Reviewer's report

Title: Tibia shaft fractures: costly burden of nonunions

Version: 4 Date: 22 October 2012

Reviewer: Glinda Cooper

Reviewer's report:

The authors have responded to some of my previous comments, at least in part, although I am puzzled why they did not go further – this would be a much more substantive paper if the analyses they plan to do, looking at associations between various factors (such as presence of additional fractures) on nonunion status and on health care costs) were included in this paper. If it continues to be a stand-alone descriptive paper, there are a few remaining clarifications that would be useful to address:

1) I think it would be valuable to note the difference between the nonunion and union fractures in frequency of other fractures in the abstract

Page 4, line 59 - should that be united (instead of untied)?

Page 6, line 85. HIPAA is the Health Insurance Portability and Accountability Act (you left out "Accountability")

line 87 - what is "carve-out services"?

Does the data set cover the entire US or is it a particular region?

Page 7 - you mention socioeconomic characteristics: what specific socioeconomic variables were available in this data set?

How much missing data was there for the Charleson index?

Page 8 , line 129: HIPAA (not HIPPA)

Page 9, lines 135-139. The data you describe in this paragraph are NOT shown in Table 1. Please take out the reference to Table 1.

Page 9, lines 141-144: The region and type of insurance coverage are NOT shown in Table 1. .Also, the description of the Charleson index would be more informative if you also gave a proportion > 3 (or 4 or 5; something that better captures the high end of the distribution)

Don’t need Table 1 and Figure 1; these are redundant. Just show these data in one form or the other.

Page 12, line 206. Are you saying that a health insurance company would use this information to make decisions about what care they would or would not cover?
Line 210: First sentence is not accurate and should be deleted.

Page 13, line 221-223: Why is it "coincidental" that patients with nonunion were more likely to have additional fractures?

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests.