Reviewer's report

Title: Automated real time text messaging identifying acute stroke patients for clinical trials

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Reviewer: Robert Hatala

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Stroke is the leading major cardiovascular event in the Western world. However, compared to myocardial infarction, less evidence base data are available in this clinical field. This is partly due to methodological difficulties in recruiting patients during the acute early phase of stroke.

This is a methodological paper focusing on the implementation of a standardized stroke algorithm on the platform of a clinical information system for rapid triage of patients as potential candidates for clinical trials in acute stroke.

Due to the short time buffer during which patients can be recruited for such trials this automated approach has the potential to minimize time delays and facilitate identification of patients fulfilling the predefined inclusion criteria for a clinical trial.

The system is working in the “background of the clinical routine” so that it does not load additional tasks on medical staff responsible for the acute clinical management. The authors have successfully tested the performance of the system in 513 patients with suspected stroke.

The main message of the manuscript is the information that dedicated electronic data capturing and health record tools might be useful for rapid triage of patients in the light of their eligibility for clinical trials performed on site. This could stimulate the interested center to develop such tools suitable for the given electronic information environment. Such approach might have important impact on improving the quality of recruitment and reducing bias in the selection process.

Minor essential comments

Following question should be specifically addressed in the methods and discussion section, respectively:

1. It might be of interest for the reader to see the structure of the standardized stroke sheet.
2. The concept is obviously closely linked to the capabilities of the used clinical information system (CIS). What are the minimal criteria for the CIS in order to implement this approach in given hospital settings?

Level of interest: An article whose findings are important to those with closely related research interests
Quality of written English: Acceptable

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.