Reviewer’s report

Title: Expenditure Variations Analysis Using Residuals for Identifying High Health Care Utilizers in a State Medicaid Program

Version: 0 Date: 30 Aug 2018

Reviewer: Reviewer 2

Reviewer's report:

PEER REVIEWER COMMENTS: To view the full report from the academic peer reviewer, please see the attached file.

REVIEWER COMMENTS FROM REPORT: This paper applied innovative statistical methods to classify patients based on the residuals from expenditure regression models. Additional analyses were done to identify the factors contributing high residuals and the relationship with preventable health care utilization. The results shed some insights about the high expenditure in patients' health care utilization and possible ways to reduce the high expenditure.

REQUESTED REVISIONS:

There are extensive health services research studies that address the high expenditure problem in health care. The authors need to thoroughly review these papers before claiming the validity of their own approach. For example, it is a naive approach to use the OLS to analyze the health care expenditure. Manning's two-step econometric approach is more appropriate to handle the highly skewed distributions of medical expenditures with many zeros. Moreover, including the patients from 18-60 is not appropriate since elder patients consume the majority of the health care resources. These limitations can create systematic bias in the model estimation, which makes the residual an unreliable dependent variable to analyze.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

No
Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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