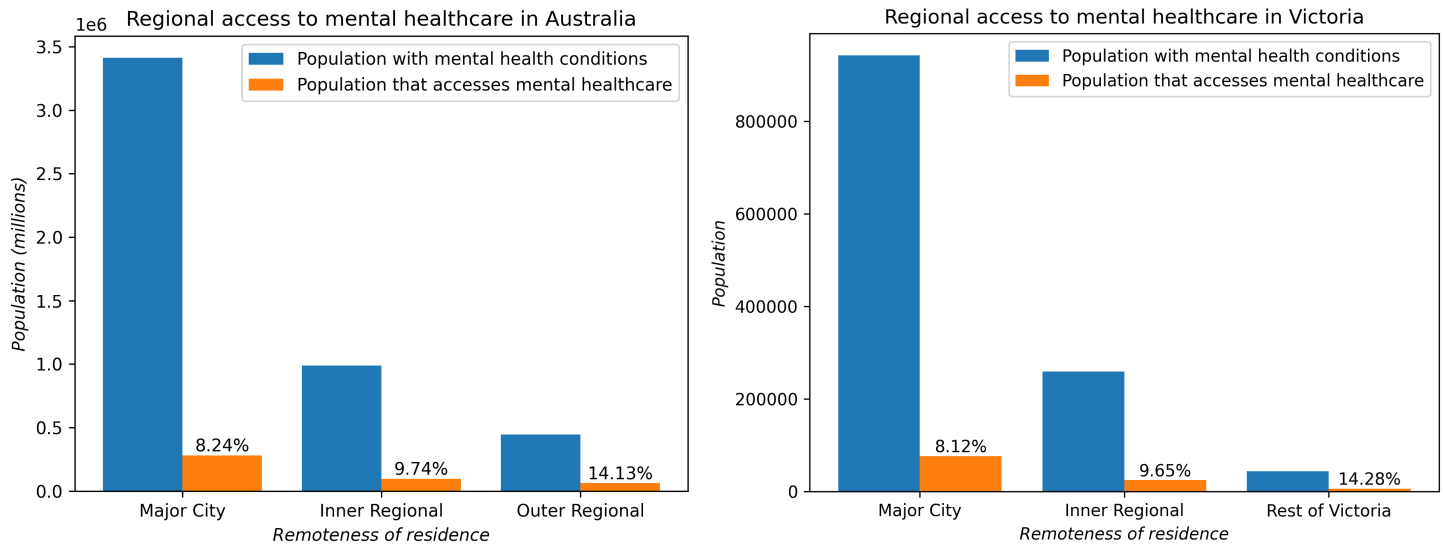


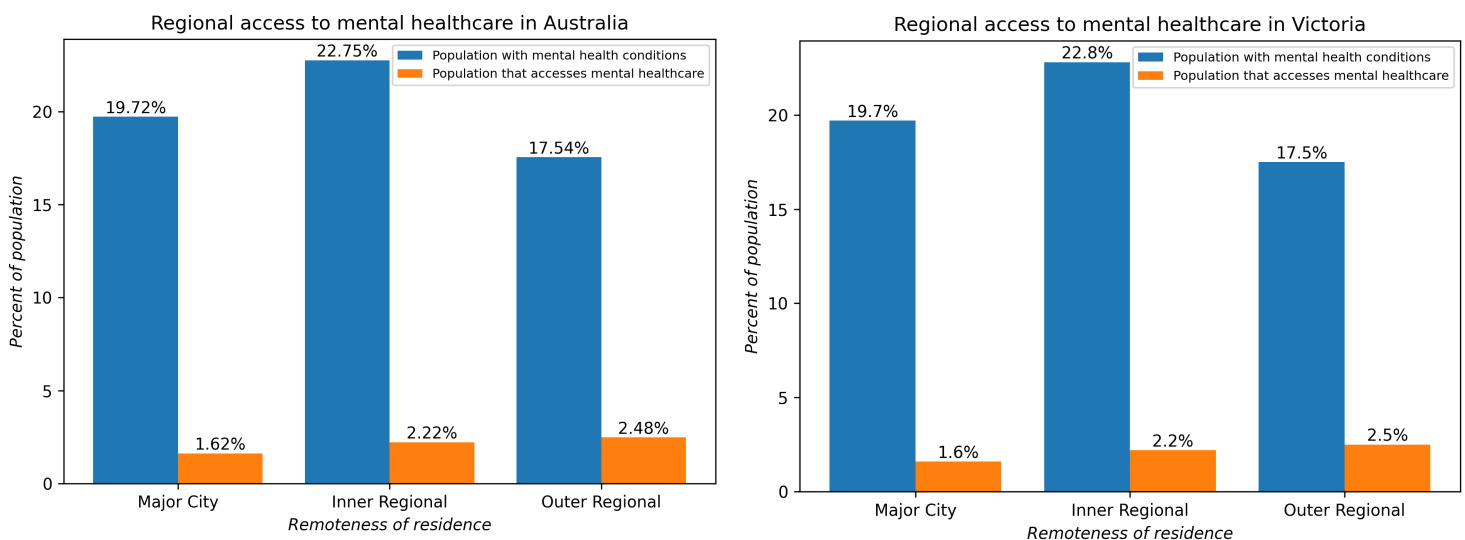
## Remoteness

### Key results



The bar charts above compare the population that faces mental health conditions to the population that accesses mental healthcare, represented as percentages, for Victoria and Australia as a whole. By analysing this visual, it is evident that a very small percentage of people suffering from mental health in all regions access mental healthcare. However, according to the data, as the remoteness of one's residence increases, it is evident that there are more frequent cases of individuals accessing mental healthcare. Upon closer analysis, it appears as though the more remote regions of Australia either have better access to mental healthcare per capita, or individuals in these regions feel more compelled to seek support for their mental health. On the other hand, rural areas may have more stigmatised views of mental health, leading to fewer reported cases of mental health related ailments.

While access to mental healthcare is an important metric, it is equally valuable to assess the frequency of poor mental health in the various categorised levels of remoteness, as this data can suggest that the impact of residing in certain regions may have a significant influence on an individual's mental health. The following bar charts provide information that can help analyse the data pertaining to this concept.



By using the percentage of the population in the given levels of remoteness over the raw population counts, it is possible to compare the prevalence of mental illness and mental healthcare in the different regions. Upon analysing these bar charts it is clear that, in both Victoria and Australia in its entirety, the frequency of mental health conditions appears to be more widespread in major cities and inner regional locations in comparison to outer regional areas. Alongside the previous bar charts, this new information suggests that individuals residing in more urban areas are more likely to both have a mental health condition, and not seek and/or have access to mental healthcare. This indicates that the remoteness of residence for an individual appears to be a relevant socioeconomic factor in the context of mental health and mental healthcare accessibility, although it may not play a substantial role as a result of the relatively low percentage differences between the levels of remoteness.

### **Significance of the results**

The data for the remoteness of residence suggests that there is a correlation between an individual's remoteness of residence and their likelihood to have a mental health condition and access mental healthcare. This is important to acknowledge, as it implies that urban areas tend to damage a population's mental health, and needs more infrastructure or awareness in place to combat these problems.

