**Title:** A conceptual framework for increasing clinical staff member involvement in general practice: a proposed strategy to improve the management of low back pain

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**Author’s response to reviews:**

Dear Editor Dr. Jean-Francois Chenot,

Revision of the debate article ‘A conceptual framework for increasing clinical staff member involvement in general practice: a proposed strategy to improve the management of low back pain’ to BMC Family Practice. Below follows a point-by-point response to your comments.

**Comment 1:** You are proposing a framework, which might be useful for some. I admit it's hard to do justice to significant differences between health systems in developed countries. Therefore the applicability of your suggestions for reframing health services for LBP will be very substantially, depending on specific local conditions. Many of your suggestions will require health policy changes which go beyond optimizing services for LBP. Many proposed changes, providing information material apply to other common health problems. I have suggestions you might address or clarify.

**Response 1:** Thank you for considering the manuscript for publication.

**Comment 2:** Line 56: spondylarthrosis is not an inflammatory disease. Spondylarthrosis is degenerative change of limited clinical significance, you probably mean axial spondylarthritis.

**Response 2:** Thank for pointing to this. Spondylarthrosis is changed to axial spondylarthritis on page 3, line 56.


**Response 3:** Reference 7 on page 16, line 292 is changed from Koes BW, et al, 2010 to Oliveira CB, et

Comment 4: Line 85. In many European countries practices nurses virtually do not exist (France, parts of Belgium) or have limited role in direct patient care (Germany).
Response 4: We agree with this and have added the sentence: ‘Furthermore, in other countries nurse practitioners virtually do not exist or have limited role in direct patient care’ on page 12, line 216.

Comment 5: Line 114-116. Other Implementation Studies have shown only moderate effects of guideline implementation.


Response 5: We agree that simple intervention strategies, especially if short in duration, have been found to be ineffective. On page 12, line 219 we have added the text: ‘Previously implementation interventions outside of Denmark have shown modest effects and pointed to the need for increasing the duration of the interventions to obtain sustained effects. This proposed strategy, however, involves continuous education of clinical staff members and a sustained external support function, thereby optimising the potential for the effects of the intervention to be maintained’. Furthermore, we have added the two references: Suman et al. and Mesner et al. (ref 32-33).

Comment 6: I feel the size of expected benefits of improving management of LBP need to be addressed, since the resources necessary to do so need to be justified.
Response 6: We have added information about savings from a previous finding in the introduction section on page 6, line 115 ‘Previous studies have shown that interventions to support practitioners’ implementation of guideline-based management can change referral intentions, reduce referrals from general practice to secondary care, and reduce healthcare cost by £−93.20 per patient consulting general practice’. Furthermore, the expected benefit is mentioned on page 12, line 223: ‘Through the promotion of more guideline concordant management, this intervention aims to reduce waste and unnecessary health service utilization and has the potential to result in improved patient outcomes. Since, training of new clinician groups does not require addressing unlearning of not guideline concordant procedures and the involvement of clinical staff members can expand the total clinician time with the patient. We believe this intervention can reduce healthcare related cost by up to 20% in countries with a primary care based system.’
Comment 7: Line 130. Many European countries do not have primary care based system, patients can access specialists directly, circumventing gate keeping. Patients like imaging (Jenkins et al.).
Response 7: This is a relevant point. A new sentence is inserted on page 12, line 227: ‘We believe this intervention can reduce healthcare related cost by up to 20% in countries with a primary care based system. This intervention is less relevant to countries in which patients can circumvent gate keeping by accessing specialist care directly.’

Comment 8: Table 1. The heading “Sources of general practice behaviour“ does not optimally reflect the content of the first column.
Response 8: We agree with this. The previous heading ‘Sources of general practice behaviour’ is changed to ‘Possible actions and elements for changing general practice behaviour’ in Table 1.

Response 9: We agree that screening tools may not be suitable for patients with very acute LBP (patients with pain less than 2 weeks) and have limitations if used exclusively to guide care. The text regarding screening tools is changed in Table 2: ‘Access to screening tools (for patients with pain > 2 weeks)’.

Comment 10: I feel better organisation of health service implementing the steps you proposed will maybe not have a large impact on functional capacity or pain, given the limited effectiveness of most interventions (see ACP Review of Roger Chou) but might reduce waste an unnecessary health service utilization.
Response 10: We agree with this point. We have added a new subheading on page 12, line 218: ‘Possible effects of the proposed strategy’ and on page 12, line 223 new text is added: ‘Through the promotion of more guideline concordant management, this intervention aims to reduce waste and unnecessary health service utilization and has the potential to result in improved patient outcomes’.