Reviewer's report

Title: Non-adherence to drug therapy and drug acquisition costs in a national population - an individual-based register study

Version: 1 Date: 26 May 2011

Reviewer: Geva Vashitz

Reviewer's report:

Dear Authors,

The study aim to estimate the drug acquisition cost related to non-adherence to drug therapy in Sweden. It reflects the immense costs related to non-adherence. This is an important issue for health services policy. The large sample gives the results a strong impact.

Some comments that can improve the manuscript:

The Abstract: The background section should be tightened. There is some confusion between ‘non-adherence’ and ‘adherence’ – perhaps it is better to use one term. Could you please explain in which strata is the adherence measured (across all patients?), and clarify the terms “total adherence” and “age adherence rates”.

The introduction is well written. The literature is relevant and adequate.

Method: Although I understand the use of the word “individual” to describe a person, it is sometimes ambiguous. Perhaps “patient” or “person” would be clearer.

There some paragraphs of 1-2 lines that should be merged into bigger paragraphs.

Adherence definition: I wonder is the authors could compare their adherence measures to other measures such as MPR and PDC. This is not mandatory; however it will make the results difficult to be compared to other studies.

Can you please describe how the “I” (ingested adherence) was recorded – was it self-reported?

Figure 1 should be explained: to which drugs does it relate? Does the DDD is calculated across all drugs?

There is a mixture between method and results section; some results are described in the method section.

The language is rather fluent and the article is easy to read. However there are some style and grammar mistakes that can be checked by an English-native speaker.

Table 2: ATC codes should be transparent to the reader. I suggest shortening the table to present summary measures. It is currently too detailed.

Could you please describe the “individuals” line in Figure 3?
Thanks and Good luck.

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

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

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests.