Reviewer's report

Title: Are community-living and institutionalized dementia patients cared for differently? Evidence on service utilization and costs of care from German insurance claims data

Version: 2 Date: 6 November 2012

Reviewer: Ramon Luengo-Fernandez

Reviewer's report:

Overall, I think that this study will be of interest to journal readers and a valuable addition to the field. However, although I did not find any fundamental flaws with the research, the following revisions should be made:

Major Compulsory Revisions

1) Abstract, Results section, last sentence. It should be stated explicitly that these amounts are per patient per year.

2) Abstract, Conclusion section, 2nd sentence. The sentence starting "After corresponding...." is very difficult to understand. For example, what is corresponding adjustment, is it adjustment by care levels, age-gender, co-morbidity etc...

3) Methods, page 5, paragraph 3, last sentence. At this point the authors should define the different levels of care.

4) Results, comment applicable throughout the section. My major criticism of this study is the way in which results are presented. Throughout the results section, I thought there could have been a better connection between the results presented in the tables and the text.

For example, when providing written commentary of the results reported in Table 3, the authors could have made better use of the results presented in the table (e.g. institutionalised patients had over 50 GP visits per year compared with 35 for community-dwelling patients, p<0.0001 etc...) This not only highlights major findings, but also makes reading the paper much easier.

Following on from this point, I found the text detailing Table 4 difficult to follow. The authors report "Analysing trends across care levels the LTCI expenditures rose by ca. EUR 7,800 in the community and by ca. EUR 4,600 in nursing homes." However, this is not directly discernible from the table: If I compare Care level 2 to Care level 1 the difference is EUR 2,782 for institutionalised patients and EUR 3,995 for community patients. If I compare Care Level 3 to Care Level 2 the difference is EUR 1,864 for institutionalised patients and EUR 3,761 for community patients. And finally, if I compare Care Level 3 to Care Level 1 the difference is EUR 5,939 for institutionalised patients and EUR 9,390 for
community patients. None of these comparisons matches the results presented in the text.

5) Discussion, page 13, sentence starting "However, comparable SHI expenditures...." This sentence does not make sense. It is my impression that something has been left out.

6) Discussion, page 15. This is extremely dense, with the paragraph taking an entire page. To aid readers, please break into paragraphs and condense text.

Minor Essential Revisions

1) The use of respectively is sometimes used inappropriately, e.g. "per capita expenditures were estimated on ca. EUR 4,500 (community) respectively EUR 15,300 (nursing-home)...." and "dementia-specific ICD-10-Code respectively with at least one....".

2) ADL is never defined in full.

3) It is my belief than when setting statistical significance is being set the use of p<0.05 is customary, rather than 5%.

4) Page 13, last paragraph, 2nd sentence. Rather than this results corresponds, it would be better use of language to report this result is similar to, or has been also observed etc....

5) idem to above in page 14, paragraph 3, 2nd sentence.

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.