Reviewer's report

Title: Impact of asthma control on health care costs and quality of life in France and Spain

Version: 3 Date: 18 December 2012

Reviewer: Mohsen Sadatsafavi

Reviewer's report:

Review of the manuscript entitled "Impact of asthma control on health care costs and quality of life in France and Spain"

This is the revision of the original paper I previously reviewed. The authors have successfully addressed most of my comments. There are some remaining reservations, as follows.

Minor Essential Revisions

1- Page 5, first paragraph: It is not really clear how the sample size is calculated. For a proportion, and in the absence of a well-defined null hypothesis (e.g., prevalence being different than 40%), sample size calculation can be based on a desired width of confidence interval. There is no null hypothesis in this section, and the authors do not mentioned how tight they wanted the CI around the prevalence to be. As a result, it is still unclear how the sample size of 380 for each wave is obtained.

2- Data collection section: it is not clear how some important information had been collected for this study. For instance, it is mentioned that "all prescription drugs taken during the 3 months prior to doctor visit were recorded". Is this a self-report? Or objective verification using, say, chart review? or something else? Similar concerns with regard to the other resource use items such as hospitalization, ER visits, and so on. For indirect costs, how the information on sick leaves and productivity loss was collected? There are validated instruments such as the Work Productivity and Activity Impairment Questionnaire (WPAI), but there is no mention of such instruments anywhere.

3- Page 7, first paragraph: Not clear how the productivity loss using the human capital approach is estimated. Did the authors multiply the GDP/employed population/working days by the number of sick days? If so, the authors have collected the number of sick days for both countries (this should be mentioned somewhere).

4- Page 5: first paragraph under Data Collection: (FEV1)) has an extra closing parenthesis.

5- Page 7, line 3 devised should change to divided.

6- Table 1: Gender F: the letter F should be removed?

7- Page 10: "but represented a major driver in partially controlled and controlled
patients" should be "partially controlled and uncontrolled patients".
8- Page 16: "must be assess" should read "must be assessed"

Discretionary Revisions
9- Title: the word Impact implies causality. In this cross sectional study, causality between asthma control and outcomes cannot be established. A better title would be "The association between asthma control, health care costs, and quality of life in France and Spain".
10- Abstract: (age greater or equal to 18) parentheses are not required.
11- Page 3 (first line of Introduction): asthma is a severe chronic disease. I would drop the word severe as asthma can be quite mild.
12- Page 5: "The study was proposed to 750 GPs of this panel, randomly selected and 230 agreed to participate." will be read much better as "The study was proposed to 750 randomly selected GPs of this panel, and 230 agreed to participate."
13- Data analysis section: I think more standard terminology for qualitative and quantitative variables are categorical and continuous, respectively.
14- Results: It will be helpful if the authors also report the mean and SD of age, in addition to percentage of the population within each age range.
15- Page 9: 34.6% of French patients had exacerbations, and the rate was 2.3. For Spanish patients, the percentage of those experiencing exacerbation (43.6%) was higher, but the rate was lower (1.8). This is not necessarily wrong but needs verification.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

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