Reviewer’s report

Title: Age and sex differences in disabling foot pain prevalence using different definitions of the Manchester Foot Pain and Disability Index

Version: 1 Date: 27 July 2011

Reviewer: Anthony Redmond

Reviewer’s report:

Major compulsory revisions
This is a potentially valuable study and establishing standardized criteria for case ascertainment would be a valuable addition to the literature.
The paper is well written and the data relating to age and gender are genuinely useful.

There is one major shortcoming however, which is significant enough that it must inform the interpretation of the entire study, namely the sample construction being based on a sample who were selected having already declared that they have ‘pain, aching or stiffness’ in either of their feet on "most days" in the past month.

I am struggling to accept that after selecting a group on the basis of reporting pain on "most days", the authors go on to be critical of the sensitivity to difference in that same group, of a definition that uses pain 'on at least some days' and to a lesser extent a second definition that uses an almost identical "most days" wording. A floor effect is inevitable in that instance and so cannot really be considered a research finding that informs the interpretation of the performance of the measure or its definitions. To draw conclusions re the ability of an instrument/definition to differentiate non disabling and disabling foot pain, the sample needs to be representative of the entire population (or at least the entire spectrum of pain).

As noted above, the information about better differentiating the responses according to age and gender (limited to a population that has already been determined to exhibit disabling foot pain) is potentially useful. Providing the results, discussion and conclusions are amended to limit the scope only to the differentiation within a population with pre-existing and already identified disabling foot pain, this would seem appropriate.

Conversely, the inclusion of statements such as: “we concur with Roddy et al … that the original definition does not distinguish between disabling and non-disabling foot pain…” are not substantiable from these data. Lengthy sections of the discussion are also given over to the overall prevalence/definition data and so reinforce the false impression that this is an important finding.

In summary, it is clear that the more stringent definition probably does provide
better differentiation of data by age and gender and the authors have identified this in the title of the manuscript. Given the pre-selection of the sample for a history of pain on most days however, the assertion re broader definitions of disabling/non disabling pain cannot be supported by the current study and should not be included as a finding.

The title of the manuscript relates only to the detection of age and gender differences. Unless the authors can provide a strong case to the contrary my recommendation is that the text should be reworked also to focus solely on these two aspects.

**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