Reviewer’s report

Title: Ipsilateral Lower Extremity Joint Involvement Increases the Risk of Poor Pain and Function Outcomes after Hip or Knee Arthroplasty

Version: 2 Date: 21 March 2013

Reviewer: Hassan Ghomrawi

Reviewer’s report:

The authors tackle an important topic in total joint replacement. Other joint “pains and limitations” have received little attention in the literature despite being intuitively affecting patient perceptions.

Major compulsory revisions

The authors describe the Mayo Clinic total joint replacement registry rather in general terms without providing specific inclusion/exclusion criteria beyond “Patients were included in this study if they had undergone a primary or revision THA or TKA during 1993-2005 and had responded to both pre- and at least one-post-surgery questionnaire (2- or 5-year follow-up).”

Based on these criteria, the reviewer is not clear whether ipsilateral involvement was present at baseline when the index surgery was performed or not. If so, this involvement would have also affected the baseline reporting.

It is also not clear whether the ipsilateral joint of interest had a total joint replacement or not. In other words, it is not clear whether the pain is resulting from a deteriorating total joint replacement (that was not performed at Mayo) or from a degenerative disease of the joint.

Can the authors explain why they have not excluded inflammatory arthritis patients in the analysis? Other joint involvement is very prevalent in these patients, unlike OA patients.

Also, the authors acknowledge the effect of contralateral joint involvement on reporting for the index joint. It is unclear, given the large volume of patients in the Mayo clinic registry, why the authors have not excluded patients with contralateral joint pain or adjusted for this variable in the analysis.

The multivariable regression adjusts for a bunch of variables, most of which are traditional in these studies. The reviewer does not understand why distance from medical center is an important variable to adjust for in the model. If the authors believe it is important, they should provide an explanation.

The authors correctly acknowledge the presence of response bias in their study and are commanded for this, especially given that the response rates go as low as 48%. They report important differences between respondents and non-respondents in their results section. The authors are strongly advised to take
advantage of statistical methods to adjust for bias to determine if the results would change.

**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