Reviewer’s report

**Title**: Reliance on social security benefits by Swedish patients with ill-health attributed to dental fillings: a register-based cohort study

**Version**: 1  **Date**: 21 May 2012

**Reviewer**: Karin Festin

Reviewer’s report:

This is a paper on an important subject and I read with great interest. It has some areas that have to be clarified and there are some smaller things that can be changed in order to improve the paper (see below). The question posed is well defined and data are sound. Results etc are adequately reported and discussed. Title and abstract are ok. The language is a little plain, otherwise ok.

Major Compulsory Revisions

1. General. My major concern regarding this paper is about the statistical way the authors’ deals with data on social security benefits (and income). These type of data (data on sick leave and disability pension) are to my experience very seldom normally distributed, why calculating mean number of days with these type of benefits might be doubtful. The same yields for income, which often has a skew distribution in a population. The way data is presented (regression coefficients and graphically) it is not possible for the reader to assess if this is a problem or not. A test whether data is normally distributed should be included, and if turns out that this is not the case, non-parametric statistical methods should be used instead. If data turns out to be appr. normally distributed the statistical methods used in the manuscript is relevant. Distribution of data and choice of statistical methods is not addressed at all in the manuscript.

Minor Essential Revisions

2. Background. The background is short, but relevant. However, I would like to have some more information on this group of people – e.g. what kind of ill health do they report, what type of symptoms do they show and how does it affect their work capacity? It would also be valuable with a little information about the procedure of filling replacement.

3. Methods. Very little information about sick leave and disability pension data is provided in the manuscript. The Swedish social insurance system (with the employer paying for the first period in the sick leave period) could be better described (including level of compensation), so that the reader knows which type of sick leave data is included. Also level of compensation could be valuable information.

4. Methods. Seven out of 21 counties were included in the study. Please explain why and how those were selected.
Discretionary Revisions

5. General. Sometimes I got confused when reading about ‘the comparison group’. Maybe this group should be referred to as the general population instead.

6. Results. Second paragraph. Second sentence. Please write which type of data were available.

7. Discussion. Strengths of the study are discussed, while no possible limitations/weaknesses are mentioned, not regarding data, methods used or in the conclusions drawn.

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

**Quality of written English**: Needs some language corrections before being published

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

**Declaration of competing interests**:

I declare that I have no competing interests.