Reviewer’s report

Title: The effects of patient education programs on compliance with medications among asthma and COPD patients: A propensity score matching with a difference-in-difference regression approach

Version: 2 Date: 8 March 2015

Reviewer: Christine Urquhart

Reviewer’s report:

Major compulsory revisions.
1. More details are required about the intervention, in particular the frequency of any support from the respiratory educator. This is important when estimating the likely increased compliance (and therefore increased chronic drug use costs) in later years.

2. I am unable to comment in detail on the statistical methods used - the approach seems thorough and the authors have provided full details of the calculations in the appendix. As some of the readers will be interested in the potential bias, I think it might be useful to included some discussion of the reasons for choosing the caliper method (for example) and some of the other methods used - and whether these help to reduce the bias. The total number examined (under 200 for the intervention group) is not that high compared to many RCTs.

Minor essential revisions
1. The English needs copy-editing throughout. There are phrasing problems (participating in, not participating to). I was also puzzled by the tense usage. I'd normally expect actions completed to be in the past tense.

Minor essential

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

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.