Reviewer's report

Title: Comparing lumbo-pelvic kinematics in people with and without back pain: a systematic review and meta-analysis

Version: 1 Date: 31 May 2014

Reviewer: Mark Hancock

Reviewer's report:

The authors have responded to my previous comments and I am happy with the changes they have made.

Minor essential revisions:

In my first review I missed the point raised by the editor regarding the defining of cases vs controls. I agree this is a very important issue for this review. For example hypothetically these changes in movement control may occur after the first episode of LBP and then not resolve. In this case you would expect to see differences between cases and controls that have no history of LBP but not when controls had a previous history of low back pain or even mild ongoing pain which may be classified as a case in some study. Many other potential scenarios exist depending on how cases and control are defined.

The authors have made some changes in response to the editor’s comment, but I think this limitation (based on poor definition in primary studies) should be highlighted more clearly in the manuscript as it is crucial to sensible interpretation. If there had been clear enough definition in primary studies, then arguably the meta-analysis should have only combined similar definitions (e.g. controls with no history of LBP vs those with past history). I suggest the last sentence of the abstract explains this limitation in more detail. The discussion touches on this point in the second paragraph but again I think this can be strengthened and expanded on.

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