Reviewer's report

Title: Identifying Diabetics in Medicare Claims and Survey Data: Implications for Health Services Research

Version: 2 Date: 26 February 2014

Reviewer: Yelena Gorina Gorina

Reviewer's report:

Major Compulsory Revisions:
1. Page 7, second paragraph. What percentage of respondents consented to the linkage? Was a sample weight used in the calculations? What methods (if any) were used to adjust the weight for “non-linkable” respondents to obtain nationally-representative results?

2. Page 9, second paragraph. Suggest deleting the second statement. The fact that a value of the percentage with self-reported diabetes and/or positive A1c tests is about a value of the percentage with claims-identifiable diabetes, is of no consequence (no diabetes-related claim is likely to exist for a person with not yet diagnosed diabetes and there is no scientific evidences that all or most “undiagnosed” diabetes may be attributed to the report bias).

Minor Essential Revisions:
1. Page 4, middle of the second paragraph. I suggest clarifying that Medicare claims data are claims submitted to the CMS to reimburse a provider for Medicare-reimbursable services rendered to a beneficiary and are not a complete health care utilization or medical record.

3. Page 5, second paragraph. Suggest revising the first sentence, e.g. accuracy of claims-based diagnoses can be assessed using hospital discharge abstracts and physician data.

4. Page 7, second paragraph, bottom. Suggest deleting the sentence starting with “Diabetes prevalence is higher ...”. As stated in the previous sentence, linkage consent rates were higher among wealthier respondents. Research shows that those with high or middle income have lower rates of diabetes compared with those poor or near-poor (see e.g. Beckles et al, 2011, http://www.cdc.gov/mmwr/preview/mmwrhtml/su6001a20.htm). This contradicts the statement that self-selected subsample (of those consented to linkage) represents persons who are more likely to be diabetic.”

5. Page 8, middle of the second paragraph. Please clarify a period of enrollment to FFS Medicare used for inclusion criteria, e.g. one year (2006), or since the beneficiary’s enrollment in Medicare.

6. Page 11, third paragraph. Were the data adjusted for linkage non-consent to obtain nationally-representative results?

7. Reference 11. Please add the year of the article.
8. Reference 12. Please add the date of access.

Discretionary Revisions:

**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.