Reviewer’s report

Title: Faecal immunochemical tests (FIT) can help to rule out colorectal cancer in patients presenting in primary care with lower abdominal symptoms: A systematic review conducted to inform new NICE DG30 diagnostic guidance

Version: 0 Date: 19 Jun 2017

Reviewer: Amanda Cross

Reviewer’s report:

General comments

This paper describes a timely review of the role of FIT in symptomatic patients. The paper is well written and I have some fairly minor comments below.

Specific comments

1. Abstract: add abbreviation for FIT in the first line of the abstract.
3. Abstract: the abstract describes 24 resources but Figure 1 shows 21 and in the text description in the main methods section, it describes 19?
4. Abstract: the authors searched various resources through Mar 2016 - this is quite a long time ago. What papers have been published since this? If there are newer studies and they can't be incorporated in this paper, perhaps address this and any additional studies to the discussion in the main part of the paper.
5. Abstract: the abstract states that the studies cover 4091 patients but fail to give how many CRCs this includes - suggest adding this important information here.
6. Abstract: HRA abbreviation used in abstract but not written out beforehand.
7. Abstract: the statement 'where a lower diagnostic threshold was considered…' - I don't think it is clear what this means.
8. Abstract: the concluding statement is very bold and I'm not convinced there is enough data to support this.
9. Methods: no need to write out FIT and CRC in the first paragraph of the methods - it is already abbreviated in the introduction.
10. Methods, page 9, line 147: I think 'OC Sensor' needs to be added before Eiken.

11. Methods, page 10, line 168-169: TP, FP, FN, TN have all already been abbreviated on the previous page.

12. Methods, page 10, line 180 and line 182: HSROC abbreviated on line 180 and then the same text has been abbreviated as simply ROC on line 182.


14. Results: although the methods give detail on how heterogeneity will be assessed, there are no results given for heterogeneity and no discussion of this.

15. Results, page 11, line 198: here the results state that there were 9 studies identified but the abstract says 10? The authors do state that there was an additional unpublished study but that it couldn't be included in the current article? Therefore, the abstract should say 9 shouldn't it??

16. Results, page 12, line 211: For FOB gold, the authors state there were 2 studies but then fail to give any information on the 2nd unpublished study throughout the results?

17. Results, page 12, lines 210-216: no mention of the Rideascreen assay.

18. Results, page 14, line 252: SROC was previously abbreviated as HSROC - would be better to be consistent throughout.

19. Results, page 15, line 294: The description of the FAST score should have the f-Hb categories as exclusive categories; for example, the text currently says: "(0, 0 to 20, 20 to 200, and ≥200 µg Hb/g" -it is not clear which category someone with 0, 20 or 200 go? -as written, they could be in the 0 group or in the 0-20 group, etc.

20. Results, page 16, line 295: it is not immediately clear which 5 studies were chosen and why. In addition, only 4 references are given.

21. Results, page 21, lines 16-33: Did the authors of the current review try to contact the authors of these previous studies to get more information?

22. Discussion, page 25, line 1: I find it very hard to understand how any conclusions can be drawn in the FOB Gold test given the lack of data.

23. Discussion, page 25, line 28: the authors mention the symptom of rectal bleeding specifically, which you would expect to be highly correlated to FIT positivity. Are the authors able to look at any of the data by symptom? For example, it would be interesting to see how sensitive FIT is in patients with symptoms other than rectal bleeding.
24. Discussion, page 28, line 9: typo 'detectyable'

25. Tables 2 and 3, column 2: Suggest adding text to column heading to make it clearer; for example, 'Prevalence of the condition specified below (%)'

26. Figure 2: I cannot distinguish between the X and the X with a line through in the figure? This needs revising for clarity.

27. Summary box for 'What does this study add': I don't think the data presented in this paper can add that "Secondary care referral following a positive FIT can result in the identification of other significant bowel pathology in patients who are found not to have lower gastrointestinal tract cancer." This data simply isn't presented.

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

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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