Reviewer’s report

**Title:** The association between each central line insertion bundle and central line-associated bloodstream infection

**Version:** 2  **Date:** 6 May 2014

**Reviewer:** darren J malinoski

**Reviewer’s report:**

**Major:**
1. the duration of catheter insertion is not mentioned and this is a well-known risk factor for CLABSI. If these results are not available, then this should be mentioned as a limitation.
2. how many patients had multiple catheter insertions and how was this handled in the analysis?
3. did the 6 clabsi’s occur in 6 patients or fewer?
4. how long after insertion were the clabsi’s diagnosed?
   *if the above data are not available, they should be discussed in the limitations section

**Minor:**
1. results paragraph 2: the results state that the intervention period had 6 clabsi and a rate of 1.65/1000 catheter days. this number should be 0.64/1000 catheter days.
2. results paragraph 2: "Five CLABSIs were CVC related and one was double-lumen catheter-related" - how do you differentiate CVC related from double-lumen?

**Discretionary:**
1. table 1: the data are presented as the percent of each variable within the clabsi and no-clabsi groups. it might allow the reader to infer more of the relationship between each variable and the occurrence of clabsi to display the results as "% of patients with clabsi when variable present vs. absent", while these data have the same p values regardless of how they are expressed, a better assessment of direct association can be illustrated with the suggested approach.

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

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