Reviewer’s report

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

Version: 0 Date: 04 May 2017

Reviewer: Janet Bray

Reviewer’s report:

Please include all comments for the authors in this box rather than uploading your report as an attachment. Please only upload as attachments annotated versions of manuscripts, graphs, supporting materials or other aspects of your report which cannot be included in a text format.

Please overwrite this text when adding your comments to the authors.

This well written paper examines the validity of a Canadian emergency department administrative dataset to identify TIA cases. The study used ED diagnosis and 90-day neurological diagnosis as the gold standard on cases recruited in two trials. The major issues with the study are the use of non-consecutive cases and the retrospective determination of the ED diagnosis. More detail is required about the data sources to determine the impact of this on the study.

1. The two trials are not well described. What were the inclusion and exclusion criteria? How many were excluded?

2. Who performs the NARS coding -do they have health professional qualifications?

3. Methods - suggest removing "initial" from ED diagnosis as the whole ED admission seems to have been used.

4. The determination of ED diagnosis is unclear. The methods suggest the abstractor determined the ED diagnosis rather the simply abstracting the ED diagnosis as recorded by physicians at the time. Please clarify and state this in the abstract, methods and discussion.

5. Any retrospective derivation of ED diagnosis is subject to bias -this need to be described as a limitation if this was performed.

6. It would be useful to know the accuracy of coding and of the derived diagnosis against the actual final ED diagnosis -but this data may not be available.

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.

Unable to assess

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

Unable to assess

**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

**Declaration of competing interests**
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare I have no competing interests.
I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal

Do you want to get recognition for reviewing this manuscript? Add a record of this review to Publons to track and showcase your reviewing expertise across the world’s journals. Signing up is quick, easy and free!

No