

PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form ([see an example](#)) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below. Some articles will have been accepted based in part or entirely on reviews undertaken for other BMJ Group journals. These will be reproduced where possible.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Effectiveness and uptake of screening programmes for coronary heart disease and diabetes: A realist review of design components used in interventions.
AUTHORS	Holland, Carol; Cooper, Yvonne; Shaw, Rachel; Pattison, Helen; Cooke, Richard

VERSION 1 - REVIEW

REVIEWER	Dr. Kevin Pottie Associate Professor Departments of Family Medicine and Departments of Epidemiology and Community Medicine, University of Ottawa Principal Scientist WHO Collaborating Centre on Technology Assessment and Health Equity, Institute of Population Health, University of Ottawa Principal Scientist, CT Lamont Primary Healthcare Research Centre, Bruyère Research Institute
REVIEW RETURNED	19-Jul-2013

GENERAL COMMENTS	<p>I really enjoyed reading your review. I think this is a very interesting topic, and there is opportunity in this topic area to contribute to the field of study. It is clear that a great deal of work went into this review, but I have to wonder if perhaps the review set out to address too much breadth, at the expense of depth. Please let me set out my concerns, below:</p> <ul style="list-style-type: none">• I found the title to be somewhat inappropriate. It is indicative of paper that is too broad, attempting to report on too many outcomes. In attempting to capture and report on too much less is achieved.• I wonder why other methods were not considered such as realist review: i.e. Pearson, M et al, Intermediate care: a realist review and conceptual framework final report 2013.• The abstract would benefit from more explicit reporting of results.• The selection process requires more detail and clarity. The exclusion criteria at the stage where papers were evaluated, as written, lacked clarity and comprehensiveness. Overall, eligibility criteria required more detailed explanations.• One of my main concerns is the manner in which the results are communicated. The reporting was primarily narrative, describing the results of each study. However, I found there to be an insufficient depth of analysis and synthesis for a systematic review. I would suggest that a critical realist review be considered as a possible approach for this type of study.• The discussion suffered from inadequate interpretation and a lack of linkages to implementation science literature as it exists today. This is required in order to put the study in context and show its uniqueness, for which I did not see enough evidence. I would
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	<p>suggest perhaps including references to such authors as Grimshaw or Greenhall.</p> <ul style="list-style-type: none"> • I have concerns about the certainty of the conclusions. It seems as though much of the analysis is filtered through the opinions of the authors, and what they found to be important, without enough expression of this in the limitations section. • I suggest the challenges of this implementation research or narrative review paper be outlined earlier in the paper to give the reader a better indication of what to expect or not expect. • I recommended the PRISMA table be included as supplementary material rather than as a table within the paper. Happy to see this used.
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REVIEWER	Bo Christensen Professor, GP, ph.d, Institute of public health Aarhus University
REVIEW RETURNED	23-Jul-2013

THE STUDY	<p>The Objective is relevant but it to broad for one paper. I think they have to focus the topic how behavioural components and strategies influence on effectiveness of screening for coronary heart disease (CHD) and diabetes i this paper.</p> <p>The attendance rate etc. is not have only minor relevance because the health system is very different ant is not possible to give a answer with this systematic review</p> <p>So be more specific and focused,</p> <p>No statistical is used and it is unnecessary so this ok.</p>
RESULTS & CONCLUSIONS	The discussion is weak. The result has to be discussed in relation to theories of health behaviour, change of lifestyles and adherence etc.

VERSION 1 – AUTHOR RESPONSE

We are grateful for the positive comments of the reviewers and their suggestions, which were perceptive and useful to us, particularly in re-formulating the work as a realist review, as suggested by Dr. Pottie, and ensuring the focus on the use of evidence based behavioural strategies in screening studies came over more precisely and explicitly. Dr. Pottie’s other comments are responded to first, and then Professor Christensen’s, as follows:

“I really enjoyed reading your review. I think this is a very interesting topic, and there is opportunity in this topic area to contribute to the field of study. It is clear that a great deal of work went into this review, but I have to wonder if perhaps the review set out to address too much breadth, at the expense of depth. Please let me set out my concerns, below:

- I found the title to be somewhat inappropriate. It is indicative of paper that is too broad, attempting to report on too many outcomes. In attempting to capture and report on too much less is achieved.

