

# ANNUAL NEEDS ASSESSMENT





## 2023-2025



South Eastern Melbourne Primary Health Network

15 November 2023

## Acknowledgements

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| <br> | <p>We acknowledge the Bunurong and Wurundjeri peoples of the Kulin Nation, the Traditional Owners and Custodians of the lands, waters, and skies in which we work. We pay our respects to their Elders past and present. We also acknowledge all First Nations peoples with whom we work. Sovereignty was never ceded.</p> |
|   | <p>We acknowledge and celebrate diversity in all its forms and recognise the contribution people from diverse backgrounds and life experiences make to a strong, healthy and resilient community. We welcome everyone in the community as part of the SEMPHN organisation.</p>   |

**Cover image:** Happy multigenerational people having fun sitting on grass in a public park - People diversity concept by Allessandro Biascioli/[Shutterstock.com](https://www.shutterstock.com)

## Updates to the 2023 Needs Assessment

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## Abbreviations

| Acronym           | Meaning   |
|-------------------|---|
| <b>ABS</b>        | Australian Bureau of Statistics   |
| <b>ACSC</b>       | Ambulatory Care Sensitive Condition   |
| <b>ADIS</b>       | Alcohol and Drug Information Service  |
| <b>AIHW</b>       | Australian Institute of Health and Welfare  |
| <b>AIR</b>        | Australian Immunisation Register  |
| <b>AOD</b>        | Alcohol and Other Drugs   |
| <b>AODTS NMDS</b> | Alcohol and Other Drugs Treatment Services National Minimum Dataset                           |
| <b>ASGS</b>       | Australian Statistical Geography Standard   |
| <b>ASR</b>        | Age-standardised rate   |
| <b>ATS</b>        | Australian Triage Scale   |
| <b>CALD</b>       | Culturally and Linguistically Diverse   |
| <b>CAMHS</b>      | Child and Adolescent Mental Health Services   |
| <b>CBD</b>        | Central Business District   |
| <b>CDM</b>        | Chronic disease management  |
| <b>CHS</b>        | Community Health Service  |
| <b>CMHN</b>       | Community Mental Health Nurse   |
| <b>COPD</b>       | Chronic Obstructive Pulmonary Disease   |
| <b>COVID-19</b>   | Coronavirus disease   |
| <b>CRM</b>        | Customer Relationship Management System   |
| <b>DALY</b>       | Disability-adjusted life year   |
| <b>DoH</b>        | Department of Health (Commonwealth)   |
| <b>ED</b>         | Emergency Department  |
| <b>GP</b>         | General Practitioner  |
| <b>IARE</b>       | Indigenous Area   |
| <b>IRSD</b>       | Index of Relative Socio-economic Disadvantage   |
| <b>LAC</b>        | Local Area Coordination   |
| <b>LGA</b>        | Local Government Area   |
| <b>LGBTIQA+</b>   | Lesbian, Gay, Bisexual, Transgender, Gender diverse, Intersex, Queer, Asexual and Questioning |
| <b>LHN</b>        | Local Health Network  |
| <b>MBS</b>        | Medicare Benefits Schedule  |
| <b>MH</b>         | Mental health   |
| <b>MHCSS</b>      | Mental Health Community Support Services  |
| <b>NDIS</b>       | National Disability Support Scheme  |
| <b>NES</b>        | Non-English speaking  |
| <b>NPS</b>        | National Psychosocial Support   |
| <b>PBS</b>        | Pharmaceutical Benefits Scheme  |
| <b>PHN</b>        | Primary Health Network  |
| <b>PMHC MDS</b>   | Primary Mental Health Care Minimum Dataset  |
| <b>POLAR</b>      | Population Level Analysis and Reporting tool  |
| <b>SEMPHN</b>     | South Eastern Melbourne Primary Health Network  |
| <b>VAHI</b>       | Victorian Agency for Health Information   |

## Health and service needs for south east Melbourne



# Chapter 1 Introduction

South Eastern Melbourne PHN (SEMPHN) is a leader, facilitator and influencer towards the shared goal of better primary health care. SEMPHN fosters and supports a more equitable, person-centred and seamless health system to positively impact the health outcomes for our communities. Reporting to an independent Board, our vision is for the people of south east Melbourne to have the opportunity to live their healthiest lives possible. Our local focus is to positively impact population health and service demand, consumer-focused healthcare, primary health services, innovation and system reform and organisational excellence and sustainability.

