Reviewer's report

Title: Identifying factors likely to influence compliance with diagnostic imaging guideline recommendations for spine disorders among chiropractors in North America: a focus group study using the Theoretical Domains Framework.

Version: 1 Date: 15 April 2012

Reviewer: Rosemary McEachan

Reviewer's report:

This article reports the identification of factors based on the Theoretical Domains Framework related to the management of lower back pain without the use of x-rays. Six focus groups were conducted with Chiropractors in two geographical regions (USA and Canada). An interview schedule was developed, based on the TDF, and subsequent analysis used the TDF as a coding framework.

This is an excellent example of the use of the TDF as a tool for eliciting beliefs likely to influence clinician behaviour in an area where little research has elucidated theory based predictors of clinician behaviour.

I have only minor comments which the authors may wish to consider to strengthen the manuscript

Minor essential revisions

Introduction

1. P6, top paragraph – could the authors please summarise the key clinical and non-clinical factors found to be associated with test ordering (refs 38-46)

2. P7 – context – what do you mean by different imaging patterns?

3. P7 – please clarify – with regards to the quality performance indicators does ordering of x-rays good or bad?

Analysis

4. P8 – please could you clarify whether an utterance relates to just one individual or whether it could include others views as well. For example if a participant A said ‘I don’t feel confident xxx’ and participant B said ‘I agree, I don’t feel confident xxx’ either would this be one utterance or two?

5. Could the authors please report any reliability information they have regarding coding (e.g. % agreement / kappa).

Supplementary files

6. Supplementary file 1 – please could you ensure there is a glossary for all acronyms (e.g HMO)

Discretionary revisions

Discussion
7. One of the things which struck me was the length of the interview schedule (understandably so given the breadth of domains to be covered), and that the style of questioning may seem unfamiliar to participants. It would be extremely informative for those wishing to use this approach in the future to have some idea about participants reactions to the questions and probes – in essence the ‘face validity’ of the schedule. For example, did participants feel the interview guide was repetitive? Did they remain engaged throughout the interview? were there any difficulties with understanding of different domains? Did respondents feel questions relating to domains were relevant?

8. The authors mention the overlap with utterances across different domains (e.g. beliefs about consequences vs. motivation and goals). I wonder if the authors could clarify whether more generally beliefs / utterances related to one domain were tapped when asking questions about a different domain, or whether this was limited to those domains with obvious overlap. There are two points of interest here – first related to the discriminant validity of the domains (and the interview schedule). The second, whether if certain beliefs keep coming up during different lines of questioning we can make assumptions about their strength?

9. The authors discuss the impact that the chosen methodology (focus group) may have had on elicitation of beliefs regarding emotion. Might the group dynamic also have impacted on truthful discussion about social influences / professional identity?

Dr Rosie McEachan

**Level of interest:** An article whose findings are important to those with closely related research interests

**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