Reviewer's report

**Title:** Acute and Chronic Impact of Cardiovascular Events on Health State Utilities

**Version:** 2  
**Date:** 19 October 2014

**Reviewer:** Rui Li

**Reviewer's report:**

This study estimated utilities of health states representing cardiovascular conditions while distinguishing between chronic post-event impact and acute impact including the cardiovascular event. It addresses the gap in the current available literature on cardiovascular utilities that time between the cardiovascular event and the utility assessment is not usually reported. The study design is well developed and thoroughly described. The discussion supports the data and compares the results from other studies reported in the literature, and the study limitation is thoroughly described.

**Major Compulsory Revisions:**

1. In the paragraph under “participants”, the authors stated that “inclusion criteria did not specify particular clinical characteristics because interviews were intended to yield utilities that may be used in cost-utility analyses for submission to health technology assessment agencies, most of whom prefer that utilities represent general population values.” How are the characteristics of the UK general population compared with the study participants reported under “Sample description”? Although the authors discussed it as a limitation, it will be informative to report how different the study participant from the general population in UK, especially the rate of having these cardiovascular events, so the readers will have a sense how generalizable the study results are.

2. Did the author consider clustering effect of the two sites when comparing the difference between health state utilities? Because the study participants within the city are not independently and identically distributed, when conducting statistical analysis, clustering effect should be adjusted.

**Minor Essential Revisions:**

1. The last paragraph under “Utility interview procedures and scoring”, the first sentence, “If participants indicated that a health state was worse than dead, the interviewer altered the task so that respondents were offered a choice between immediate death (alternative 1) and a 1-year/10-year life span (alternative 2) beginning with varying amounts of time in the health state being rated, followed by full health for the remainder of the time horizon.” It was hard to understand “beginning with varying amounts of time in the health state being rated, followed by full health for the remainder of the time horizon.” Consider to rewrite.

2. In Table 1, please explicitly state what “other” includes for marital status and
employment status, because they are a large proportion of the study participants.

3. The second footnote under Table 2, should it be -0.85 instead of -0.95 for the lowest possible utility value for chronic health states reflected from the lower bounds of the chronic post-event health states under “Range” column?

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
I declare that I have no competing interest.