Could we prevent avoidable death by reducing health risk factors?

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Structure

- Motivation and outcome
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Motivation and outcome

- There are around 4,800 people died from avoidable death in Victoria in 2015.
- We can prevent avoidable death by encouraging people eating enough fruit and reducing obese, low-exercise, risk waist measurement, psychological distress and smoking population.

Datasets

```
Index(['lga_code', 'lga_name', 'FruitAdequateIntake_per100',
       'RiskAlcoholConsumption_per100', 'HighBloodPressure_per100',
       'Overweight_per100', 'LowExercise_per100',
       'RiskWaistMeasurement_per100', 'Somker_per100',
       'PsychologicalDistress_per100', 'obese_per100'],
      dtype='object')
```

LGA _15_Health_Risk_Factor.csv Dataset

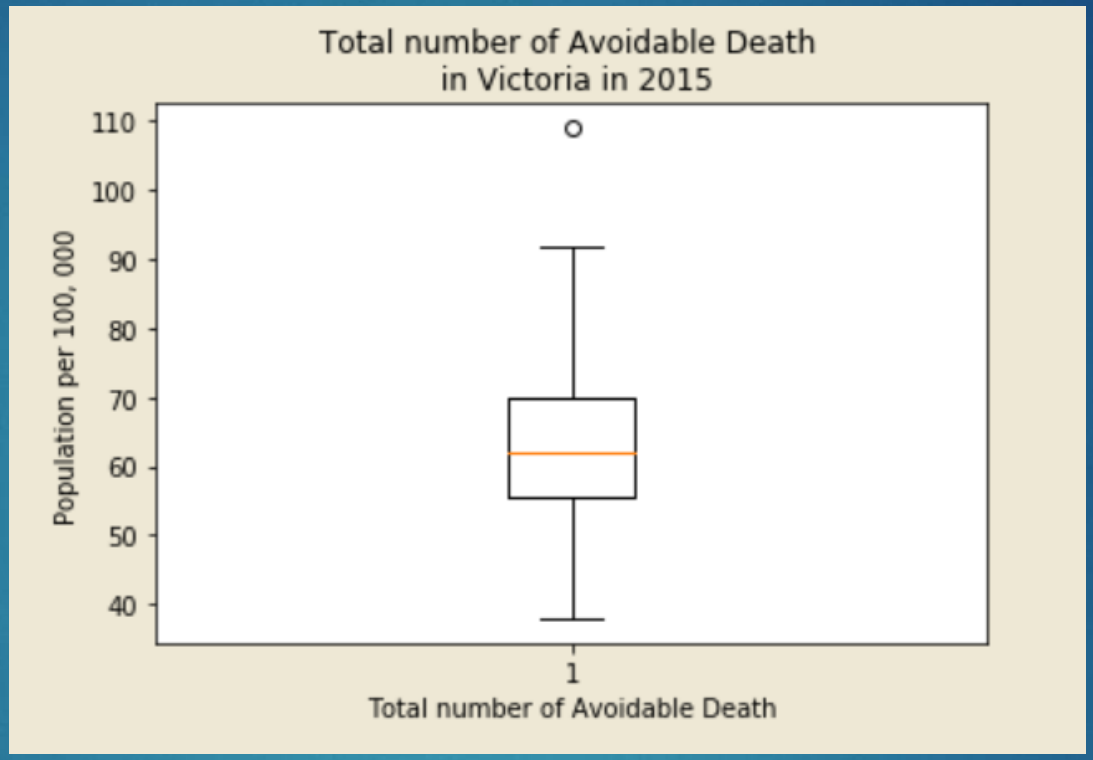
```
Index(['lga_code', 'lga_name', 'diabetes_per100,000',
       'cerebrovascular_per100,000', 'colorectal_per100,000',
       'cancer_per100,000', 'pulmonary _per100,000'],
      dtype='object')
```

