



# Social Isolation, loneliness and substance use in older adults

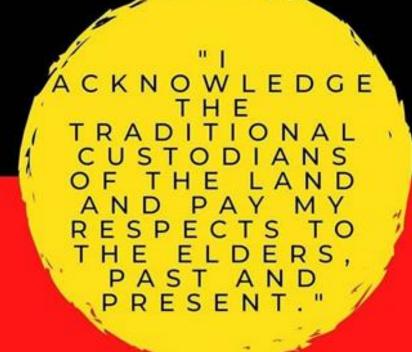
Findings from the Beyond 50 Study

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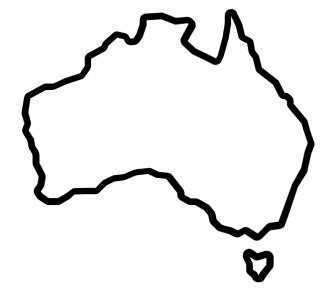
**VAADA** Conference





#### Substance use in Australian older adults

- Older cohorts have higher drinking participation that younger cohorts
- Increase in the use of cannabis and increase in the rate of treatment episodes with cannabis dependence
- Use of other illicit drugs remains low, but evidence of increase in stimulant and opioid harms.
  - 13-fold increase in amphetamine type stimulant hospitalizations and deaths
  - 8-fold increase in opioid agonist treatment







#### Substance Use in Older Adults

- Cognitive and metabolic changes
- Increased risk of falls
- Comorbidities
- Other medications
  - Polysubstance use
- Overlooked cohort in substance use research











#### Social Isolation and Loneliness

Older adults have a unique risk of social isolation and loneliness

#### Social Isolation

- Lack of personal connections and interaction (physically remote, lack of social network)
- Can be associated with loneliness, but not always

#### Loneliness

- Subjective feeling of being lonely
- Can be lonely while in a crowded room
- Can be independent of social connection





#### Social isolation, loneliness and substance use

- Social isolation and loneliness increases mortality risk
  - 25% increased risk for premature mortality
- Thought to influence health related behaviours such as diet, physical activity and substance use

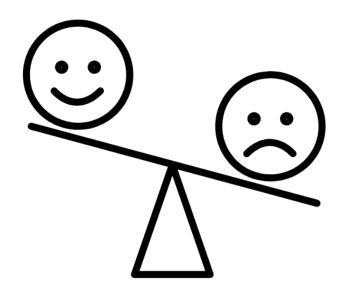






#### Mental health and substance use

- In heathy adults, alcohol can have a positive, short-term impact on mood
  - Reduce symptoms of anxiety and depression
- Long term use has negative effects on mood
  - Increase in symptoms of anxiety and depression
- Bidirectional and complex









Health & social outcomes in Frankston and the Mornington Peninsula

# National Centre for Healthy Ageing







A partnership between





### Aims of the Study

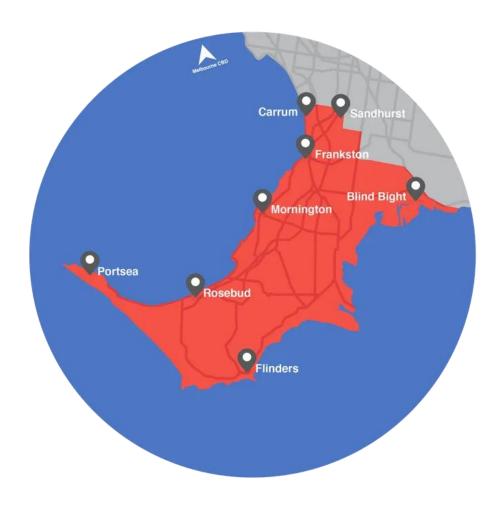
- 1. Develop a detailed understanding of trajectories of physical health, mental health and substance use patterns.
- 2. Identify key risk and protective factors associated with the development of poor physical and mental health and substance use disorders.
- 3. Understand the impact of social isolation and loneliness on the development of physical, mental health and substance use disorders.





# The Beyond 50 Study

- Frankston and Mornington Peninsula LGAs
- Higher percentage of population in later life
- Mostly water-bound geographical area
- Peninsula Health sole public health provider
- Includes some of the highest and lowest levels of advantage







