Reviewer's report

Title: Retaining young people in a longitudinal sexual health survey: a randomised controlled trial of strategies to maintain participation

Version: 1 Date: 29 July 2009

Reviewer: Jeremy Miles

Reviewer's report:

This paper addresses an issue of importance to many researchers.

Major compulsory revisions

I would prefer that the authors used the term ‘significantly different’ rather than ‘statistically different’.

The authors analyze a randomized trial, and yet do not take the randomization into account in their analysis, leading to underestimation of standard errors. (I wonder if this accounts for the statistical significance of the baseline comparisons – it is unusual for so many of these to be significant when we know the null hypothesis to be true, assuming that randomization was carried out correctly).

The analysis can be carried out appropriately using generalized estimating equations, robust standard errors which account for clustering, or using multilevel models. (I believe that the first two are available in recent versions of SPSS, multilevel logistic models are not; R, Stata and SAS are all capable of all three of these analyses).

Minor essential revisions

In the first paragraph of the introduction, I would tone down the usefulness of the methods to address attrition – for example, I might say “statistical techniques off strategies which attempt to reduce bias introduced by attrition” – I wouldn’t want to imply that they solve the problem, rather that they reduce it.

I find the comparison of cohorts confusing – we are interested in the comparison of the incentives, and the paper focuses on comparison of cohorts to too large an extent.

Page 8, likelihood might be better than likeliness.

Discretionary revisions

It seems a curious result that the 500 GBP prize should reduce participation – do the authors have any hypotheses regarding why this happened?

Is it possible to look at change in participation rates, and how that changed with incentives – e.g. was anything a predictor of return to the study at a later wave, having failed to complete an earlier wave (or the other way around) – this might improve the power of the study.
On page 6, the utility of each of the prizes could be given. A 1:1333 chance of a 500 GBP prize has a utility of (about) 40p, 1:300 chance of a 20 GBP voucher has a utility of about 7p.

**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 interests