Reviewer's report

Title: Studying the Potential Impact of Automated Document Classification on the Systematic Review Update Scheduling Process

Version: 1 Date: 4 October 2011

Reviewer: Lana Yeganova

Reviewer's report:

This paper describes a system for providing alerts when new publications become available for updating systematic reviews (SR). Given the importance of SRs and labor-intensive and costly process of creating and updating these reviews, utilization of automated methods to help schedule the SR update could be very useful.

Since some SR topics require updates sooner than others, having an automated system alert when new relevant publications become available is beneficial. This study is a preliminary investigation of using automated document classification to the SR logistical process, in terms of recognizing the need, planning and scheduling an update for an existing SR.

Authors build on their prior work of applying automated document classification methods to document triage for creating a SR. They use the same method for their current task. While the work is still preliminary, it raises a number of interesting questions.

First, it is interesting to know why the algorithm does not perform well on AEDs and ProtonPumpInhibitors topics, as compared to other topics. Second, it would be very interesting to design the classifier targeted at identifying those “motivating” publications. In general, can one define how are these “motivating” publications different from other positive publications included in the SR. What features could one use to identify these “motivating” publications?

Minor Essential Revisions

Abstract does not clearly explain what authors are trying to accomplish in this study. I would suggest expanding the methods section of the abstract.

On page 5, in the background section, authors talk about “publications that may be more important than others”. I would suggest mentioning that these documents are subset of documents that are eventually included in the update. It is also not clearly defined whether NewAlert is triggered when a positive document is encountered for update or a “motivating” document. While both of these issues become clear further down the road, they are not clearly defined when introduced.

It would be helpful to define your training and test sets in the description of Table 1.

The following sentences need revision.
Two topics, ... were not included in this study due to insufficient ... 

Four specific (A, P, B, and L) ... 

The most important publications are the ones that are most likely to inform ... 

If a choice needed to be made ... have a higher priority than ... 

... unstudied adverse events within the literature 

In terms of their potential to motivate 

**Level of interest:** An article of importance in its field 

**Quality of written English:** Needs some language corrections before being published 

**Statistical review:** No, the manuscript does not need to be seen by a statistician. 

**Declaration of competing interests:** 

I declare that I have no competing interests