## Objective:

Are non-hospitalised health care services affordable and accessible to Australians in Australia?

## Scope:

Focus on non-hospitalised services between:

1. GP
2. Nursing and Aboriginal health worker services
3. Allied health
4. Diagnostic imaging
5. Specialist

## Datasets

### Cost of Living Measurement Dataset

**Dataset**: Selected Living Cost Indexes, Australia

**Date Range**: Jun 2007 to Sep 2023 (Quarterly)

**Description**:

The Selected Living Cost Indexes (SLCIs) provide quarterly information about price change on the out-of-pocket living expenses for four population sub-groups:

1. Employee households
2. Age pensioner households
3. Other government transfer recipient households
4. Self-funded retiree households

Also included is the Pensioner and Beneficiary Living Cost Index (PBLCI) which provides quarterly information about the combined price change on out-of-pocket living expenses for two population sub-groups; age pensioner households and other government transfer recipient households.

The SLCIs inform users of the extent to which the impact of price change varies across these different sub-groups of the Australian population.

**Data Source**:

The data is an external source from Australian Bureau of Statistics (ABS). ABS is Australia’s national statistical government agency that provides statistical services to Australian states and territory governments. As government data and source, the data source is considered trustworthy.

**Data Collection Method:**

The SLCIs data is constructed using Household Expenditure Survey, Household Final Consumption Expenditure and CPI data. Outlay approach (*payments made to gain access to goods to services*) is used to calculate the change in prices of goods or services.

There are three stages to constructing SLCI:

1. Calculating expenditure weights representing the expenditure patterns of defined household types. This involves determining the proportion of total spending that each category of goods and services occupies for specific types of households. This uses HES and/or HFCE data.
2. Involves identifying appropriate measures of price change for each of the expenditure weights. The measures of price change, except for Interest charges, are sourced from the CPI. Interest charges are measured separately for SLCIs.
3. The third and final stage is to use the weights to aggregate or average the price change measures.

From 1998 to 2018, HES (Household expenditure survey) data was used to construct the indexes. Household expenditure data is collected by ABS and run every 6 years. Approximately 10,046 households (23 626 persons) are surveyed via computer interview questionaries. Surveys that were partially completed had values imputed using similar demographic groups.

From 2018-19 onwards HFCE (*Household final consumption expenditure*) data from the National Accounts was used to construct the indexes. The HFCE data is available annually. HFCE is determined quarterly using survey and administration data from:

1. Retail Trade survey, Retail and Wholesale Industries Surveys,
2. Scanner data from supermarket chains,
3. information on rents from the Census of Population and Housing,
4. Building Activity data, Survey of Income and Housing,
5. Various other ABS publications and government departments like Services Australia and the Department of Health

HFCE data is more reliable since it uses wider set of sources with combination of administration and survey data.

SLIC utilizes CPI data to determine price movements of goods. Prices are collected in the kinds of retail outlets and other places where metropolitan households purchase goods and services. This involves collecting prices from many sources such as supermarkets, restaurants, travel agents and schools. Prices are collected by personal visits, telephone or internet as appropriate by ABS staff. The ABS is also utilising administrative and transactions datasets as a method of obtaining prices for use in the CPI. The frequency of price collection by item varies as necessary to obtain reliable price measures.

As the SLCIs aim to measure price changes for a fixed basket of goods and services over time, identical or equivalent items must be priced in successive periods. However, as items available in stores are constantly changing, these changes in the quality must be identified and adjusted for to ensure that the index reflects only 'pure' price changes. These adjustments take place during the compilation of the CPI and are also used in the SLCIs price movements.

**Data Limitation**:

1. The Selected Living Cost Indexes are published at the national level only using averages of 8 capital cities.
2. SLCI was first published in 2000. The SLIC is backdated to 1998 for all household types.
3. SLIC was not back dated for individual good and services between 1998 and 2007.
4. HES is regularly reviewed, and sample sizes are updated to include more households within the household groups. This means 6-yearly HES are not consistent.
5. Index on Health does not differentiate between non hospitalised and hospitalised services.

**Relevancy**:

The dataset was collected by trustworthy data source; government agency. As the data was collected ABS and is used by other government organisations, it’s the most reliable and complete set of data available on cost of living in Australia.

SLCI data can be used to determine the proportions of expenditure by household spent on healthcare historically, change in trends quarterly/annually and predict future expenditure trends of different household groups.

SLCI dataset is also crucial to conduct necessary analysis to assess the affordability of healthcare. This dataset will be used for the project.