Reviewer's report

Title: Can we use the pharmacy data to estimate the prevalence of chronic conditions? An attempt to compare different information sources

Version: 3 Date: 30 May 2011

Reviewer: Marc Saez

Reviewer's report:

Major Compulsory Revisions

1.- It is not clear to me how authors 'aggregate' 'general population' (prescription drug usage) and a 'selection sample' (hospital discharge registry). Authors should adjust these two samples: the former, at least theoretically random, the latter, with a clear selection bias, before proceed to estimate prevalences and do not, simply, discuss this point as limitation.

2.- In this sense, authors should read the paper Saez et al. A selection-bias free method to estimate the prevalence of hypertension from an administrative primary health care database in the Girona Health Region, Spain. Comput Methods Programs Biomed. 2009;93(3):228-240. Authors should apply and/or the methods used there.

3.- It is not clear how authors try to reconcile actual prevalence rates and prevalence rates based on diagnosed people (maybe coverage of drug treatment is low for some health problems, not all the problems are equally controlled, etc.). It is not enough the discussion. Authors should extend more this point.

4.- Some drugs could be used for more than one health problem. How authors controlled for this limitation?

Discretionary Revisions

1.- Maybe authors should add some figures (for instance, instead/in addition of Tables 2 and 3).

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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

Declaration of competing interests:

I declare that I have no competing interests