Reviewer's report

Title: Comparison of case-mix & patients' reports of outcome in Independent Sector Treatment Centres and NHS providers: prospective cohort study

Version: 1 Date: 16 January 2008

Reviewer: Carmen Dirksen

Reviewer's report:

This paper describes a comparison of case-mix and patient reported outcomes between Independent Sector treatment Centres and NHS providers. The paper is clearly written, statistical analyses seem trustworthy (although not my primary area of expertise) and conclusions follow from the results. However, I have a few suggestions and questions that might further improve the paper.

Specific

In the 'Background' part of the abstract the reason for comparing case-mix and patient-reported outcomes between ISTC's and NHS providers should be described shortly.

Methods, page 6. How were patients recruited, by means of their doctor? What information did patients receive? Patient recruitment should be described in more detail.

Related to the above, on page 6 it is stated that 20 NHS providers and 6 ISTC's participated in the study. However, in the results section on page 8 it is stated that included patients came from only 4 ISCT's and 17 NHS providers. Is this related to the recruitment procedure? Or were there ISCT and NHS organisations that ultimately refused to participate in this study? Please comment on this.

To me it is not fully clear what is meant by 'adjusted for pre-operative patient characteristics' (page 8). Are pre-operative scores on EQ-5D, health status, disease-specific measures etc. all considered patient characteristics or do patient characteristics only refer to age, sex, co-morbidities etc. The authors should be more explicit on this.

Related to the above, have the authors also considered calculating change scores for those measures that were administered both pre-operatively and postoperatively (like health status, EQ-5D, disease-specific measures) and compare these statistically between ISTC's and NHS providers? This also provides insight in (some) differences between ISTC's and NHS without having to adjust for pre-operative differences in all measures (but only for those that were measured pre-operatively only, like age, sex, co-morbidities etc.). Would this change the results?

General
The authors could use the term "patient-reported outcome" (thus: PRO) throughout the paper, instead of using "patients’ reports of outcome" or "PROM". PRO is increasingly being used (especially in drug research) which refers to a measurement of a patient’s health status that comes directly from the patient, without the interpretation of the patient’s responses by a physician or anyone else. PRO measures may for example assess constructs like symptoms, functioning, (HR)QOL and patient satisfaction with treatment, measures which have been used in this study.

EQ5D should be described as EQ-5D, the latter which is commonly used. Also, the authors should explain if the EQ-5D index score (Dolan, 1997) or Visual Analogue Scale (VAS) of the EQ-5D was used in this paper. If the first was used, the authors should refer to the paper of Dolan (Dolan, P. Modelling valuations for EuroQol health states. Medical Care 1997; 35: 1096-1108).

**What next?:** Accept after minor essential revisions

**Level of interest:** An article of importance in its field

**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'