LGA_15_Avoidable_Death_by_Causes.csv Dataset

Data Wrangling Methodologies

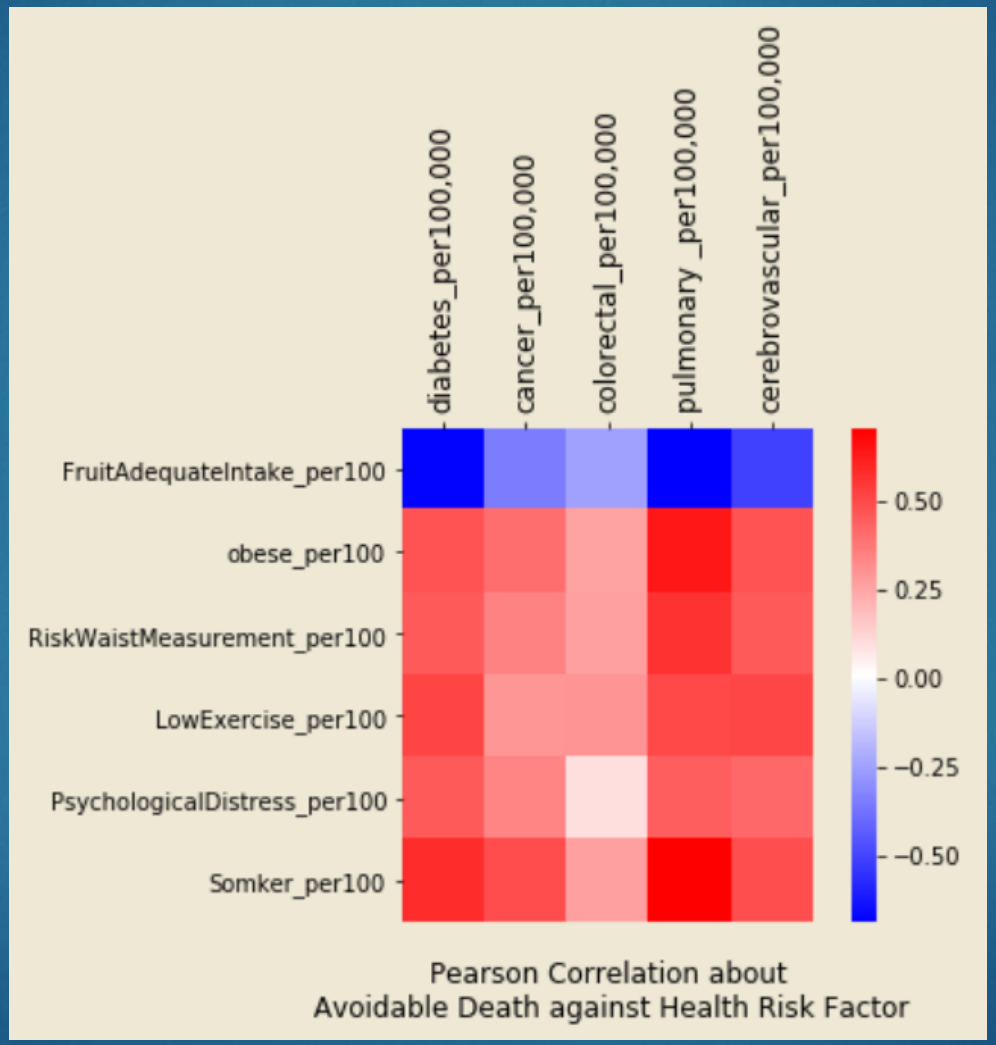
- Data Preprocessing
  - Format Transforming
  - Missing Value
  - Outlier
    - Boxplot
  - Add values
    - Total population has health risk factor per 100 population
    - Total avoidable death per 100,000 population
- Data Visualization
  - Scatter plot
  - Heatmap
  - Pie Chart
  - Clustering Map
- Data Analyzing
  - Pearson Correlation

