Reviewer's report

Title: Admission to hospital for pneumonia and influenza attributable to 2009 pandemic A/H1N1 Influenza in First Nations communities in three provinces of Canada.

Version: 1 Date: 6 September 2013

Reviewer: Brenda L Coleman

Reviewer's report:

Major Compulsory Revisions

1) Please provide standard errors or confidence intervals and levels of probability for rates and ratios as you are comparing between provinces, years, residential area. You use the word “significant” in results paragraph 3, but don’t appear to have used any statistical test to make that claim. Please amend the methods section, to discuss SE/CI/testing.

2) Since your databases are different (along with other provincial differences such as demographics, healthcare systems, timing of pandemic, etc.), you should not attempt to combine your results (e.g., results, paragraph 3 and discussion paragraph 2) but rather should provide the 3 estimates (perhaps 44-46% and 8-11%, etc.).

3) Although provided in Table 2, your results section does not clearly address the main question “differences in rates of hospitalization between FN residents and non-FN residents of each province”.

4) Methods section: you state that you aggregate reserve communities in each province, yet you provide information about remote/isolated vs other communities. Please elaborate on how these divisions were made.

5) You suggest that age and SES “may” account for variability in rates of hospitalization and although you have this data available, you have not adjusted for the differences. This addition would be a valuable addition to the manuscript.

6) The discussion lacks the depth of comparison with published works regarding Aboriginal health and influenza.

7) Another limitation, which should be mentioned is that rates of hospitalization may be confounded by historical issues. If differences were noted in the Aboriginal population’s rate of complications in one province or during the first wave of the pandemic, and this affected clinical practice in another province/second wave. Please comment.

- Minor Essential Revisions

1) First Nations identification: please clarify - it appears that it was the same for all provinces in P1, but then BC was apparently different re: P2 (also note that postal codes areas are large in all rural areas, not just in BC)
2) Outcome measures: lab testing criteria for pH1N1 varied over time. Did it vary by province as well?

3) This is an international journal, please:
   a. add the word “Canada” to the abstract (suggest methods section “three Canadian provincial data…”)
   b. spell out the acronym US (background, P1)
   c. spell out the acronym BC (throughout paper)

4) Please spell out the acronym FN (you switch back and forth throughout manuscript)

5) Outcome measures: spell out FNIH

6) Results: P2 – please refer to “rates” as rates of hospitalization for people from…FN or “other” rather than

7) Table 1, please define CMA and NA

8) Table 3, please delete the British Columbia rows. Add comment in footer to explain

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

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

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

**Declaration of competing interests:**

I declare that I have no competing interests.