Reviewer's report

Title: Surgical site infections following coronary artery bypass graft procedures: 10 years of surveillance data

Version: 1 Date: 28 April 2014

Reviewer: Caroline Marshall

Reviewer's report:

This is an interesting important paper examining CABG surveillance results from surveillance undertaken in Queensland Australia over ten years. The research question is clearly elucidated and the methods appropriate to assess this.

Major essential revisions

Could the authors clarify if there are any other hospitals in Queensland that perform CABG surgery but do not submit surveillance data to CHRISP? If this is the case, a description of the reasons/types of hospitals and patients that may differ from the hospitals that do provide information should be provided. This information is provided in the discussion, but should be mentioned in the methods.

Lines 38 and 39 do not quite make sense. When was the 2 year implementation phase? Before the study period or at the beginning of the study period?

Was active post-discharge surveillance carried out? This needs to be specified and if it was carried out, for how long also needs to be specified. This is implied in the discussion, but is not stated in the methods. A comment on how this was conducted should be included. In line 178, it is stated that post-discharge surveillance was collected from 3 hospitals (but there were only 3 in the study, so why state this?)

Could the authors explain why they chose the ASA score of 3 as the reference score and not 1?

Although it may not have been published at the time of submission, the authors should include in their discussion a recently published article that covers some of the points from their manuscript: Activity of Commonly Used Antimicrobial Prophylaxis Regimens against Pathogens Causing Coronary Artery Bypass Graft and Arthroplasty Surgical Site Infections in the United States, 2006–2009

Sandra I. Berrros-Torres et al, ICHE March 2014, vol. 35, no. 3

Minor essential revisions

Methods:

“risk factors of complex sternal” should read “risk factors for complex sternal”

The conclusions that GNB are increasing in the abstract don’t really follow from the results in the abstract (although the evidence for increasing GNB is given in the main body).
Line 11 should read “associated with increased risk” of SSIs
Line 26 should read “investigation”
Line 37 should read “have provided data”
Line 43 should read “follow up SSI cases”
Line 52 – do you mean “data quality assurance procedures were implemented”? 
Line 94 should read “95% confidence intervals” (assuming that was the case)
Line 115 should read “male”
Line 116 delete “old”
Line 116 replace “having” with “included”
Could the authors explain how you can have CABG surgery without a graft site incision (or vice versa)?
Line 132 should read “Pathogens causing SSIs”
Line 136 delete “For specific organisms,”
Line 284 should read “more severe underlying disease”

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

**Quality of written English:** Needs some language corrections before being published

**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