### **Limitations**

Due to a lack of available data, the main limitation in the analysis of the remoteness of residence is the extrapolation of the Australia-wide statistics to the Victorian population. It is potentially inaccurate to ascertain that the prevalence of mental illness and mental healthcare facilities based on the remoteness of residence in the country closely correlates to the state of Victoria in particular, somewhat limiting the analysis. However, as seen on the table below, the distribution of the populations in terms of remoteness between the country and state appear to be similar, which can be explained by a significant portion of the Australian population being contained in Victoria. This reduces the impact of this limitation to a certain extent, and the similar distribution can also explain the likeness of the bar charts in the case of the remoteness of residence.

### Population distributions in Australia and Victoria

Location	Major Cities	Inner Regional	Outer Regional
Australia	70.21%	18.4%	11.39%
Victoria	76.11%	19.38%	4.51%

On the other hand, as the census is conducted on a 5 year basis, the data's time frame does not match the NOCC and ABS datasets' time period, implying that the analysis may not have accounted for changes in population distribution and growth. However, as the census used contains the most recent data available, this limitation was largely averted due to the relatively small time difference between the census and the other datasets.

*Not sure if this should be general or in terms of each socioeconomic variable individually*

### Datasets used and how they are linked

In the context of the remoteness of residence, the NOCC dataset for consumer outcomes in mental healthcare is used to determine the population that accessed mental healthcare resources. This is used alongside the ABS national health survey data, which helps determine the number of people with mental health issues. These datasets are linked through the remoteness of residence categories that both datasets use. By dividing the person counts for each level of remoteness from the aforementioned datasets by the total population in the given region from the Australian census, it is possible to determine the percentage of the population that both faces mental health complications and accesses mental healthcare. These percentages could then also be extrapolated to the Victorian population, once again through the census, increasing the granularity of the analysis and providing context for mental illness and healthcare access at a state-level. Furthermore by dividing the data from the NOCC by the data from the ABS, it is possible to find the ratio between these two metrics, enabling analysis on the impact remoteness has on mental healthcare access.

### Wrangling and analysis methods

In order to obtain relevant data from the wide range of information offered in the datasets used, an extensive use of data pruning was required to obtain the data pertinent to the research. Furthermore, in order to analyse the data, the information obtained through pruning had to be restructured in order to manipulate the data and find relevant points of analysis.