Reviewer's report

Title: The validity of self-reported cancer screening history and the role of social disadvantage in Ontario, Canada

Version: 2  Date: 22 May 2014

Reviewer: Garth Rauscher

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Major Compulsory Revisions

The conclusion that "Future research should focus on education strategies that enable patients to be more aware of their screening status." seems far fetched and infeasible, and distracts the reader from the other main important finding that self-reports should not be relied upon when estimating screening utilization. Please remove instances of these statements in the abstract and discussion.

Methods: "The CCHS data to which we had access contain responses from approximately 30,000 Ontarians per cycle who agreed to data linkage with administrative health data" Did all CCHS respondents consent to linkage as part of the study generally or was this a separate consent process, and if so, what % did consent to linkage?

Inclusion/Exclusion criteria: "People were included if they were in the linked CCHS database, had answered the questions about cancer screening..." What about people who did not report any screening and therefore may not be in the linked database simply due to lack of an exam to link to? This point needs clarification.

Next page: "Eligibility for CRC screening was defined as ... no history of barium enema or sigmoidoscopy in the preceding five years, no history of colonoscopy in the preceding ten years..." By CRC screening do the authors really mean fecal testing only? If so that should be stated more clearly up front, as this reviewer was surprised to see these potential CRC screening procedures used as exclusion criteria. This point needs clarification.

Discussion: "The high false positive rate implies that particular efforts are needed to address issues of over-reporting of FOBT use" How would you intervene on that in such a way to improve population-based recall of FOBT? Please delete this sentence and replace with a conclusion related to the impact of over-reporting on estimates of utilization, or the like.

Discussion: The paragraph that starts "We have also highlighted several subgroups that are more likely to over-report cervical cancer screening in Ontario than their counterparts." could provide more interpretation. In fact over-reporting of cervical cancer screening (defined as 1-Sp) was consistently lower for
subgroups typically thought of as more disadvantaged (foreign-born, Non-White, recent immigrants, though really over-reporting was high for all subgroups.

Table 1: It would be much more informative if Table 1 were reorganized to include the number of people, rate of documented screening, and rate of reported screening, separately for cervical, breast and CRC.

Table 2- It would be nice to see the reports to records ratio perhaps in place of the likelihood ratios which are hard to interpret in this context, whereas report to records ratio is a straightforward measure of over-reporting.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests