Reviewer's report

Title: Bridging health technology assessment (HTA) with multicriteria decision analyses (MCDA): field testing of the EVIDEM framework for coverage decisions by a public payer in Canada

Version: 1 Date: 13 December 2010

Reviewer: Janine van Til

Reviewer's report:

I would like to compliment the authors on a well written manuscript which discusses a relevant and emerging topic in decision making and support systems. In general I would like to point out that the relevance of the current article is in the methodology, and not in the specific case.

This means that I would like to see more attention to general properties of decision support framework and especially the importance of and outcome of this study with regard to the test-retest properties of the framework. Less attention can be given to the specific case, which would favor the readability of the manuscript, especially for less informed readers. Also, the length of the article can be reduced by focusing on the main objective.

Introduction

Page 7. Line 2. It’s not clear to me what the authors mean by “rooted in the natural thinking process”. It seems contra dictionary to the earlier mentioned criticism on MCDA being “not intuitive”, and much is still unclear about what the natural thinking process entails (Minor Essential Revision, MER).

Page 7, last paragraph. Much relevant work related to the EVIDEM concept is mentioned. However, given these studies, the additional value of this particular study as stated in the objective is not clear/relevant. In my opinion, the test-retest properties of the framework are of paramount importance, and I would suggest emphasizing the concept and importance of stable preferences related to the goal of the framework in this paragraph and relating the objective to these outcomes of the study (Major Compulsory Revision, MCR).

Methods

Although I find the information about data retrieval and presentation important to emphasize the scientific rigor of the decision process, I feel the amount of information can be cut back in favor of a more detailed explanation of the EVIDEM support structure and process. F.i. what where the instructions given to the panel? Were the panel members allowed to deliberate, and was consensus sought? When did panel members read the information in Tikiwiki? Did panel members discuss the qualitative information among themselves, how much time was allowed for individual estimation and the whole process (MER)?
Results

Page 13, line 1. Why independent of the specific case? Please state the relevance in the methods (Discretionary Revision, DR).

Are the weights significantly different from each other? In other words, what is the added value of criteria weights compared to equal weights (can also be addressed in the discussion) (Discretionary Revision, DR).

Is the discussion on the relevance of disease severity as a relevant criterion in accordance with the high weight of 4 (low SD) in the evaluation (MER)?

Page 14. Health Technology report is – in my opinion- not relevant in relation to the objective of the study. Maybe provide in attachment or online (MER)?

Page 21. How can it be that scores are more consistent than weights? Please explore possible explanations (DR).

Discussion

First paragraph: Please revise first paragraph of discussion according to higher relevance to test-retest properties as proposed as study objective (MCR).

Second paragraph: HTA positioning

Third paragraph: Evidence

Fourth paragraph: Relevance of first two sentences is questioned (DR). Statement on source of data to third paragraph and omit rest of paragraph?

Fifth paragraph: Weighting and scoring strategy. Please explore following issues:

What are the implications for total estimates (high, low, variation) for decision making (MER)? The statement on the lack of reference points is the most important statement of this paragraph!

Sixth paragraph: Limitations. Importance of panel vs. online testing (DR)?

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

Since September 2010 I have been asked by the EVIDEM group to become a member of the methodology development group of the EVIDEM framework. I have however not been involved in this particular study.