Reviewer's report

Title: Predictive Performance of Comorbidity Measures in Administrative Databases for Diabetes Cohorts

Version: 3 Date: 19 November 2012

Reviewer: Roslyn A. Stone

Reviewer's report:

General comments:
The revised manuscript is quite responsive to the comments in the previous review: most of the indicated clarifications and corrections have been made, overall percentages have been added to Table 2, and a summary paragraph has been added. A few minor revisions remain to be addressed.

Major Compulsory Revisions:
None identified.

Minor Essential Revisions:
1. The conclusion sentence in the abstract is awkwardly worded. “Cohort age and the health outcome under investigation, but not the diagnosis coding system…” would be more clear.

2. The description of the basis for the categorizations in Table 1 is unclear; how can categorizations be based on two different distributions (i.e., the overall and age-specific cohorts)?

3. Dollar amounts should be included for the income quintiles in Table 2. Otherwise these quintiles are uninterpretable; it is important to know how wide (or narrow) these intervals are. If the income data are limited, that can be mentioned in the limitations.

4. Table 3 is cluttered and hard to read because the c-statistics, their CIs, and the % changes and % are reported to 3 decimal places. Many of these numbers are quite similar; reporting them to 3 decimal places is not meaningful.

5. Multiple imputation is never mentioned in the analysis section, or in the presentation of the results. Was a multiple imputation method used to create a single imputation? If not, how were the multiple imputations for each observation handled in the analysis?

Discretionary Revisions:
None identified

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.

**Declaration of competing interests:**

I declare that I have no competing interests.