Reviewer’s report

Title: Safety checklists for use by medical care teams in acute hospital settings

Version: 2 Date: 21 May 2011

Reviewer: Christian Wulff

Reviewer’s report:

Overall assessment:
I think the topic of the manuscript is very important. The paper is thoroughly written and overall well structured. Anyway I think the paper has some methodological drawbacks (see below) which have to be sorted out before publication. Most important I think the quality assessment of the included studies is inadequately described.

Below I have gone through each of the manuscript’s sections separately.

ABSTRACT:
- Major Compulsory Revisions: None

- Minor Essential Revisions
1. I recommend that you use the same checklist-term throughout the paper. – For example you use the term ‘safety checklist’ in the Abstract’s Background, but ‘medical checklists’ in the Abstract’s Results. Please be consistent to not confuse the readers. Else please state that the two terms are synonymous.

2. Methods: I recommend that you first state the databases you searched and then list the limits (E.g. “We searched the databases [X,Y,Z…] for [type of papers / studies?] published in English before September 2009.”).

3. Methods: I do not know “All EBM”. I suppose that “All EBM” is an acronym for some evidence based search-machine? Please write out.

4. Methods: I recommend that you state the different possible levels of “quality” or “risk of bias” and then use only one of these terms (i.e. either use ‘high/moderate quality’ or ‘moderate / high risk of bias’ in the Abstract’s Results section.

5. Results: I recommend that you delete the first (negatively worded) sentence (“We were unable […] of medical checklists.”) and add the study designs of the nine included studies to the following sentence. – I think it is sufficient, that you end the Abstract’s Conclusion by calling for more studies, especially high level studies as randomized controlled trials.

- Discretionary Revisions
6. Question to Background-section: Is it important to particularly list ‘junior medical staff’? - At least in Denmark (where I come from), most front-line doctors are ‘junior doctors’. Likewise many front-line nurses are ‘junior nurses’. I believe it
is more important to clarify who fill in the safety checklist (doctors, nurses (or both), and maybe other health care personnel).

BACKGROUND:
- Major Compulsory Revisions: None
- Minor Essential Revisions
  1. I propose that you insert a definition of ‘safety checklist’ and state synonymous terms (‘medical checklist’?) if you want to use such. – Maybe mention a few word about whether most safety checklists are paper-and-pencil or electronic or maybe?.
- Discretionary Revisions
  2. “Checklists have seen improved safety outcomes…..”: Is the word “seen” correct? (My mother-tongue is not English…)

METHODS:
- Major Compulsory Revisions
  1. I believe that the section on ‘Protocol registration’ has to be moved to the end of the paper.
  2. Search Strategy: I think it is important that you go from the general to the specific (see also Abstract,2.). I propose starting with something like: “We searched the databases [X,Y,Z…] for [type of papers?] published in English before September 2009. The search in MEDLINE used ……”.
  3. Page 4, line 1: I do not understand the purpose of “Validated search filters were used to separate systematic reviews and clinical trials from other types of studies.”? - I suppose you used the systematic reviews to find papers reporting clinical trials / comparative studies on your topic?
  4. Please add a reference to the ‘critical appraisal questions’ sentence in the “Quality assessment”-section and Table 1.
  5. I think it is very important that you state which criteria (and cut-offs) you used to deem whether studies were of low / moderate / high risk of bias. – Did you use all questions listed in Table 1 or only those presented in Table 3? Moreover how did you select the Quality Assessment items to be included in Table 3?
- Minor Essential Revisions
  6. Inclusion and exclusion criteria: Similar to Abstract’s note 6.: Is it important to particularly list ‘junior medical staff’?
  7. Quality assessment: Grammar: I believe “…is intended…”, “…will be performed…” and “…will attempt…” should be written in past tense, i.e. “…was intended…”, “…was performed…” etc.?

RESULTS:
- Major Compulsory Revisions
  1. Search results: I don’t understand the partitioning of the different study types. I
think this presentation confuses the readers. – I.e. Initially I thought that 
N=5881+684+3297=9862 could be found in Figure 1? I suppose this is not the 
case because of duplicates?

2. Table 3 (Study quality): (See also Methods 5.) I do not understand the 
selection of the quality assessment items. I do not understand what you mean by 
“Attributable to intervention”? To understand how you deem whether the studies 
have moderate or high risk of bias, I recommend you to add a sort of score 
column and that you state ‘cut-off’ scores in the Table’s legend.

- Minor Essential Revisions

3. Study findings: The sentence: “The key results from individual studies are 
summarised by clinical setting in Table 4.” – One could add: “And also below in 
the text”, because you also go through the results in the text. I find the exposition 
of the findings in the text (page 5 from “ICU setting” to the end of the Result 
section at page 8) much too comprehensive. Instead of going through each of the 
studies’ outcomes, you should consider presenting only the summarised findings 
in the text (setting by setting as now). Maybe you could present the precise 
outcomes in a separate Table, to be uploaded as an additional file (meant for 
readers particularly interested in the field).

4. Table 4: I think that it would help the readers’ interpretation if you add a 
column between Setting and Results where you state the number of studies.

DISCUSSION:

- Major Compulsory Revisions: None

- Minor Essential Revisions

1. I think you should delete the first (negatively loaded) sentence in the 
Discussion (page 8): “There is a lack […] patient safety.”

2. I do not think that the sentence (page 10, line 9) is very explicit: “There were 
differences between treatment groups for outcome measurement periods.” 
Regarding what?

- Discretionary Revisions

2. The sentence (Page 8, line 17) “There is a lack…”: “Is” should be changed to 
‘was’ (?)

3. Page 9, line 1: “…loads of staff, level of training, or other factors…” I believe 
“or” should be changed to “and”.

4. Note to page 10, l 6: “In most studies the checklist itself was not validated prior 
to implementation. For example, one study states that “it is not clear that each 
element of the checklist needed to be there.”” I believe this point is very important 
and could be elaborated. The overriding premise for implementing checklists is 
that all check items are based on best evidence of effectiveness!

CONCLUSIONS:

No comments.
Level of interest: An article of importance in its field

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.