PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (**http://bmjopen.bmj.com/site/about/resources/checklist.pdf**) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Barriers to primary care clinician adherence to clinical guidelines for the management of low back pain: Protocol of a systematic review and meta-synthesis of qualitative studies
AUTHORS	Slade, Susan; Kent, Peter; Bucknall, Tracey; Molloy, Elizabeth; Patel, Shilpa; Buchbinder, Rachelle

VERSION 1 - REVIEW

REVIEWER	Ann Scott Research Associate, Alberta Ambassador Program | HTA Program, Institute of Health Economics, Canada
REVIEW RETURNED	21-Jan-2015

GENERAL COMMENTS	This study aims to document barriers and facilitators to LBP guideline adherence from the provider perspective and will be valuable in collecting the information from primary studies into a single, focused review. However, the protocol requires minor revision to clarify the methodology before being considered for publication. On page 4, first paragraph: The authors may find the review by Scott NA et al. useful (Managing low back pain in the primary care setting: The know-do gap. Pain Research & Management 2010: 15(6):392-400). Page 6: Last sentence in last paragraph: Please define what constitutes a low, medium and high methodological quality score. Data Extraction and Synthesis sections: At present the description of the methods is somewhat nebulous and repetitive. • There is repeated reference to grouping and sorting of data and themes. It would be helpful if the authors provided more detail on potential categories for this sorting and grouping. While the methods for qualitative research are, by necessity, a little vague, it is nonetheless possible for researchers who are familiar with this literature to suggest some common categories for grouping enablers and barriers in clinical adherence, e.g. environmental, policy, practitioner, patient, or innovation-related. Also, providing some idea of the broad themes that you are looking for would give some backbone to the Methods description (see also the next bullet point). • There is no clear mention of outcomes (e.g. factors that act as barriers or enablers to diffusion) in the Methods section (although they are mentioned in the Aims section on page 5). There is also no mention in the Methods of the outcome (also identified in the Aims section) of documenting primary practitioner “perceptions and beliefs” about guidelines, which sounds like it is distinct from the perception of barriers and enablers. More clarity on this would be helpful. • When extracting data on determinants of adherence (barriers/enablers), will you code/group them based on the authors’

	terminology or according to your definitions (e.g. what would you do if a paper codes a barrier as practitioner-related but you would deem it as patient-oriented)? • Is there any plan to document the degree of effect or importance of the identified enablers/barriers with respect to each other? For example, will they be categorised in terms of their relative effect on practice (e.g. minor, major?)? • Generally, there are two ways a primary study in this area could be conducted: a guideline is introduced and the practitioners are asked about their experiences with guideline adherence/implementation (a post-test study of sorts); and a more theory-based exercise where practitioners are asked about their perceptions of guidelines in general, in the absence of recent experience with guideline implementation. Are you including both types of studies, and if so, will you be demarcating the results from each of these study types or pooling the results? It is possible that the results may differ depending on the study type. Figure 1: To avoid confusion the final box in the diagram relating to meta-analysis should be removed. Figure 2: The COREQ checklist is listed here but is not specifically mentioned in the methods section (it is cited with a group of other references in the Data Analysis section). Why is this being used in addition to the CASP checklist? How will you integrate these results with those of the CASP tool to gain an overall picture of methodological quality?

VERSION 1 – AUTHOR RESPONSE

Reviewer: comments and author responses

• On page 4, first paragraph: The authors may find the review by Scott NA et al. useful (Managing low back pain in the primary care setting: The know-do gap. Pain Research & Management 2010: 15(6):392-400).

We have added a citation to this work

• Page 6: Last sentence in last paragraph: Please define what constitutes a low, medium and high methodological quality score.

We have removed reference to low, medium and high scores as the CASP Qualitative Checklist does not provide a scoring algorithm for determining what constitutes high, medium or low quality. We will instead present results from individual items that assess validity in the CASP Checklist and consider these when interpreting our findings (Page 6).

• Data Extraction and Synthesis sections: At present the description of the methods is somewhat nebulous and repetitive.

We have re-written components of the methods section to add clarity

a) There is repeated reference to grouping and sorting of data and themes. It would be helpful if the authors provided more detail on potential categories for this sorting and grouping. While the methods for qualitative research are, by necessity, a little vague, it is nonetheless possible for researchers who are familiar with this literature to suggest some common categories for grouping enablers and barriers

in clinical adherence, e.g. environmental, policy, practitioner, patient, or innovation-related. Also, providing some idea of the broad themes that you are looking for would give some backbone to the Methods description (see also the next bullet point).

We have now made reference to these issues on page 8: “We will consider some common domains that are known to influence adherence, such as clinician knowledge and professional background, cultural, environmental and patient-driven factors and categories of low back pain guideline recommendations such as imaging, activity and medication.” However, we do prefer to examine the data that emerge from the included papers rather than make a priori hypotheses

b) There is no clear mention of outcomes (e.g. factors that act as barriers or enablers to diffusion) in the Methods section (although they are mentioned in the Aims section on page 5). There is also no mention in the Methods of the outcome (also identified in the Aims section) of documenting primary practitioner “perceptions and beliefs” about guidelines, which sounds like it is distinct from the perception of barriers and enablers. More clarity on this would be helpful.

We have amended the Aims to: “perceptions and beliefs about guidelines that may act as enablers and barriers” and aligned the aims and methods sections

c) When extracting data on determinants of adherence (barriers/enablers), will you code/group them based on the authors’ terminology or according to your definitions (e.g. what would you do if a paper codes a barrier as practitioner-related but you would deem it as patient-oriented)?

On page 8 paragraph 2 we have clarified that we will initially code according to author terminology, look for common denominators and group with our definitions according to the emergent data

d) Is there any plan to document the degree of effect or importance effect; importance maybe of the identified enablers/barriers with respect to each other? For example, will they be categorised in terms of their relative effect on practice (e.g. minor, major?)?

We have amended to text on page 8 to reflect that this will be considered but will depend on the emergent data

e) Generally, there are two ways a primary study in this area could be conducted: a guideline is introduced and the practitioners are asked about their experiences with guideline adherence/implementation (a post-test study of sorts); and a more theory-based exercise where practitioners are asked about their perceptions of guidelines in general, in the absence of recent experience with guideline implementation. Are you including both types of studies, and if so, will you be demarcating the results from each of these study types or pooling the results? It is possible that the results may differ depending on the study type.

We will include all types of studies and we will compare study type and emergent themes where possible or where data are provided. Page 8

• Figure 1: To avoid confusion the final box in the diagram relating to meta-analysis should be removed

This has been removed from the final box

• Figure 2: The COREQ checklist is listed here but is not specifically mentioned in the methods section added to the methods paragraph page 5 for reporting guideline (it is cited with a group of other references in the Data Analysis section) removed from the data synthesis section. Why is this

being used in addition to the CASP checklist? How will you integrate these results with those of the CASP tool to gain an overall picture of methodological quality? Deleted in figure – the COREQ has been completed for submission and is not a method quality assessment but a reporting guideline

The COREQ listing in the box has been removed and the COREQ reference has been added to the methods paragraph page 5 for a reporting guideline rather than a method quality assessment instrument. It has been removed from the data synthesis section.
The COREQ Checklist has been completed as a submission requirement of a qualitative reporting guideline.