Reviewer's report

Title: Inclusion of Short-term Care Patients Affects the Perceived Performance of Specialists: A retrospective cohort study

Version: 3
Date: 8 January 2015

Reviewer: R. Liisa Jaakkimainen

Reviewer's report:

This study has a very relevant and interesting research question. The background is appropriate, but limited to the American environment. Performance measures are also examined in the international area and some comments would help readers from outside the US. For example, primary care delivery in Canada, UK and Europe is mostly provided FPs, with internists acting as consultant physicians. This mention would help the international interpretation of the study.

Major Compulsory Revisions

1. There are four groups mentioned in the background section: specialty providers who see long term patients, short term patients, referred patients and patients then returned to their primary care providers. But the analyses are comparing short term and long term patients. Are these other two groups included in a short term group? For example in the methods section over, it isn't clear where patients see by both providers are assigned?

2. Extracting clinical data from electronic medical records is not easy. Is there some sensitivity analyses or reference you have for why looking at the last clinical measure is the best measure? For example, BPs may be target for the last 4 measures, but the 5th measure is not target. Were there some preliminary analyses showing the last measure reflects the target performance measure the best? Was a sensitivity analysis done with different performance targets to see if the results were consistent?

3. In the methods overview, was the primary care providers also at your institution or outside. Not clearly written.

4. Very small number for only primary care only (62 and 60) any comments as to why this is so low?

5. I am not sure if you meant that there was no ethics review for this study? Is this correct?

Data analysis.

6. My major concern with this study is the potential confounders that are not controlled. While age and sex are examined, there is no mention of comorbidity or other health conditions. What happens if a patient has both diabetes and IHD? This is study uses administrative data and controlling for comorbid conditions may have an impact on the results. Was this possible?
7. The missing data is also an issue for the analyses. Could an analysis be done including only complete data? Or were methods to input missing data considered?

8. P values are missing for the figures. Were they statistically significant results?

9. I think an actual p value should be included and not just say p <0.05. With multiple comparisons and more stringent p value should be used.

Discussion

10. More comments in the discussion are needed about generalizability. Are the specialists and generalists in this study similar to those in other urban regions of the US?

Conclusions

11. I am not sure the conclusions are specific enough to the results of the paper. This paper examined short term and long term patients seen by specialist to providers. Not sure they can comment on the performance measures used, rather the impact on the interpretation of performance measures.

The title is appropriate.

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

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

Declaration of competing interests: I have no financial or non-financial competing interests.