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We used an iterative consensus approach to develop a set of principles to use Census Ancestry data to identify health disparities by ethnicity

BACKGROUND

Ethnicity is not collected routinely in Australian health data. High quality data on the proxy of Ancestry is collected in the Australian Census. However, Census Ancestry data is difficult to use with limited guidance available. We aimed to develop an approach to using this data to examine health disparities.

METHODS

An expert panel was formed with representatives from the Federation of Ethnic Communities' Councils, Australian Bureau of Statistics, and researchers from diverse disciplines. The work was also informed by a community panel with ethnically diverse representation and yarning circles led by Aboriginal and Torres Strait Islander academics. We analysed 2016 Census data linked to death registrations for 2016-2021 in 20.9 million people. We examined the health outcome of all-cause mortality and compared how different decisions on how to categorise the population by ethnicity impacted on the detection of mortality inequalities between groups.

Census Ancestry Question 2016

| | | |
|--|-------------------------------------|-------------------------------------|
| <p>18 What is the person's ancestry?</p> <ul style="list-style-type: none"> Provide up to two ancestries only. Examples of 'Other': GREEK, VIETNAMESE, HMONG, KURDISH, MAORI, LEBANESE, AUSTRALIAN SOUTH SEA ISLANDER. Remember to mark the box like this: <input type="checkbox"/> <p>Go to census.abs.gov.au for more information.</p> | <input type="checkbox"/> English | <input type="checkbox"/> English |
| | <input type="checkbox"/> Irish | <input type="checkbox"/> Irish |
| | <input type="checkbox"/> Scottish | <input type="checkbox"/> Scottish |
| | <input type="checkbox"/> Italian | <input type="checkbox"/> Italian |
| | <input type="checkbox"/> German | <input type="checkbox"/> German |
| | <input type="checkbox"/> Chinese | <input type="checkbox"/> Chinese |
| | <input type="checkbox"/> Australian | <input type="checkbox"/> Australian |
| Other ancestry 1 (please specify) | Other ancestry 1 (please specify) | |

RESULTS

We developed the following approach:

1. Recategorising those identifying as 'Australian' or 'New Zealander' only from the Oceania to the European category unmasked large inequalities in mortality experienced by Indigenous Peoples in our region.

