Reviewer's report

Title: Comparative effectiveness and cost-effectiveness of antiretroviral therapy and pre-exposure prophylaxis for HIV prevention in South Africa

Version: 2
Date: 28 December 2013

Reviewer: James G. Kahn

Reviewer's report:

The paper is improved. However, not quite there. In order & numbering of issues in my original review:

Please note that at least one prior paper on the cost-effectiveness of ART for prevention (but not PrEP) used a long time frame. This is Granich, Kahn, et al.

1&2) The design / labeling of tables and figures remains unclear. Please get assistance of an editor or a test reader, to assure understandability. For example I took 30 minutes to understand Figure 3, and I'm an expert in this field. In addition the abstract is unclear and apparently contradictory. ** See uploaded file with further detail on these points **

3) The results are still not stepwise incremental, e.g., in the abstract. That is, the authors say that the new abstract presents both vs. the status quo (which I believe is misleading) and incremental, but in fact for ART it presents only vs. status quo.

4) rewrite of PrEP scale paragraph is now clear.

5) Adding the phrase "and the results get increasingly attractive as we consider longer planning horizons" is not responsive to my suggestion. I feel strongly that policymakers will want to understand how the economic results evolve over time, since they may not want to base policies only on such a long horizon. I think the paper will be more powerful with a figure showing year-by-year results. I would think this is fairly easier to generate.

6) Focused PrEP cost - well-addressed.

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:

One of the co-authors, Eran Bendavid, is a co-investigator on a grant on which I too am a co-investigator. To the extent that this paper improves our grant's productivity, it may help with follow-up proposals. However, in our grant we
publish >15 papers a year, some in high profile journals, so this single paper will have little effect on our perceived productivity.

I have no other financial interests.