We support this by providing:

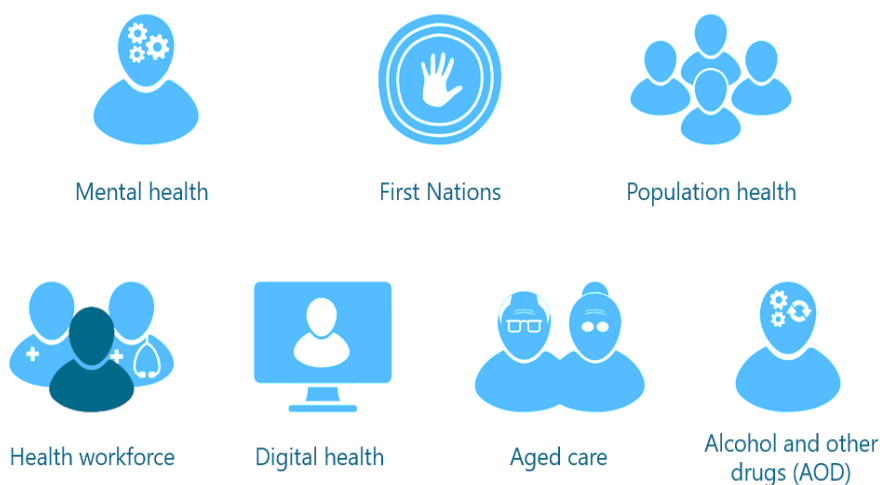
- Evidence, planning and influencing services to meet population health needs.
- Capacity building services to grow primary health and its workforce in our region.
- Commissioning services to translate national and state policy into local services and the regional health system.

## Purpose of this document

The Australian Department of Health requires PHNs to conduct a health needs assessment of the region on an annual basis to inform population health planning. Health needs assessments support evidence-informed decision making around service commissioning and capacity building activities for general practices and healthcare providers. This document has been developed to assist SEMPHN and service providers in the region undertaking population health planning.

Seven priority policy and practice areas have been identified by the Commonwealth for the improvement and innovation of primary health (Figure 1.1). These priority areas form the basis of a comprehensive analysis of the health and service needs across the region.

Figure 1.1 PHN Priority Areas





## Approach and methodology

The SEMPHN health needs assessment was conducted with oversight from Project Governance and Project Control Groups at SEMPHN. In 2021, a significant update was undertaken to the needs assessment with regard to scope and data sources. In 2022 and 2023, data was updated using available 2021 Census releases and additional indicators and data believed to be relevant for new service development and commissioning priority areas.

A needs assessment is 'a systematic process that provides information about social needs or issues in a place or population group and determines which issues should be prioritised for action' (Smart, 2019) The SEMPHN Health Needs Assessment was guided by two conceptual frameworks. Bradshaw's Taxonomy of Need and the Social Determinants of Health.

## Taxonomy of need

Need can be understood across four types: comparative, felt, expressed and normative (Bradshaw, 2013) (Figure 1.2). This needs assessment has gathered data from different sources to ensure all four types of need are understood, and prioritisation can occur to support those most in need.

