Reviewer's report

Title: Randomised controlled trial to improve health and reduce substance use in established psychosis (IMPaCT): Cost-effectiveness of integrated psychosocial health promotion

Version: 0 Date: 09 Apr 2017

Reviewer: Ann-Kathrin Weschenfelder

Reviewer's report:

This methodologically well conducted economic evaluation analyses the cost-effectiveness and cost-utility of a health promotion intervention aiming to improve the physical health of patients with established psychosis in comparison to treatment as usual. In contrast to other interventions in the field this program is integrated into existing patient contacts. The applied methods are appropriate. The transparently reported results show no significant differences between intervention and control patients in terms of costs and outcomes measured as QALYs and the SF-36 mental and physical component scores. Possible reasons for the lack of any effect should be stated and discussed more extensively. The results are compared to similar studies and implications for policy are clearly pointed out. Therefore there are only minor comments on this study.

Abstract:

In the results section a short description of the sample should be added containing at least the sample size analysed.

The terms cost-effectiveness and cost-utility are used unhyphenated in the abstract and abbreviations, which should be corrected.

Methods:

Regarding the study design the intensive health promotion intervention is conducted for 9 months and it is hypothesised that a positive effect on quality of life and health will be present at month 12 (3 months after the end of the intervention) and sustain for further 3 months. A statement on the rationale behind this hypothesis should be included as well as a discussion of possible effects of the lack of information on outcomes immediately at the end of the intervention. Possibly effects on health and quality of life are largest at 9 months and wear off over time.
Additional information should be given on the regression used to adjust for baseline differences between intervention and control group including the type of regression (OLS or other), a statement on normalisation if applied and a statement on handling of outliers.

The choice of the human capital approach over the friction cost method in valuing productivity loss is not assessed in sensitivity analysis. This should either be done or at least the possible impact of this choice should be explained within the discussion section.

Results:

The extensive and valuable information on the resource consumption is displayed in very large tables 1 and 2. Splitting each table into community based professionals and the other sectors of resource consumption will improve clarity of arrangement. Also the lines of services not used by any patient could be omitted.

The quality of figure 1 is rather poor and does not provide satisfactory legibility.

Discussion:

Explanations for the lack of effectiveness of the intervention have been discussed in a different paper which points out that the unsuccessful implementation of the intervention is a major factor. These possible explanations should be briefly described and the reasons for the lack of successful implementation of the IMPaCT Therapy should be described more extensively.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

No

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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