Author’s response to reviews

Title: The cost effectiveness of UK National Health Service Physiotherapy support for occupational health services

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Reviewer 1 (JK)

Methods:

The methods section has been edited as advised to ensure that it is clear and focussed (p. 4-8 ). We have focussed the statistical analysis section in particular (p. 7) and have ensured that this incorporates the revisions to the analysis recommended by reviewer 2.

We have included a table providing data on the characteristics of service users who did/did not participate in assessments and have reported the results of a comparison of those who were lost to follow up vs. those who completed the 3 month follow up questionnaires at the beginning of the results section (p.10).

Results:

We have provided clarification of derivation of costs in Table 4 and provided references for the unit costs used. We have specified that the perspective employed was that off the UK NHS and therefore have not included any productivity and other indirect costs in the analysis.

Figures:

Figure 1 has been modified as suggested by both reviewers to provide further information and clarity. We have reported data on participants as a whole rather than by recruitment site to make this figure easier to interpret and have included
information on recruitment as well as retention rates (Figure 1, p. 17).

Discussion:
Detailed improvements since baseline have been omitted. This has been replaced with a sentence at the beginning of the discussion section relating to symptom reduction “Statistically significant improvements were observed in all the outcomes shown in Table 1 between the baseline and follow up assessments.” (P.14)

Detailed Questions:
• When the service was designed, it was anticipated that service users may be referred for face-to-face treatment and/or workplace assessments. However, in reality, all the service users who received a workplace assessment had first received both telephone advice and a face-to-face assessment. This has been clarified in the text (‘Service uptake rates and costs of service provision’ section, p. 9).

• The discrepancy in the numbers of participants reported was investigated and has been corrected in the text (abstract & results sections) and in Figure 1. There were in fact 515 participants (not 517 as previously reported) who completed baseline questionnaires, 486 of whom had completed hospital assessments (and workplace assessments where applicable). We apologise for this error and have checked all the figures again and re-run the statistical analysis to ensure that all data presented are accurate.

Reviewer 2 (CJS)
1. We have moved much of the detail on the participants to the results section as suggested.
2. We have sought to clarify position re recruitment of participants on p7 and added a table (Table 1) providing the descriptive characteristics of the participants at baseline and have included some additional comparisons between those retained and lost to follow up (including age, sex, work status, income band, clinical status at baseline).
3. We have re-analysed the data using multivariate regression models to assess whether current status on the clinical variables is associated with primary outcome variables (sickness absence and work performance), adjusting for baseline variables (clinical and demographic). Details are included in the methods (statistical analysis) and results (change in clinical, psychosocial and work-related variables) sections.
4. The reviewer’s comments relating to the lack of control group and spontaneous recovery are very important. We have attempted to clarify this in the discussion section, stressing the limitations of the design, and discussing this as being change in the expected direction that required further investigation. We also highlight in the discussion that while the vast majority of people with acute MS pain recover spontaneously, the participants in this sample appear to have more persistent problems, with the average duration of pain being 56 months.
5. Costs were derived from both top-down and bottom-up approaches. The top down approach was based on estimated expenditure provided by Welsh
Assembly Government and the bottom-up approach from discussions with physios.

6. We have inserted the sources of unit costs in Table 4. The £160 is derived from 4 sessions of face-to-face contact.

7. We feel that providing an estimate of the QALY within this cohort for the change observed is useful in demonstrating that OHPP is potentially feasible in terms of cost. However, we have clarified in the text the limitations of the design and have stressed that this indicates that the service has the potential to be cost-effective and that costs for the benefits observed are within acceptable ranges, rather than demonstrating that this was ‘caused’ by the intervention or that it is effective relative to a control group.

8. & 9. We accept that the discussion was too positive given the limitations of the methodology and have revised this accordingly. We have revised the results and discussion accordingly to focus more on describing the use of the service and the cohort. The discussion is now framed more in terms of feasibility in terms of service use and costs, rather than effectiveness, and highlights the need for further research via RCT(s) to assess effectiveness and cost-effectiveness of this type of programme relative to a control group.