Finding1 - Outlier

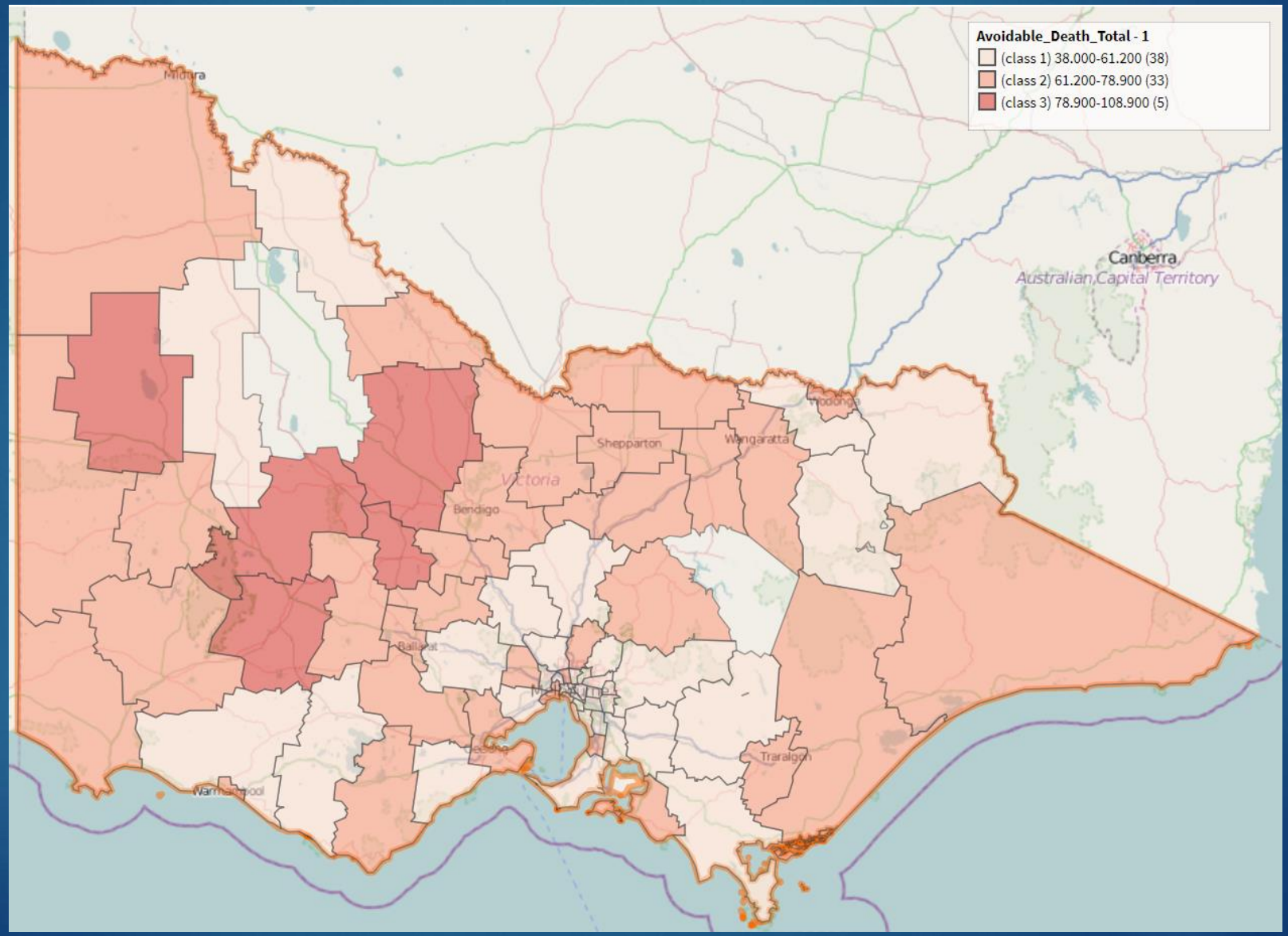


lga_code	lga_name	Avoidable_Death_Total	Health_Risk_Factor_Total	Ratio
25810	Northern Grampians (S)	108.9	283.8	0.383721

Finding 2 – Heatmap of Pearson Correlation



Finding 3 – Clustering Map



Challenge

- Finding datasets
- Dead findings
- Coding

Summary

- We could prevent and reducing avoidable death by reducing health risk factor.
- Government should take different action with respect to which class the area is in.

Thank You!!!