Reviewer’s report

Title: Moderate sensitivity and high specificity of emergency department administrative data for transient ischemic attacks

Version: 0 Date: 01 Mar 2017

Reviewer: Andrew Costa

Reviewer’s report:

The manuscript, "Moderate sensitivity and high specificity of emergency department administrative data for transient ischemic attacks" is an evaluation of the diagnostic performance of the ICD-10 data on the National Ambulatory Care Reporting System for TIA. The objectives are clear, and justified. The methods are well described, simple, and complete.

My specific comments are below:

Discretionary Revisions

*I think you should keep your description to NACRS (National Ambulatory Care Reporting System) not the 'Canadian National ambulatory administrative database'

*Pg 3, line 47: Maybe say 'more sparse' vs 'sparser'

Minor Essential Revisions

*You don't list a hypothesis

*Naming algorithms as 1,2,3 etc. reduces clarity. I suggest you use a descriptive shorthand label.

*Column labels for Table 1 do not show % in the brackets, describe ABCD2 as a footnote.

Major Compulsory Revisions

*Your interobserver agreement was only moderate for TIA diagnosis by chart review and its accuracy with the 90-days diagnosis is not particularly good. Why would you include it as a reference standard? Naturally information found in the chart will tend to corroborate ICD coding done by the clinical team, or by medical coders who are reviewing the chart, so it is biased toward better diagnostic accuracy. I am not sure what the comparison adds beyond to the comparison with the 90-day diagnosis. Suggest that Table 2 and 4 are not valuable as the chart review diagnoses are flawed. It only adds confusion.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

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

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

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.

I am able to assess the statistics

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

Acceptable

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