Reviewer’s report

Title: Automated Detection of Altered Mental Status in Emergency Department Clinical Notes: A Deep Learning Approach

Version: 0  Date: 11 May 2019

Reviewer: Wajid Mumtaz

Reviewer's report:

Introduction:
1) Please clarify that which types of diseases are mainly focused in this manuscript. Is it only pulmonary embolism or other diseases as well?

2) Line 71: What do you mean by pipeline? Is it ML?

3) Line 75: Please explain name entity recognition.

Methods:
4) Line 104: Give ref. or small details on Epic EHR System.

5) Line 122: Explin briefly about REDCap.

6) Lines 136-137: Please explain briefly.

7) Table 1 is confusing. Please redraw or clarify.

8) The authors should provide an account on how the data were arranged in matrix form. What was the dimensions of the matrix?

9) Please provide explanations on features in your dataset.

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

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 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