Reviewer's report

Title: Costs of shoulder pain in primary care: a prospective cohort study

Version: 2 Date: 20 May 2006

Reviewer: Jens Ivar Brox

Reviewer's report:

General

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

My first impression was that the study is well designed, including a properly defined population, using accurate outcome measures, and the other advantages include a large sample with sufficient follow up, and a nicely presented manuscript.

However, the population is poorly defined including any shoulder pain, excluding only severe physical and mental conditions, diagnosed by any of 103 general practitioners. Even more important, patients who had taken sick-leave for other reasons in the previous 2 months, most likely musculoskeletal pain related to their shoulder pain, were included. Since the majority of the patients included reported concomitant musculoskeletal pain from other regions, sick leave for other reasons is a major confounder, and additional analysis should be performed excluding patients on sick leave. The results reported may overestimate the costs after first consultation for shoulder pain. This is particularly important because 12% of the patients contribute to 74% of the costs.

A second problem is that the outcomes reported are poorly defined. What is the interpretation of persistent symptoms? Just usual acceptable discomfort or considerable pain and disability? As presented, 46% is not meaningful.

The questionnaire used to assess costs seems not validated. In addition rough estimates are given for unit costs. The most accurate costs are probably related to direct health costs assuming that reliable answers are given. The figures given in the tables leave the impression of accurately measured costs while measurements may not be reliable.

The classification of non-health costs with health care costs is also questionable. To me alternative therapies and over the counter medication should be classified as health-care costs. Using this classification 75% of total costs are indirect costs, but the percentage may be lower if patients on sick leave at baseline are excluded.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Abstract: Conclusion: Keep the first sentence, omit the next sentences.
Page 7: Explain friction costs better. Omit the sentence starting with: " Measures..
Page 7: Why use multiple logistic regression to evaluate baseline differences? Why just not present the table without statistical analysis or use multiple logistic regression to test differences at 6 months.
Page 8: omit as well
Page 9: Hospitalization reflect extra costs in treatment of the shoulder (See Brox et al BMJ, 1993)
Page 9: Rewrite after performing additional analysis
Page 11: Poor prognosis is not well defined since persistent symptoms are not well defined
Page 12: The effectiveness of manipulative therapy. Why not report costs for manipulative therapy which is more relevant than for the control group. As I understand this paper the clinical differences could be questioned and the extra costs are 3.8 consultations by the manual therapist??

Discretionary Revisions (which the author can choose to ignore)

What next?: Accept after minor essential revisions
Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:
I declare that I have no competing interests