Reviewer's report

Title: Early identification and secondary prevention of cardiovascular disease risk within a remote Australian Aboriginal primary health care service

Version: 1 Date: 20 July 2010

Reviewer: Geoffrey Spurling

Reviewer's report:

This paper addresses the largest contributor to excess Indigenous mortality. It has shown that an accessible intervention in primary care can make significant cuts to cardiovascular risk. This is an important finding. This article also appropriately raises questions about how primary health care is delivered in remote Indigenous contexts.

Discretionary Revisions (which are recommendations for improvement but which the author can choose to ignore)

1. Discussion

The emphasis on preventive care rather than acute care in these settings is very important.

Some of the discussion surrounding system change for primary health care in NT Aboriginal settings overreaches the findings of this paper. I think it is fine to suggest system changes are required but care needs to be taken to not overreach the findings of this one research paper.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Introduction

1. The health check is now annual.

2. I am concerned about the term secondary prevention when referring to participants with elevated cardio-vascular risk. Elevated risk does not equal disease – just risk of disease. As such, I would classify them as warranting primary prevention. The NT based services recommended for secondary prevention probably do apply to people who have had ischemic events. I think it is fine to use these recommendations for those of elevated CV risk but that doesn’t mean that those with elevated CV risk warrant “secondary” prevention.

Methods

3. This sentence is not clear to me:

"Three estimates of absolute CVD risk were performed: (i) on the day of AHC participation, (ii) on the day of post-AHC review, assuming no change in clinical parameters apart from age and (iii) on the day of post-AHC review using new clinical findings from the repeated standardised assessment."
It would help if the timing of these visits were given and the difference between points (ii) and (iii) are not clear.

4. Results
Table 1,3,4 – needs to say what the statistical test are to calculate the p values

Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached)

1. Methods
Regarding:
“Analysis of a clinic register of 440 non-perinatal deaths in this community over 25 years (1984-2008) showed a mean age at death of 48 years with 25% of all deaths attributed to CVD. For deaths occurring between the ages of 15 to 54 (N=216), 33% were attributed to CVD (unpublished data).”
Do the authors have ethical approval to publish these data regarding deaths in this community? If so – that is fine. If not- it should be cut.

Results:
2. Table 2 – needs to include a column for the evidence-based interventions because I think the way it stands this table could be misleading if it takes into account non-evidence based tests (especially blood tests) arising out of the health check.

Discussion
3. This study is underpowered to support this sentence in the discussion:
“Furthermore, the unchanged mean number of CVD events prior and following the intervention suggest that the increase in secondary prevention and gains in intermediate CVD risk reduction were not sufficient to alter progression to end-stage disease in the short term.”

You would need many more numbers to make conclusions about the impact of AHCs on CVD events.

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

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.
Declaration of competing interests:

I declare that I have no competing interests