Reviewer’s report

Title: A population-based study of the volume of ambulatory and surgical services provided by orthopedic surgeons for musculoskeletal conditions

Version: 1 Date: 30 December 2008

Reviewer: Hsiu-Yun Lai

Reviewer’s report:

Cañizares and colleagues have written an interesting paper about the services provided by orthopedic surgeons for musculoskeletal conditions in both ambulatory and hospital settings. The methods are fairly well explained and the sample size is large. My specific comments are as follows.

Major Compulsory Revisions

Because the dataset is quite rich, I suggest the authors pruning the statement with more focus on your findings correlated to the shortage of orthopedic surgeons, in order to give the readers a clearer picture of your study.

Abstract

1. The 1st sentence in the background mentioned the process of population aging and the consequence of increase in prevalence of musculoskeletal conditions. This may mislead the readers that the population under study was the geriatric group. I suggest modifying the 1st sentence with a statement focusing on the why the study is important. For example, the shortages of orthopedic surgeons increased due to the aging population increased.

2. Results, last sentence: “These findings suggest that less than one a quarter of individuals seeing an orthopedic surgeon get orthopedic surgery”— It is difficult to correlated the number of patients were seeing orthopedic surgeon and the number of patients who had orthopedic surgery. You may say that the orthopedic surgeon may distribute more time at operation than ambulatory service.

Material and Methods

1. In the 2nd paragraph, it would be beneficial if you could give the readers more detailed information on why “ambulatory encounters were obtained by removing claims for diagnostic and therapeutic tests and procedures”.

Results

1. Please state only the important relavant findings. No need of detailed description of each number.

2. 4th paragraph, 2nd sentence: the author mentioned: “only “a quarter of those surgeries were TJR. It would be good to let the readers know why a quarter of surgeries are not enough. You may also want to compare with other countries and provide a reference to support the statement.
3. Table 1: Some errors were noted in the number of encounters in all conditions (1,326,556# 1,125,800 +182,309) and bone and joint conditions ( 178,002 # 141,089 +18,466).

4. Table 3: Please give more information to explain why the column totals in several subgroups were less than 100%.

Discussion
1. Can you provide the commentary on the implications of the age-related and sex-related findings in Figure 1?
2. Suggest omitting the last sentence in the 3rd paragraph and may give some commentary on the importance of your results.
3. 5th paragraph: "However, taking into account the average number of visits, the ratio of surgical encounters to the number of patients seen in ambulatory settings suggests that only about a quarter of individuals seeing an orthopedic surgeon are likely to have an orthopedic procedure" Please refer to the comments for abstract.
4. 8th paragraph: The findings in this paper seemed not to be enough to make any inference that trained health professionals can manage non-surgical musculoskeletal conditions and the integrated care model will be a better choice.
5. Last paragraph: It would be important for the authors to give more information on the difficulties and limitations in using CCI code.
6. It would be interesting if the authors can give us the number of patients with musculoskeletal problems treated by orthopedic surgeon compared with other specialties.

Minor Essential Revisions

Abstract
1. Results: 7th sentence — better to use “fifty percent” rather than “50%” at the beginning of the sentence.

Material and Methods:
1. In the 4th paragraph, suggest omitting “Diagnosis codes can be obtained from the authors”.
2. In the 5th paragraph, suggest omitting “More details of the surgical groups can be obtained from the authors”.
3. 5th paragraph, last sentence: suggest using identical term in the same article and replacing “day surgeries” with “same day surgeries”.

Results
1. Since the study population was very large, it would be better to the authors to present the data of the 95% confidence interval instead of the p values only.
2. Table 2: Some of the row totals exceeded 100%. May be due to the rounding off process?
Discussion

1. At the end of 1st paragraph: the abbreviation “MSK” was first noted here. Suggest to replace with “musculoskeletal”.

**Level of interest:** An article of importance in its field

**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