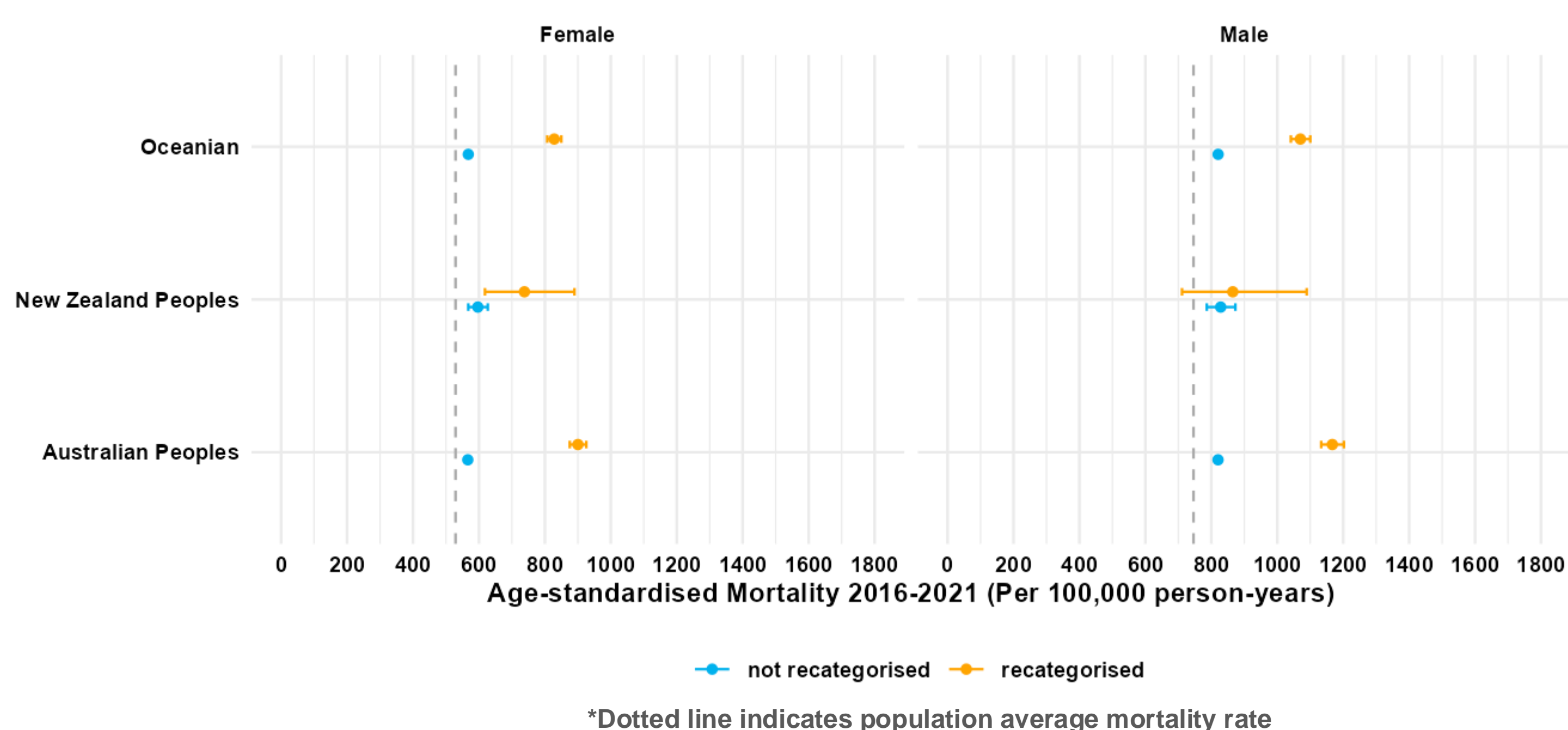


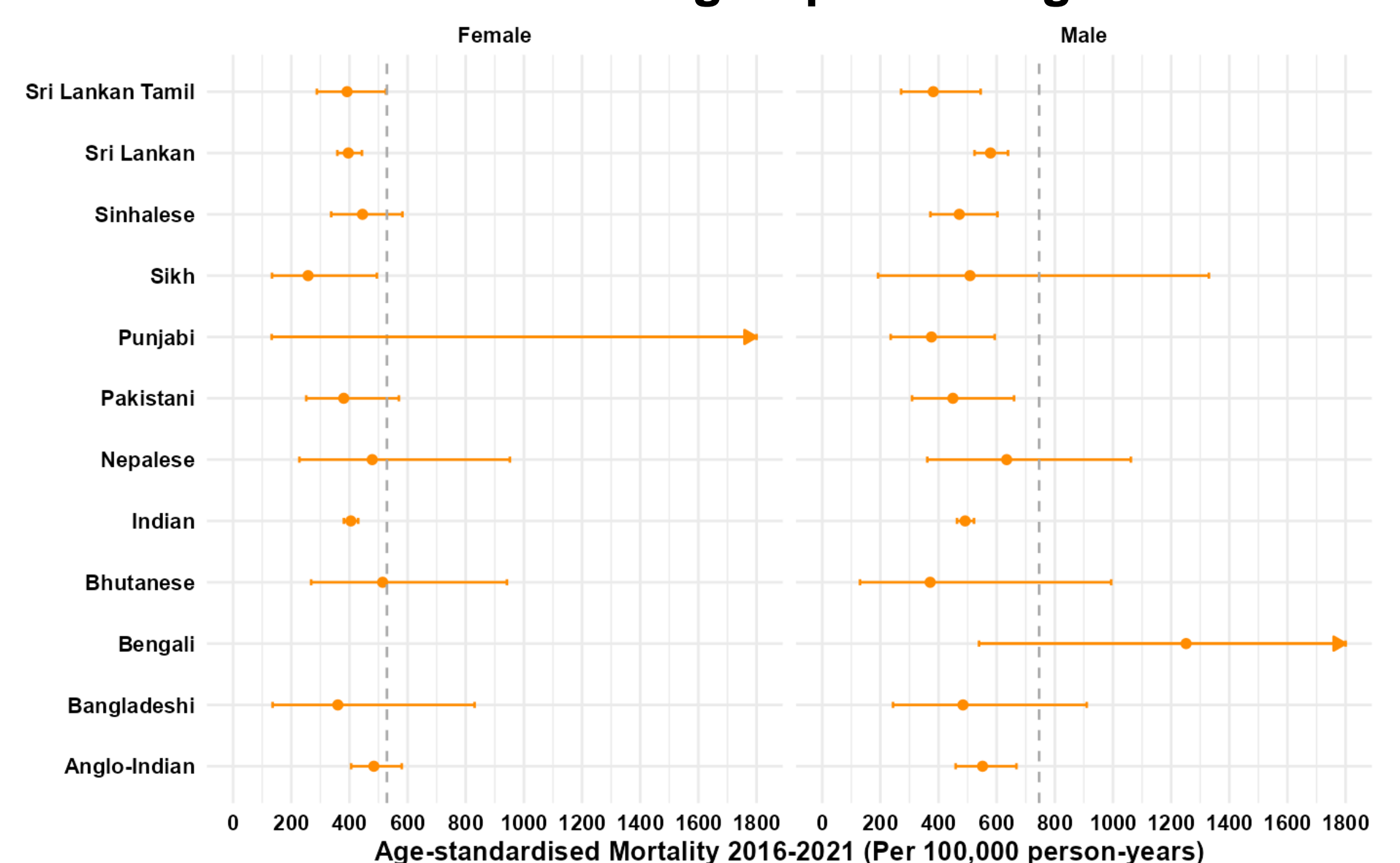
Figure 1: Recategorising those identifying as Australian or New Zealander

