Reviewer’s report

Title: Multiple Criteria Decision Analysis in the Context of Health Technology Assessment: A Simulation Exercise on Metastatic Colorectal Cancer with Multiple Stakeholders in the English Setting

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Reviewer: Siân Taylor-Phillips

Reviewer's report:

This is an interesting paper investigating an important problem of how evaluation can extend beyond what can simply be captured by QALYs. Generally well written, with a very clear introduction in particular. Some suggestions in order of appearance:

1. Abstract (pg 2 line 23-39) is not in sentences and does not make sense - please clarify

2. Abstract (pg 3 lines 1-5 conclusion) doesn't make sense so I cant judge if it is reasonable - please re-word. Are you saying it proved to aid the decision making process? If so whose decision making process and how did it help?

3. pg 8 line 37 sentence is missing the word 'to'

4. I realize that this paper is about implementing the MCDA approach, not explaining it. However, there could be more information provided on the definition of value page 8 and 9. For example why is innovation included?

5. Related to point 4 can the authors be more clear about the perspective taken? Its clearly beyond just the NHS perspective, but not clear how far it extends - providing value to whom?

6. I would like to see a lot more discussion about implications for practice - what was learned from this case study? The process is clearly expensive so cant be used for every clinical question, so should it be used at all, and if so under what circumstances?

7. The authors propose the ICVR in addition to or as an alternative to the ICER. Would this (like the ICER) be comparable between questions across health and social care? Is it not influenced by the values explored and the group providing input?

8. Provide definitions of the acronyms in the figures (e.g. fig 1)

9. I am not a health economist, requires health economist review.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Unable to assess

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.

Unable to assess

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.

I recommend additional statistical review

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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