Reviewer's report

Title: Prostate-specific antigen (PSA) screening and follow-up investigations in Maori and non-Maori men in New Zealand: a cohort study

Version: 2
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Reviewer: Ben Hudson

Reviewer's report:

This paper casts light on an area of importance in public health and clinical practice, and builds on work already published by the authors. A clear research question is asked and an appropriate method has been used. The results are clearly presented and they inform the discussion. A few minor essential revisions regarding the Abstract, Methods and Discussion sections follow:

1. The abstract is clear and provides a good summary of the work. It would be useful to demonstrate in the Results section of the abstract that the differences observed between M#ori and non-M#ori were statistically significant – suggest include RRs with CIs here.

2. Some results are presented in the Methods section – e.g. lines 130-131 and lines 172-173. These should be moved to the Results section.

3. In the Strengths and Limitations section at line 314 the authors mention that the study was “powered for the assessment of screening rates…” However, no power calculation is presented, and given the nature of the study and the lack of prior data its absence seems reasonable. This phrase should therefore be removed, but the subsequent comment on the lack of power to comment on referral and biopsy rates is important and should be retained.

4. At line 326 in the Conclusions the authors comment that their finding that M#ori men were more likely to have an elevated PSA than non-M#ori men suggests “that screening would be more effective for M#ori men”. Given the ongoing uncertainty about a mortality reduction with PSA screening and the clear harms associated with it, this statement is too strong and is not supported by the research findings – an equally valid interpretation could be that M#ori men are currently being protected from the harms of a form of screening that is yet to show clear benefits! A more neutral framing of the comment would be preferred.

5. At line 336 in the Conclusions, the authors propose that prostate cancer pathways “need to be organised so that men receive standardises (sic) evidence-based equitable care.” Are they sure that they mean standardised care? Again, given the uncertainty about the balance of benefit to harm with this form of screening, and the competing priorities that any individual man will bring to this decision, surely a standardised approach is undesirable? I suggest the authors consider advocating for an approach which ensures men are provided with clear and up to date information about the benefits and harms of screening
and are supported in a process of shared decision making. (Note also the typos “caner” and “standardises” here).

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**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.