Reviewer’s report

Title: Economic and organizational impact of a clinical decision support system on laboratory test ordering

Version: 4 Date: 19 Nov 2017

Reviewer: Nicolas Delvaux

Reviewer’s report:

The text has improved significantly and is much clearer and coherent. To correctly assess the conclusion that the decrease in laboratory tests in the intervention group versus the increase in the control group is a result of the CDSS, you also need to report the characteristics of the patients in the pre- and post-CDSS groups for the control group. As table 2 demonstrates, there were less patients admitted in 2015 which may also have played a role in the number of tests being ordered. I think the reader should be able to ascertain whether the increase in laboratory tests in the control group isn't just a result of more patients being admitted in 2015. The statistics do not account for clustering (the intervention is aimed at physicians, but the unit of analysis is the test), which weakens the already low quality of evidence for this effect size. It is therefore important to report any other elements that could have contributed to this effect in order to try and demonstrate that the measured effect is truly due to the CDSS. I have no further comments on the text.

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
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