Reviewer’s report

Title: Inequities in coverage of smokefree space policies within the United States

Version: 0 Date: 30 Dec 2016

Reviewer: John Garcia

Reviewer's report:

Overall, this is a very useful paper adding to the literature on inequalities in tobacco control policy. Therefore, I am recommending acceptance of the paper for publication following additional statistical review (or more heavily weighting other reviewers' comments on the MOR aspect of the paper) and consideration of some editorial suggestions. Editorial suggestions follow.

First, given the established causal linkages between secondhand smoke exposure and various chronic diseases and childhood lung development and chronic conditions, the authors may wish to frame this as a social justice issue and refer to inequities rather than inequalities.

Second, the points made in the introduction pertaining to denormalization refer primarily to denormalization of smoking behaviour and secondhand smoke exposure per se (starting at line 48, page 1). Brief mention of the important role of tobacco industry denormalization should also be considered.

Third, the first research question refers appropriately to "the proportion of the population covered..." (line 58, page 2). Please consider adding this phrase to the abstract.

Fourth, there is reference to "accounting for non-independence by state" (lines 12-13, page 3). It would be helpful to specify or elaborate on this. Does it refer to dependent living arrangements, or perhaps pre-emptive/enabling legislative factors, or relevance of "home rule" in some localities?

Fifth, at line 29, page 3, reference to "seven types of restrictions" or "seven groups of restrictions" might be more appropriate than "groups of types".

Sixth, one might wonder why the authors did not specify interaction terms in the logistic regression models. Given that (a) there are stark regional differences, (b) ethnic heterogeneity appears associated with a higher likelihood of clean air coverage, (c) a higher proportion of Black Americans resident is associated with more progressive policies, and (d) there are many good examples of progressive tobacco control activism and policy in the US southeast and elsewhere in America (cf. Figure 1 and 2), interaction terms may shed some light of possible socio-political mechanisms for successful attainment of such policies. If the interaction terms in
such a model do not indicate effects, this too would be interesting to readers and a comment could be made.

Seventh, in the paragraph starting at line 11 of page 6, MOR is described as directly comparable to ORs from the model. One might question the public health utility and statistical relevance of a median increase of .000028 fold. I will concede that this reviewer may not understand this particular statistic as applied here and suggest that the other reviewers' comments hold more weight in this regard. However, losing this paragraph and reference to MOR would not greatly reduce the value of this paper.

Eighth, it may be useful in the discussion to speculate on the historical reasons for success in some localities (liberal-conservative policies, social democratic norms, influence of tobacco growing and manufacturers in certain regions, effects of state-level pre-emptive legislation, local champions for child protection etc.), as well as nationally and state-wide capacity building efforts to support them (e.g. efforts by US National Cancer Institute, Centers for Disease Control and Prevention, Robert Wood Johnson Foundation Smoke-Free States Initiative, Campaign for Tobacco-Free Kids, American Legacy Foundation/Truth Initiative, etc.). Identifying areas for further research here would be welcome in your discussion.

Again, overall, I think that this is a very meaningful contribution to the literature and will be useful to public health scientists and practitioners alike.

**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:

Needs some language corrections before being published

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests.

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal