Reviewer's report

Title: Surveillance of Febrile Patients in a District and Evaluation of Their Spatiotemporal Associations: a Pilot Study

Version: 2 Date: 7 December 2009

Reviewer: Karen Olson

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Minor revisions

This paper is now easier to read and the results more clear. However, it still needs careful editing as there are some awkward sentences. I also think some of the table information could be reported in the text. For example, Table 1A can be cut because it repeats some information in the text and essentially says:

There were 1066 patient-episodes and 448 (42%) patients presented with fever. 204 patients (19%) were from RCHE and 98 (48%) presented with fever (9% of all episodes). Forty clusters with a median size of 3 (range 3-8) were identified. Of these, 25 (63%) had two or more patients who lived in the same building block. A median of 67% of individuals in each cluster lived in the same building block (range 0-100%). 18 clusters (45%) included patients from RCHE.

Figure 2 is not necessary. A sentence could say:

Most of the 40 clusters had 3 patients (n= ??). ?? clusters had 4 patients, ?? had 5, ?? had 6, ?? had 7, and ?? had 8.

Maps: Large points do not obscure exact locations. The GIS program centers the point on the exact location and if someone was so inclined, they could zoom and extract the exact location. While the exact residence of some patients with fever from 2005 may not be of much interest to anyone with malicious intent, I still believe points should be moved randomly by a small amount for publication. Or the authors could eliminate most of the street level detail so no one with any knowledge of the area could really figure out the location. Actually, I do not think the maps are really necessary because the authors described them in the text.

I was not too happy with the discussion of the other surveillance methodologies. I would be happier if the authors tried them and either reported what they found or explained why they did not seem to work. I am more inclined to trust a statistical method than the more subjective analysis they report. The authors could perhaps convince me that their analytic decisions make sense, but so far have not. Instead I am inclined to think of this paper as a simple report of a procedure that seems useful in a very specific, local context. However, I do not see their methodology as advancing surveillance methods in general. Nonetheless, the fact that they find their methods useful is interesting enough to others who might confront similar circumstances.
**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.