Reviewer's report

Title: An Empirical Comparison of Methods for Analyzing Correlated Data from a Discrete Choice Survey to Elicit Patient Preference for Colorectal Cancer Screening

Version: 1 Date: 5 September 2011

Reviewer: celia berchi

Reviewer's report:


General comments
The main objective of this article is to compare empirically different statistical methods to account for the intra-class correlation in discrete choice experiments (DCE) analysis. This issue is not very discussed in health economics literature. Although several statistical models used for DCE have been discussed, there were neither detailed empirical comparisons among them. Considering the growing number of medical publications using DCE in recent years, this paper is bound to interest a lot of readers.

Minor essential revisions
The aim of the study is clearly exposed, the title and the abstract accurately convey what has been found and the whole article is well written. However, methods and discussion are not well-balanced.

1. Methods
   a - The alternative statistical techniques are well described but insufficiently compared each other. It would be helpful for readers if the models were classified according to their theoretical relevance or frequency of use in existing literature.

   b – I think that the third and fourth paragraphs of the discussion comprise background elements and should be set in the methods.

2. Results
   There are two much tables and figures. I suggest deleting Figure 2 and Table 1 and its associate paragraph which are not essential.

3. Discussion-conclusion
   a - Results should be further compared with those of previous theoretical and/or empirical studies if possible.

   b - The conclusion suffers from lack of a clear indication of how to best deal with model selection issue when sensitivity analysis shows significant differences according to the model used.
Minor issues not for publication
1 - There are some spelling mistakes and typographical errors to correct.
   Methods:
   - 2nd paragraph: there is an extra bracket to DCBE
   - 3rd paragraph: I suggest replacing orthogonally by orthogonality?
   - 4th paragraph (RUT): delete “s” from “components”
   - last paragraph: delete “s” from “each attributes”
   - Please define the acronym “GEE”
   Results:
   - 4th paragraph: delete “the results” from “the results the # coefficients”
   - last paragraph: add “s” to “six attribute”
   Discussion:
   - 1st paragraph, line 5: add “cancer” to “colorectal screening test”
2 - Authors should check the references
   Methods, paragraph entitled “multinomial logistic model”: check the reference
   References:
   - Reference 5 is incomplete
   - Reference 21: correct the authors names which are Zwerina and Kuhfeld
   - Reference 33 should be revised

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable