Reviewer’s report

Title: The HIV self-testing debate: Where do we stand?

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Reviewer: Emily Pingel

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Overall

This article makes an excellent contribution to the literature on home-testing. It is clearly written and organized and will serve as a useful tool for future empirical work on this topic. I have minor suggestions to improve manuscript (see below).

Background

In the first and second paragraphs, the authors allude to a "demand for new policies…etc." and "a call for massive scale-up…." Who is making these recommendations? The background section would benefit from a clear indication of the players involved in this debate. If, as the authors state, HST has not been widely touted in "the field of HIV", who is touting it and why? In other words, it would help the reader to have a general sense of the positions/occupations (scholars? Policymakers? Community members? NGOs?) of those with skin in the game.

The authors state at the end of the second paragraph that [HST] "continues to be debated despite a lack of compelling empirical evidence, on a range of issues, which could tilt the debate one way or the other [3]." I would argue that perhaps it continues to be debate because of the lack of empirical evidence, not despite it. If we knew it was working well (or not), or where it was working well and how, the ethical part of the debate may have receded - it seems it hasn't because we don't really know how it will pan out if massive scale-up is indeed enacted. The authors could also further underscore this point as a central "purpose" for the importance of this paper (more than they already do). The lack of empirical evidence to "tilt the debate" makes the lines of argument they present all the more compelling.

Finally, the background section would benefit from a bit of evidence of how widespread HST currently is (and where). This also plays into the later line of argument about how emphasis on the benefits of HST increasingly outweigh emphasis on the harms - could that partly be attributed to more widespread familiarity with the technology itself (similar to what has been seen with PrEP)?
Mapping the Debate

In the first paragraph, the difference between self-testing and home-testing remains unclear. Considering rephrasing.

**Are the methods appropriate and well described?**
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Yes

**Does the work include the necessary controls?**
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