Title changed.

- I wonder why other methods were not considered such as realist review: i.e. Pearson, M et al, Intermediate care: a realist review and conceptual framework final report 2013.

Really helpful – we have now done that and it does suit our aims and the review much better – thank you. A section explaining the reasons and strategy for this is inserted page 8-9

- The abstract would benefit from more explicit reporting of results.

We have made some adjustments here, but the results did rather precisely summarise findings already – however, interpretation and conflicts are brought out in the actual results section, with references inserted in the abstract and the summary as to the role of context and design specific issues where there are equivocal findings.

- The selection process requires more detail and clarity. The exclusion criteria at the stage where papers were evaluated, as written, lacked clarity and comprehensiveness. Overall, eligibility criteria required more detailed explanations.

Much more detailed information is inserted, informed by realist review methods and styles, but some of which is moved definitions from elsewhere in the original article, see pages 11-12, with further description of analysis into themes described on page 13

- One of my main concerns is the manner in which the results are communicated. The reporting was primarily narrative, describing the results of each study. However, I found there to be an insufficient depth of analysis and synthesis for a systematic review. I would suggest that a critical realist review be considered as a possible approach for this type of study.

Although we have inserted an occasional comment to draw the reader's attention to the realist review approach of, for example, taking into account the context, we have largely left this description as it was. As the reviewer noted, this more narrative style is needed when other methods are not useful, such as meta-analyses.

- The discussion suffered from inadequate interpretation and a lack of linkages to implementation science literature as it exists today. This is required in order to put the study in context and show its uniqueness, for which I did not see enough evidence. I would suggest perhaps including references to such authors as Grimshaw or Greenhall.

Really useful comment. We have added further information commenting on the use of the underlying literature and evidence base on health behaviour change, and further information placing the study firmly into the context of Implementation science research, pages 28-29, including references to recent work from Grimshaw et al and Eccles et al (which includes Greenhall).

- I have concerns about the certainty of the conclusions. It seems as though much of the analysis is filtered through the opinions of the authors, and what they found to be important, without enough expression of this in the limitations section.

The analysis of results is filtered by the study aims as set out in the introduction and methods, which is also based on the sound theoretical background of behaviour change and study design expertise. We feel that any limitations that may be due to the authors' opinions are mitigated by having a team with varied perspectives and hence a tightly defined approach and editing process.

- I suggest the challenges of this implementation research or narrative review paper be outlined earlier in the paper to give the reader a better indication of what to expect or not expect

This is done on pages 8-10 but examining whether an evidence base is being used and used accurately is present throughout this paper.

- I recommended the PRISMA table be included as supplementary material rather than as a table within the paper. Happy to see this used.

done

Second reviewer: Professor Christensen

"The Objective is relevant but it is too broad for one paper. I think they have to focus the topic how behavioural components and strategies influence on effectiveness of screening for coronary heart disease (CHD) and diabetes in this paper".

This was our intention, but we hope that this emphasis is now more clearly brought out, see changes detailed above.

"The attendance rate etc. is not only minor relevance because the health system is very different and it is not possible to give an answer with this systematic review. So be more specific and focused",

The issue of findings being situation specific (e.g. Health service) is highlighted more in the new Realist review style, but issues of attendance and attrition do tend to have similar effects internationally.

"No statistical test is used and it is unnecessary so this is ok."

"The discussion is weak. The result has to be discussed in relation to theories of health behaviour, change of lifestyles and adherence etc".

Really useful comment, we have now added more theoretical background to the discussion, see pages 28-29.