

This section belongs in 'results' section: In the cardiovascular prevention module, 35 of 122 consultations (28.7%) spent 100% of consultation time in the history part of the programme which includes risk presentation. These consultations were shorter than average. In the other modules with weigh scales, 15 of 62 consultations (24.2%) spent 100% of consultation time in the history part; 11 of these consultations used the oral antidiabetics module. Again, these consultations were shorter than average. In contrast to this, all of the physicians indicated in their subjective appraisals of the detailedness of shared decision making steps that therapeutic options were

discussed. Obviously, in these consultations physicians discussed therapeutic options with their patients without using the respective modules which points to a reduced fidelity in this point [5].

These descriptions and findings were included in the Discussion because they stem from another of our publications. In this publication we analysed log files recorded during consultations. Here, we tried to connect these results to the findings of the present analyses and discussed them.

p. 17: first paragraph: very nice review (content-wise), but some of the language is hard to follow (may be a translation issue). What does 'emerging prompts' mean? McDermott et al. found that the emerging prompts were more likely to be accepted when physicians considered them to offer support and choice These were emerging prompts on the screen regarding guideline adherence. Added in the text.

p. 18: emerging means what in this sentence? Emerging topics We replaced "Emerging" with "Mentioned".

Figures: could English translations be provided?
We're sorry but our library has not been translated into English, yet.