RESULTS CONTINUED

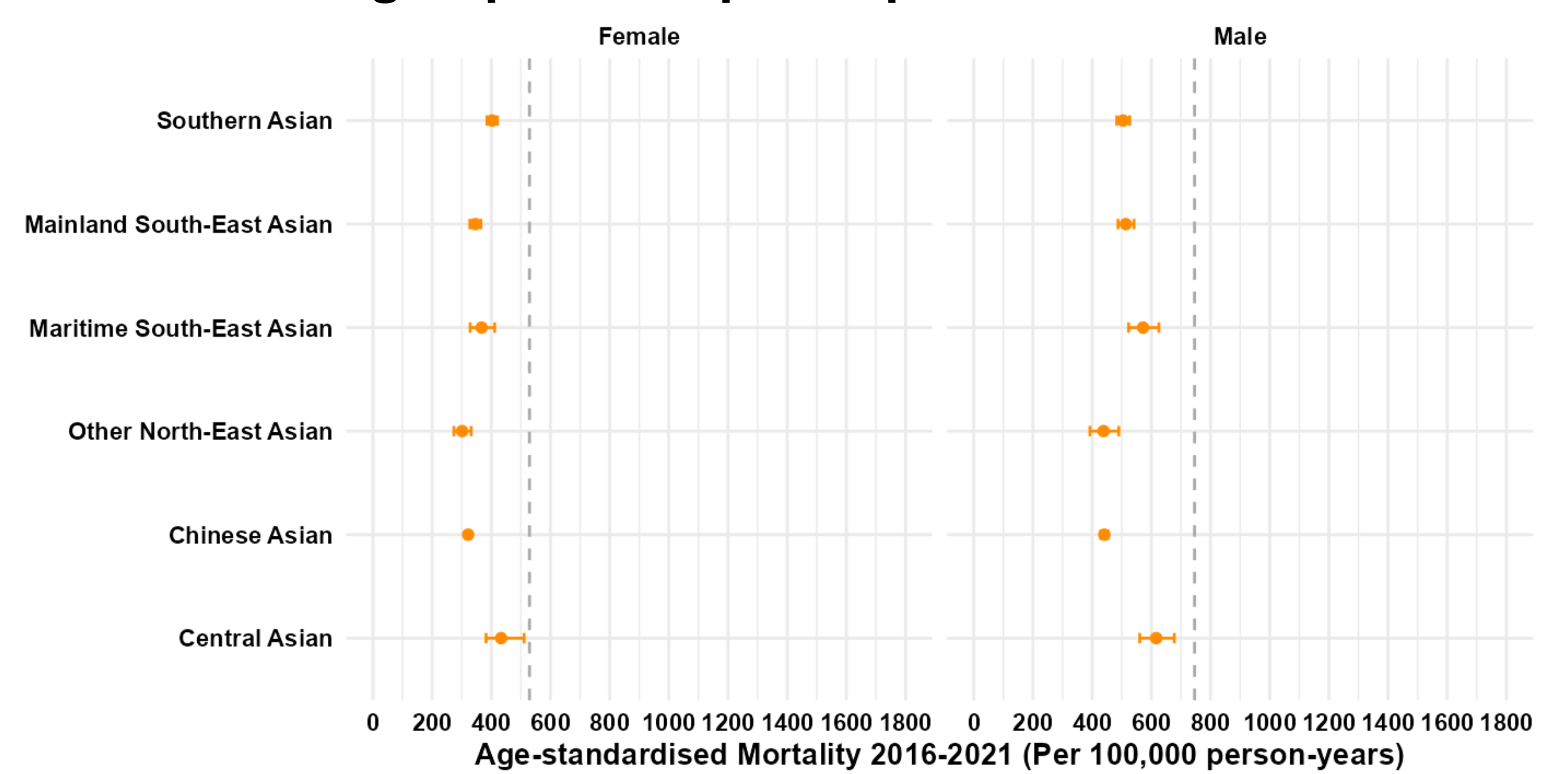
2. For those reporting two ancestries: prioritise ethnic minority over national identities and for the remainder create multiethnic groups based on the combined ancestries
3. Approach to granularity. First analyse data at the maximum level of granularity but then collapse up granularity where no disparities are identified to simplify results and messaging.

Managing granularity example

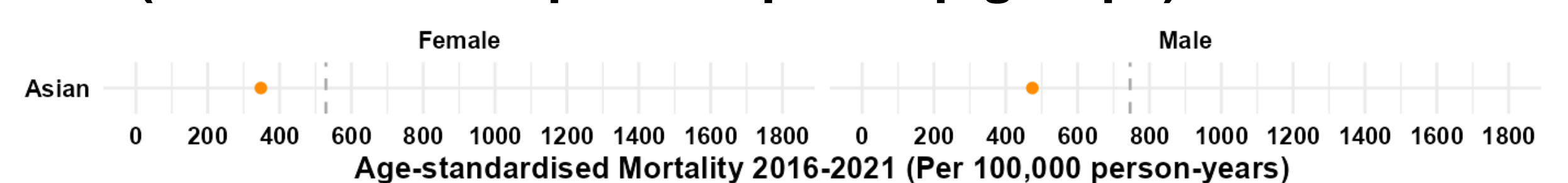
Level 4 Southern Asian Ethnic groups - Most granular level



Level 2 Asian groups – collapsed up one level



Asian (combines multiple collapsed up groups)



*Dotted line indicates population average mortality rate

CONCLUSIONS

We developed a set of principles to use Australian Census Ancestry data to identify health disparities by ethnicity. The recommendations facilitate harnessing valuable Census data to identify important health disparities and better inform future health policy in Australia.

ADDITIONAL KEY INFORMATION

Preprint available: <https://osf.io/preprints/osf/5vg7t>

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