Reviewer's report

**Title:** Annual consultation prevalence of regional musculoskeletal problems in primary care: an observational study

**Version:** 1  **Date:** 3 March 2010

**Reviewer:** Anita Feleus

**Reviewer's report:**

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The authors present results of occurrence of musculoskeletal complaints in general practice. They used a database and categorized Read codes per region.

General remarks:

- Be very clear on your definitions, throughout the whole text.
- Put it all in the perspective of your research question
- Show us what the new/important information is?

- Major Compulsory Revisions

**Introduction**

1. Page 3.

With regard to pointing out the relevance of the study, there are several studies, also outside the UK that reported on occurrence, and presented site/regional specific figures.

- what is already known and what do you add? Is it adding to the Read codes that you do not find specific enough. (it may be more informative for a GP to label the diagnosis instead of the region)

**Method**

2. Can you name publications that support the validity and completeness of the dataset, and give information on the features of the participating practices?

3. Regarding identification of codes and allocation to regions

- Including a table as appendix in which the included Read codes are presented, may make the allocation process more transparent.

4. You mention that 'unspecified' was recoded as widespread or not. Was that done by the 2 GPs? And can you be more clear on how?

Did you have access to part of the text in the electronic medical file as well, in which the region might be mentioned to help you recode the 'unspecified' ones?
Otherwise there is still a group ‘unspecified’ that is recoded into not, when you do not have more information, which is different from ‘not widespread’, or did they remain ‘unspecified’?

On page 7 you mention a final check as well. Is that solely based on the labeled code or on other information, because than it is only possible for a small group with codes with alternative terms?

6. Numerator and denominator
Numerator
-as definition for annual consultation prevalence you decided to count only the first consultations per region per treatment episode or despite a new treatment episode or new problem/diagnosis? Why did you choose this definition. Does this result in an underestimation compared to other studies, and the definitions they used?
Denominator
-Please include the reference for the population structure of England and Wales that you used, and be specific whether it is the general population or the general practice population?

Results
7..As you mention later on chest pain: at least half the codes does probably not have a musculoskeletal problem, why did you include this term? Does it contribute to your research aim?

8.In total 27% of the codes used to label musculoskeletal problems was not from the N chapter. What group was this? And does this have consequences for future morbidity studies?

9.On page 9, Any musculoskeletal problem, you mention repeated consultations. I thought you excluded these consultations, can you explain?

Discussion
10.Page 11. Can you give more detailed information on the codes included in the chest region, that can help justification for including this region? I still expect that you include mostly cardiac and pulmonary problems in the chest'-region’?

11.You claim to report on data from a high quality dataset. It would strengthen your manuscript if you have more detailed information on that, or references. The fact that GPs allocate the codes, is their everyday clinical practice, or is there more to it?

12.Not all GPs will use the same code to register the same consultation; they may have preference for symptom or diagnosis code , and probably for a good reason. Do you have any info on that , for example from the annual training these GPs receive? And on the possible consequences for the prevalence rate?

13.What do these results add to the yearly figures that are reported in the same
region?

14. Below on page 12. You suggest that this approach offers standardized method to investigate occurrence, management and outcome. Management will be more diagnosis specific than region specific, and will also contribute to your study aim for researchers in general and planning RCTs as mentioned. Did you do anything with the diagnoses included?

15. About 6% of the identified … is reported on page 13, whereas 14% is reported previously. Is this a different group?

16. On page 14 you explain why you include chest pain, I do not see how the mentioned studies can support this. In about 50-80% there are no musculoskeletal reasons for this code. Can you justify why you included chest pain or make changes? E.g., What different codes were used in the same treatment episode?

17. In the conclusion, you report on this new classification, but in the manuscript you do not make transparent what this new classification really is. See previous suggestions.

18. The manuscript does not support the firm conclusions on page 15. See previous comment on RCTs, and management.

- Minor Essential Revisions

Introduction

Page 3.

