Reviewer's report

Title: Use of Electronic Health Record Data to Identify Skin and Soft Tissue Infections in Primary Care Settings: A Validation Study

Version: 1 Date: 11 December 2012

Reviewer: Coleman Rotstein

Reviewer's report:

This manuscript describes material of interest to the readership of BMC Infectious Diseases. It attempts to validate that ICD-9 codes garnered from the electronic medical record are useful in verifying the presence of skin and soft tissue infections (SSTIs). The authors verify that the ICD-9 codes for SSTIs do actually represent cellulitis/abscess. Thus in the future abstracters of data from the electronic medical record can be assured that they are truly capturing SSTIs based on the pertinent ICD-9 codes.

After completing my review of the paper, I think that it deserves publication provided that the authors undertake the suggested revisions. Specifically and most important, the authors should include details of the number of patients that fit their inclusion criteria: ICD-9 SSTI codes, CPT codes for incision and drainage based on each of the codes listed in the methods section as well the number of patients satisfying their third criterion of a positive wound or tissue culture. These data could be included in Table 2.

Specific changes that should also be addressed are as follows:

1) The first paragraph of the "Background" section is superfluous and should be deleted.
2) In the first paragraph of P. 6, the term PPV should be spelled out whereas in the second paragraph on this page the abbreviation PPV should be used.
3) On P. 7, the inclusion criteria should be explained more explicitly including the codes that are listed in the Results section.
4) In the first paragraph of the Results section on P. 9, the percentage of females is incorrect and probably should read 54.5%.
5) As mentioned above, the number of patients satisfying each of the eligibility criteria should be listed. Ideally these data could be shown in Table 2.
6) In the Discussion section, no limitations of the data are listed. Could the authors have missed some cases such as diabetic foot infections, infected ulcers or surgical wound infections?
7) Is Table 1 really necessary?

Once appropriate revisions have been submitted based on the suggestions provided the manuscript would be acceptable for publication.
**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:**

No financial disclosures relevant to this article.