Reviewer's report

Title: Mining Adverse Drug Reactions from Online Healthcare Forums using Hidden Markov Model

Version: 2
Date: 25 January 2014
Reviewer: Samir Abdelrahman

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Major Compulsory Revisions:

The article presents a very good well-tested work (with reported acceptable statistical assessments)—Thanks for the authors. However, I do ask the authors to add the following parts:

1- Baseline experiments: I urge the authors to choose any sequence labeling technique, maybe from the literature, and test the experiments using it. It is very useful to access HMM versus the others.

2- Component-based experiments: it is very interesting for the community to see the affect of each system component in HMM modeling. For example, what if the filtered or extracted plain text module is removed; also, if any of NE dictionary sizes is decreased.

Both of the above parts may be augmented in the result tables.

3- Limitation subsection: I do believe that the authors should list all possible drawbacks in a subsection

Level of interest: An article of outstanding merit and interest in its field

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