Reviewer's report

Title: Applying the Analytic Hierarchy Process in healthcare research: A systematic literature review and evaluation of reporting

Version: 0 Date: 13 Oct 2015

Reviewer: Jos Aarts

Reviewer's report:
I have read with interest the literature review of the Analytic Hierarchy Process (AHA) decision making approach. However, I have a number of issues. The authors describe that they performed a systematic review. On page 4 I see a number of keywords. What is systematic about these keywords? More specifically, what conceptual model underpins the selection of the keywords? Second, despite the fact that authors wish to emphasize the methodological aspects (page 2), they also suggest to present examples. However, these examples remain vague (clinical guidelines, management decisions). It might therefore be questioned how this manuscript aligns with the purposes of this journal. BMC Medical Informatics and Decision Making is about informatics and clinical decision making processes that are often related to use of information technology. Could this manuscript be more appropriate for a health services research or a health economics journal? It could be helpful if the authors could be more specific how HPA, on the basis of their review, could be used in a clinical context, perhaps by offering examples, and why publishing the review in a health economics journal is less relevant.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.
Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.
Yes
Are the conclusions drawn adequately supported by the data shown?

If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?

If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

Quality of written English

Please indicate the quality of language in the manuscript:

Acceptable

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