Reviewer’s report

Title: Spatial clustering of measles vaccination coverage among children in Sub-Saharan Africa

Version: 0 Date: 14 Jul 2017

Reviewer: Abram Wagner

Reviewer's report:

Overall, this is a well-written manuscript which uses DHS data to determine spatial clusters of low vaccination coverage in Africa. I only have minor comments below.

line 77: probably should use full name of CDC (US Centers for Disease Control *and prevention*)

line 91: My preference would be not to abbreviate critical vaccination fraction to CVF - since this is relatively nonstandard and because you only mention the abbreviation a few times in manuscript.

Line 102: my preference is to not use apostrophes when pluralizing acronyms.

Line 254: you are write to discuss the inverse relationship between financial barriers and better vaccination rates. Is it at all possible that this could be related to greater vaccine hesitancy in more educated/well-off populations?

Line 262: your discussion about transient populations could be bolstered if you had references about vaccination coverage differentials between certain ethnic groups. (e.g., are there concrete vaccination coverage numbers for Maasai people or Chewa people).

Line 285: I think your conclusions can be bolstered a bit. At the very least, you could mention your findings about subnational vaccination coverage being quite a bit lower than the critical vaccination fraction in many cases, and there being spatial correlation between these districts, and often across borders.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I recommend additional statistical review

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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