Reviewer's report

Title: Didactic Guidelines for Conducting Systematic Reviews of Studies Evaluating the Accuracy of Diagnostic Tests

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Reviewer: Dr Jonathan Mant

Level of interest: A paper whose findings are important to those with closely related research interests

Advice on publication: Accept after discretionary revisions

This is a useful didactic review of how to carry out systematic reviews of studies evaluating diagnostic tests. I found the structure logical and easy to follow, and had no major disagreement with what was written.

I would suggest the authors consider the following amendments to their paper:

1. P5: Inclusion criteria: an introductory sentence here would help prepare the reader - it is not clear that the heading refers to how to decide what papers to include.
2. P6: methodological quality: It would be useful to discuss the problems with case control studies here, and perhaps refer to incorporation bias (i.e.is result of diagnostic test incorporated into gold standard test?)
3. P11: DO the authors have any advice (and why) as to which of the different measures of test accuracy should be reported? The DOR needs more explanation than simply its formula, as many (myself included!) will not be familiar with it. What happens to the DOR if either sensitivity or specificity are 100%?!
4. P12: Give a worked example of how to test for the presence of a cut off point effect.
5. P13: Odd example to use looking at positive predictive value to test for heterogeneity, since it is known that predictive value is a consequence of prevalence. Better to use an example where there is heterogeneity in sensitivity or specificity.
6. P17: Need to expand on meta-regression, what it is and what it is for. The last sentence of this paragraph (A problem that is encountered in diagnostic research....) is not clear, and could be re-written.
7. P19: Data presentation: what about confidence intervals? (referred to in the example, but not stated as important 'up-front'.
Competing interests:

None declared.