Reviewer's report

Title: A before and after study of the impact of academic detailing on the use of diagnostic imaging for shoulder complaints in general practice.

Version: 1 Date: 14 September 2006

Reviewer: Marek Brabec

Reviewer's report:

General
As a statistician, I have been asked to review the paper from statistical point of view only and hence I will concentrate on statistical methods and models used. The authors should be congratulated for writing a nice paper. They described statistical methods they used in a compact and correct way, using appropriate terminology. Models used, namely linear mixed effects (LME) model and poisson regression (with GEE estimation approach) are appropriate and correctly used. Unlike in many other papers I reviewed before, the tools that are used here for analyzing the data are up-to-date and efficient. The results appear to be correctly and nicely interpreted. Not only that the authors took care of dependencies in the data (basically to account for intra-practice similarity), but they even acknowledged residual heteroscedasticity in their LME modeling. This is certainly careful approach which reflects not only mean (first-order), but also variance (second-order) relations. On the top of technical clarity, the authors did not overstate their results and provided modest as well as appropriate formulations of their findings. Certainly, I do recommend the paper for publication.

-------------------------------------------------------------------------------

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

-------------------------------------------------------------------------------

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

-------------------------------------------------------------------------------

Discretionary Revisions (which the author can choose to ignore)