Reviewer's report

Title: Is utility-based quality of life associated with overweight in children? Evidence from the UK WAVES randomised controlled study

Version: 2 Date: 3 August 2015

Reviewer: Gang Chen

Reviewer's report:

The revised manuscript has addressed the majority of the issues that I raised and I only have a few minor concerns:

1. I did not see any tables in the revised manuscript? There may be some technique issue when uploading the tables?

2. Utility score lies on a 0-1 death-full health scale; however, it does not mean that scores are bound between the values of 0 and 1 (page 5, line 120/page 3, line 63). Negative utility score represents the health state of worse than death (SWD) which exists in several preference-based HRQOL instruments. Indeed in the Australian tariff of the CHU9D, the SWD exists.

3. Page 7, line 163-164: it's unclear to me when examine the sub-group differences on CHU9D utilities by PedsQL median score, why was the one-way ANOVA test used, instead of the non-parametric test mentioned above (line 161). Certainly the one-way ANOVA test is found to be robust to the non-normally distributed data, but it’s unclear why in this study, since some sub-group analyses were conducted by the Kruskal-Wallis test, but for the two-group case the Mann-Whitney U test was not used?

4. Even if the sample size of under-weight respondents is small (n=40), my view is that it’s still better to be presented in a separated group throughout the results. Otherwise, it’s hard to compare the results of this study with others since the reference group is different (i.e. a reference group of healthy weight would be a much more meaningful one). I will leave it to the authors/editors for the final decision.

5. Typos: “PEDsQL” should be “PedsQL” in the abstract (page 2, line 41).

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

Quality of written English: Acceptable

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

Declaration of competing interests:
None.