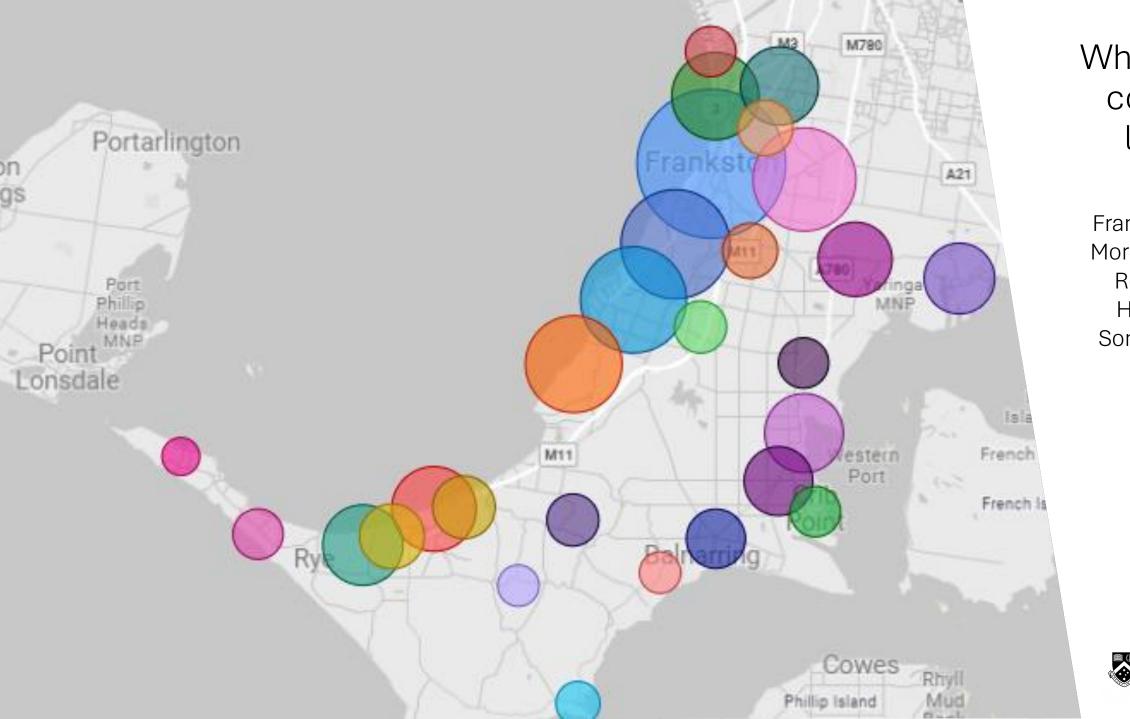
#### **Datasets**

- Quantitative data collection (n=1059)
  - Structured self-administered surveys
  - Baseline, 12 months and 24 months
- Data Linkage (n≈1000)
  - Hospital utilization data
  - National Centre for Healthy Ageing Data Platform
- Qualitative data collection (n = 48)
  - In-depth interviews with subset of participants









# Where our cohort is located

Frankston 21%
Mornington 9%
Rosebud 4%
Hastings 4%
Somerville 4%



#### Measures

Demographics



Single Items from ABS Census

Loneliness



UCLA-LS-4

Social Isolation



Duke Social Security Index

Anxiety



GAD-7

Depression



PHQ-9

Physical Health



Single Items from ABS Census and SF-12 Alcohol



**AUDITC** 

Other Substances



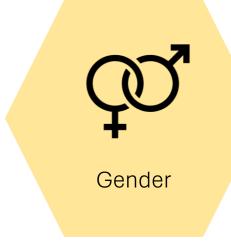
Cannabis



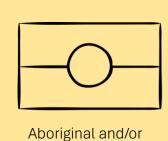




# Demographics



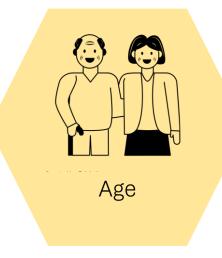
53%/47% Male/ Female



Torres Strait Islander

1.5% Aboriginal and/or Torres Strait Islander

origin



Mean age 61, Evenly distributed



8% speak a language other than English at home





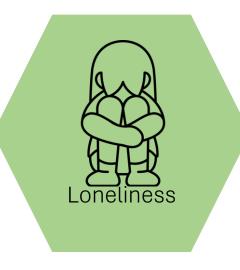
#### Mental Health/ Social Health



13% moderate to severe anxiety Woman twice as likely to suffer from severe anxiety



16% moderate to severe depression Woman 30% more likely



1 in 3 classed as 'very lonely'



1 in 4 people are dissatisfied with their social connections





# Physical Health



17% Excellent 40% Very Good 30% Good 12% Fair 2% Poor



62% seen specialist
17% emergency department
20% admitted to hospital
physical health
8% required ambulance



30% physical health limited their work or activities



Social Life

45% social life was affected by physical or emotional health





#### Substance Use



84% current use 52% positive screen for hazardous use 16% abstained



8% current use



4% recent use



<5% recent use





# Hierarchy Regression Analysis

# Group 1 Demographics

Gender
Age
Education
Relationship status
Income
Retirement status
Voluntary work

#### **Group 2**Social Health

Social Security (DSSI) Loneliness (UCLA-LS-4)

## Group 3 Mental Health

Anxiety (GAD-7)
Depression (PHQ-9)

# **Group 4**Physical Health

Comorbidities
Self-reported health
Limited in activities

#### **Group 5**Substance Use

Tobacco
Other Illicit Substances





# Hierarchy Regression Analysis

# Group 1 Demographics

Gender
Age
Education
Relationship status
Income
Retirement status
Voluntary work

Significant Association P<0.000 R<sup>2</sup>=0.085

### Group 2 Social Health

Social Security (DSSI) Loneliness (UCLA-LS-4)

Significant Association P=0.007 R<sup>2</sup>=0.099

### **Group 3**Mental Health

Anxiety (GAD-7)
Depression (PHQ-9)

No Association P=0.141  $R^2=0.106$ 

# **Group 4**Physical Health

Comorbidities Self-reported health Limited in activities

> No Association P= 0.147 R<sup>2</sup>=0.113

## Group 5 Substance Use

Tobacco
Other Illicit Substances

Significant Association P<0.000 R<sup>2</sup>=0.142





## Interpretation

- Demographic and substance use characteristics consistent with what we know so far
- Social isolation and loneliness positively correlated with higher AUDIT-C scores, HOWEVER people with high social security have higher alcohol consumption
- Not associated with mental health







#### What's next...

- Understand experiences of people who suffer from social isolation and loneliness and how it influences their substance use
- 2. Investigate objective social isolation and substance use characteristics
- 3. Investigate the relationship between anxiety and depression and substance use in more detail







### The Beyond 50 Research Team

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#### Coinvestigators

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# Beyond 50 Updates

To keep up to date with study findings, please visit the Beyond 50 website

www.beyond50.study



