Reviewer’s report

Title: Incidence and costs of bleeding-related complications in French hospitals following surgery for various diagnoses

Version: 6 Date: 4 February 2013

Reviewer: Darryl T Gray

Reviewer’s report:

This is a further improved, (re-) re-revision of a manuscript on a study of hospital costs and prolonged length of stay associated with transfusions and bleeding consequences seen in French surgical inpatient stays. It addresses an important issue and provides useful and interesting new data. Several previously raised issues have now been better addressed. However, some clarifications should still be made.

Specific comments follow. In general, these issues were at least partially raised in prior reviews.

Major Compulsory Revisions (issues that need to be addressed in some fashion. Revisions to the analysis itself may or may not be required.)

TEXT

1. The statement “separate scales were applied to public and private sectors” need to be explained. It now appears that “billed” physician fees (rather than those actually paid or expected to be paid) were included in private sector hospital" costs” for private hospital cases. For public hospital cases, how was part of the public hospital physician’s salary attributed to a given case? In any case, the difference between WB and WoB cases costs/LOS could be affected by the difference in distribution of WB and WoB cases between private and public sector hospitals. This difference (if any) should be discussed and its potential impact on observed differences between WB and WoB cases in terms of costs and LOS should be more fully discussed. The response in the cover letter does not address this issue.

2. Given the potential for non-Gaussian distributions of hospital costs and/or LOS, the skewness of the cost and LOS data should be described. Given recent work done on handling non-Gaussian distributions of hospital costs, SOME discussion, based on papers published more recently that 2000, is still warranted. The ways in which non-Gaussian distributions of hospital costs were accounted for in the regression analyses should be better described. The
response in the cover letter does not address this issue.

3. *It is still unclear how or why LOS and costs for the bleeding complications group were adjusted for age, gender, # of procedures, etc. (adjusted to what?) . If they were adjusted to the distribution of age, procedures, etc seen in the WoB group, then that should be clearly explained. Otherwise, how does this adjustment relate to estimates of the incremental increases in LOS and costs seen in these pts vs the WoB cases, especially if the WoB case distribution was not adjusted. It is still unclear why adjusted costs and LOS were not calculated for the WoB cases.

4. A model with a single age category of 0 to < 65 years old seems less informative than one with smaller categories within this group. If that is what was done, then the justification for this would seem to call for some explanation (in terms of uniform results within this large age range, etc. If nothing else, this should at least be acknowledged as a limitation in assessing the potential impact of age on the results.

Minor Essential Revisions:

1. Once again, this reviewer asks: “What does the word *tariffs* mean as the term is used in this context?
2. X and Y axes should be labeled for all figures

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

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests