

Review of: "A Computational Model Assessing Population Impact of a New Tobacco Product"

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The authors describe a computational model which can assess the effect of introducing a new tobacco product into the U.S. market. It is one of a number of approaches, their reference 2 describing a number of other approaches, and their main application concerns predicting up to the year 2060 in a status quo base case scenario where new tobacco products are not introduced and a modified case scenario where they are. As with all such modelling uncertainties arise due to inaccuracies in the assumptions made, or unpredictable future changes in the nature of the products, the rate of transitioning between products, the advent of epidemics and wars, and the ability to cure diseases, but the user can take many of these factors into account in the modelling.

The paper is very clear and generally very well written and I see no major errors in it which require attention. I only have some minor points on the English which the authors might attend to, which are listed below.

In the conclusion and in the second paragraph of the introduction the authors use the word "leveraging" or "leverage" as if it were a verb. It is only a noun in English, and though sometimes used as a verb in U.S. English without my understanding what it has to do with levers, it would be clearer if its use were avoided. Thus, I would say "using an ABM" rather than "leveraging ABM", and similarly "use an ABM" rather than "leverage" ABM.

Introduction first sentence. Please add the word "to" between "will result in a net benefit" and "health of the population".

Introduction last sentence. The final semi-colon might better be after "uncertainty" than after "estimation". Certainly the structure of the sentence as it is makes it difficult to understand.

Table 1 "Years of New Tobacco Product Use (YNPU) F". Add "is" before "incremented".

In the first sentence of the paragraph above Figure 2, there is a reference to "an NT", "an CS" and "an NPU". I would have thought that in each case, "an" should be replaced by "a".

It is stated in the last paragraph of the section "3. Transition" that agents in the NT state can make one of four possible transitions. I think three is correct, not four. Remaining in the NT state is not a transition. Earlier text in the same section does not treat staying in the same group as a transition.

I am not sure why reference 12 has a "NOT IN FILE" note against it. The paper certainly exists and seems correctly cited.

