Reviewer's report

**Title:** The effect of out-of-pocket costs and financial rewards in a discrete choice experiment: an application to lifestyle programs.

**Version:** 2  
**Date:** 7 April 2014

**Reviewer:** Muhammad Assad Assad Farooqui

Reviewer's report:

Wanders and colleagues use a discrete choice experiment (DCE) to determine the effects of out-of-pocket costs and financial incentives on participation in a lifestyle program for diabetes mellitus type 2 (DM2) patients. The authors found that increasing out-of-pocket costs results in reduced participation and, surprisingly, that increasing financial rewards has a similar effect. They also found that the effect of increasing both out-of-pocket costs and financial rewards is of a similar magnitude.

The paper addresses an interesting issue - the varying effects of costs and rewards - and is policy-relevant. It also uses a robust approach in eliciting preferences by having the same respondents complete both versions of the questionnaire (one using out-of-pocket costs and one using financial rewards). Further, the finding that increasing financial rewards may lead to a decreased willingness to participate is a novel one.

The paper uses appropriate methods to support its claims and the results are clearly presented. However, there are some additional analyses which would make for a stronger contribution (discussed below).

Compulsory revisions:

1. While the finding that an increasing financial reward leads to decreased program uptake is a novel one, it is based on the assumption that the "money" and "expected outcome" attributes are linear. The authors should either justify this assumption by referencing empirical arguments or explicitly test it by running a model with all attributes being effects-coded.

2. Did the authors conduct any rationality tests? One that is especially important is to check for dominant preferences among respondents. This is indicated by the use of a simple heuristic whereby respondents pick an alternative solely on the basis of the "best" level of an attribute. So, for instance, they might always (for all observed choices) pick the alternative with the highest financial reward (or lowest out-of-pocket cost), disregarding all other attribute levels. While this could reflect actual preferences, it could also indicate that respondents are not engaging with the DCE task.

Minor essential revisions:
3. Were there any missing data? It would be useful to report this.

4. In the abstract, please report the sample size (n=206) in the Methods section.

Discretionary revisions:

5. Is it possible to explicitly model uptake rates (such as was done in Brown, D. S., Johnson, F. R., Poulos, C., & Messonnier, M. L. (2010). Mothers' preferences and willingness to pay for vaccinating daughters against human papillomavirus. Vaccine, 28(7), 1702-1708.)? If so, this would make for a stronger contribution and also permit a direct comparison with the 24.8% figure mentioned in the manuscript (for those who stated they probably or certainly wanted to participate in a lifestyle program).

6. Use terms more conventionally used in DCE manuscripts, such as "relative importance" or "preference weight", instead of "regression coefficients".

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

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**

I declare that I have no competing interests.