Reviewer’s report

Title: V-Model: a new perspective for EHR-based phenotyping

Version: Date: 19 March 2014

Reviewer: Yevgeniy Elbert

Reviewer’s report:

One of my concerns - the records reviewed as part of the validation were from Seoul Hospital - i wonder if the same conclusions would hold if you were to use the records from another international location - like ER records from one of the US hospitals and whether conclusions would be the same. I think it would have added to validity of the study.

Minor Essential Revisions:

You are making analytic comparison with only LifeLines visualization model, but in abstract results and conclusions you speak of "models".

In the introduction, there are positive claims like "V-Model's visual display is highly effective in reading and understanding patient's history" which are not supported yet by the results.

"The results were analyzed at a 0.05 confidence level "- it is really 95% confidence level and you were using it as a cut-off of significance of test results (rather than analyzing it at 0.95 level). Also, in Table 4, it is worth using "bold" font to emphasize which model did better - in at least one case, LifeLines had better response time.

Stick to the same usage - if you are using numbers in your paper use them consistently (there is sometimes 32% and "ninety two point five percent" in the same paragraph.

Discussion could add more potential criticism - like for example you are comparing a MS Visio representation to a fully-fledged software system, so there might some technical problems with V-Model representability in actual software implementation

Translate korean characters in the figures

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

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