1. In the second paragraph you mention: in order to plan primary health care and monitor effectiveness of practice…

-Did you mean monitor clinical course? (Unless you monitor a RCT)

2. Here you focus on occurrence, this will help you to plan primary care, and estimate workload.

Additionally, I agree that is helps to estimate whether a RCT is feasible. However, I do not see how it helps identifying suitable and effective interventions.

-please explain

3. Aims.

a. What this study adds, is that it includes all musculoskeletal problems and does not focus at specific regions, and gives region specific information. Maybe you can use this strengthen the research question a little?

b. If the goal is to develop a resource for primary care researchers, also outside the UK,

-it may help to mention in which other countries Read codes are used, and also include studies outside the UK? (Personally, i am more familiar with the ICPC).
- After the research question you mention the Method that you will use. I suggest to move that information to the Method section.

Methods
4. Please be very clear on what you consider to be:
   a. Regional versus site specific versus specific by location
   b. Sector specific (of which you give the definition) versus widespread (differs little from sector specific?) How do they differ? And is widespread used in recoding unspecified the same as two or more sectors mentioned on page 8?
   c. What do the ‘sectors’ contribute to your research question?
5. I don’t know whether all readers are familiar with the term ‘mid-year population’, please explain. That will clarify the denominator
6. You use the term musculoskeletal – defined, does that mean that it is a way of definition and there may be non-musculoskeletal codes included as well? And if so, do you have an idea of that percentage of the 5,908?
Results
Denominator
7. Do you mean 100,758 persons?
8. In the first 4 lines name the number of consultations twice. Are the first two lines correct?
9. Page 10 You chose to report RR with 95% CI, and sometimes without. Please be consistent and use it where you know it is appropriate.
10. On Page 11, you report on 10% off all musculoskeletal consultations, do you mean all consultations or treatment episodes?
Figures and tables
11. Tables in general: age-gender standardized, ..according to the ..population with reference?,
12. In Table 3 abdomen is included. Can you explain why this region should be presented?
13. You use the terms: torso, trunk and chest, are they different?.
14. Why didn’t you use 95% CI in Tables 4 and 5
15. 10th Line, the finding that ….examining consultation rates? ….shoulder complaints?
16. The explanation you report for more elbow complaints in men, is there an explanation for more complaints in other regions for women as well?
17. Page 13. Population of over 100,000 registered patients?
18. Some criteria.. others used?.. are more restrictive. Does this have consequences when comparing figures with others?
19. There are several studies reporting on musculoskeletal problems in the general population, and how many/which persons choose to seek medical care. This, you may want to add.

Abstract
20. Your results seem site specific to me, ‘body region’ sounds more vague than the results are, and less specific than you aim to report.
21. There were 4 GPs that allocated the codes. I thought that all codes where allocated by the consulted GP? Can you please clarify?

- Discretionary Revisions
1. On page.10 above, you present results on differences in region, age and gender. Try to be more specific and focus on the most important aspects.
2. Figure 1. Please use subscription for clarification of the figure
On the left side region specific prevalences are presented. On the right sight sector specific?
3. In overlapping regions., besides knee, overlap is reported by others in shoulder and neck complaints..

Abstract
4. Suggestion: switch the 1st and 2nd line of the results?
5. 556/10,000 registered patients?

General questions
1. Is the research question clear?
Clear enough, but I suggest you separate the question from the goal, instead of naming them in the same sentence.
2. Methods
Are the methods appropriate and well described?
I would like some more information as requested below, to strengthen the method section.

3 Results
Are the data sound?
They seem to be sound, but I would like some additional/detailed information.

Does the manuscript adhere to the relevant standards for reporting and data deposition?
Yes, but be consistent in reporting 95%CI’s.
4. Discussion
Are the discussion and conclusions well balanced and adequately supported by the data?
This can be improved

Are limitations of the work clearly stated?
Briefly

Introduction (discussion)
Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
I made a suggestion for improvement.

Title and abstract
Do the title and abstract accurately convey what has been found?
Yes, I only have a question on allocation of the codes and a few suggestions for the text.

General
Is the writing acceptable?
Yes

**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.