Reviewer's report

Title: How important is clinical decision support in the quality of telephone triage? A retrospective analysis of triage documentation

Version: 1
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Reviewer: Carl Thompson

Reviewer's report:

Major revisions

state mean level of contacts with CDS in the "no CDS control group" (if its in the order of 1-25 contacts then it really is "no CDS" if its a mean of 200 symptom assessments then it is hardly a "no CDS" control
measures of variability SD and preferably confidence intervals for mean scores

minor essentials
explicit statement of hypotheses
review and discretionary comments

1. Is the question posed by the authors well defined?
There is no research question, hypothesis or explicit aims and objectives posed in the paper. However, the objectives are discernible from the description of the paper in the final paragraph of the background section. An explicit set of hypotheses would help considerably and would aid interpretation (on the part of the reader) of the results if used to frame the presentation of results. E.g. CDS supported nurses will have better quality documentation than unsupported nurses etc. etc.

2. Are the methods appropriate and well described?
Methods are reasonably well described and the quasi experimental design is appropriate (in the absence of an even sounder randomised and prospective design). The authors have paid attention to the possible impact of training and accommodated this in their design. The (no cds but trained) control group description is a little misleading; as I read this, the nurses could have had up to 299 contacts with a CDS and still have been included in the study as “no CDS” nurses? Given the common patterns associated with primary care telephone support calls (D&V; sore throats; pain; fever) it is possible that nurses may have had considerable “condition specific” contact with algorithms and the correct questions to ask.

There is no a priori sample size calculation and the measures of central tendency (mean scores table2) have no measures of variation associated with them. At the very least standard deviations are required, but even more preferable would be confidence intervals in order that the reader can judge precision of any effect and
the clinical significance of the impacts reported. The lack of reporting of distribution is worrying given the centrality of “variability” in symptom reporting to the background justification for the study.

3. Are the data sound?
Yes

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
APA statistical reporting conventions (if required by the journal) are desirable

5. Are the discussion and conclusions well balanced and adequately supported by the data?
Yes the authors resist the temptation to go beyond the fact that this was a study examining the effects of CDS on the quality of documentation (not the decisions and judgements that are the focus of the CDS).

6. Are limitations of the work clearly stated?
Yes, the major limitation is that (legal issues aside) the quality of documentation is not really the purpose of CDS. Rather, it is the quality of choices and judgements – something the authors allude to.

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
Yes

8. Do the title and abstract accurately convey what has been found?
Yes although a more declarative title would be preferable (“clinical decision support improves the quality of triage documentation in nurses: a retrospective quasi experiment” perhaps?)

9. Is the writing acceptable?
Yes, its very well written, reasonably concise and to the point.

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

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**
I declare that I have no competing interests