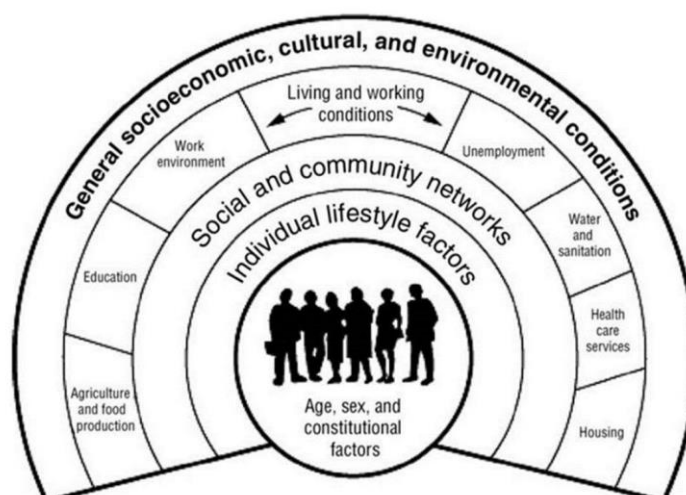
Figure 1.2 Taxonomy of need

|   | Type               | Descriptor   | Data source example                                    |
|---|--------------------|--|--|
|   | <b>Comparative</b> | Comparisons are made between and within population groups.   | <i>Publicly available national, state and PHN data</i> |
|  | <b>Felt</b>        | Identified by individual or community member perceived need. | <i>Community consultations</i>                         |
|  | <b>Expressed</b>   | Identified by individual or community using services.        | <i>Service utilisation</i>                             |
|  | <b>Normative</b>   | Measured against standards, research or expert opinion.      | <i>Clinical standards</i>                              |

## Social determinants of health

The Social Determinants of Health (SdoH) describe the social and economic circumstances (non-medical factors) that influence health throughout the life course and influence health inequalities (WHO, 2018). The Dahlgren-Whitehead model (Göran & Whitehead, 1991) (Figure 1.3) was applied in the planning, analysis, and translation stages of this needs assessment to anchor each priority area (presented by chapter), acknowledging the connection between individual and behavioural factors to community and environmental factors. It also helped to conceptualise need in the context of inequalities.

Figure 1.3 Dahlgren-Whitehead model of health (1991)



## Data sources and analysis

Population health status and service use were scoped largely through publicly available data sources and data collected by general practices via POLAR and the SEMPHN CRM (Table 1.1). This was guided by previous needs assessments, as well as validation and identification of new sources through collaboration with SEMPHN staff.

Stakeholder consultations have been conducted with our customers (general practitioners and health care providers), consumers of health services, the SEMPHN community and our staff. Service mapping activities were conducted where possible. This was complemented by qualitative data obtained through patient experience surveys and stakeholder consultation.

Where available, data were analysed at the smallest geographical level available, however, in some instances data and findings were only available at a state or national level. To assess comparative needs, data is compared against PHN, state, or national level estimates where available.

Quantitative data is also supported by any qualitative findings from focus groups and workshops conducted (where applicable and available) to assess felt need. Interpretation of needs was supported by the application of a triangulation matrix provided by the Department of Health. This allowed SEMPHN to consolidate and verify the findings from multiple sources and consultations to identify key issues and themes.

It should be noted that not all sources of evidence are available at a PHN catchment level. This makes it more difficult to analyse health and service needs that are prioritised to local geographies and population segments for the region. As a result, local prevalence is often based on synthetic estimates using demand/utilisation data, state and national-level surveys, and regional risk factors.

Table 1.1 Data sources

| Data source  | Organisation                                       | Time period     |
|--|--|-----------------|
| Census   | Australian Bureau of Statistics                    | 2016, 2021      |
| Social Health Atlases  | Public health Information Development Unit (PHIDU) | 2021            |
| AIHW releases (various)  | Australian Institute of Health and Welfare         | 2016 to present |
| Crime Statistics   | Crime Statistics Agency Victoria                   | 2023            |
| Victorian Population Health Survey                                     | Victorian Agency for Health Information (VAHI)     | 2022            |
| Health Demand and Supply Utilisation Patterns Planning (HeaDS UPP)     | Department of Health and Aged Care                 | 2022            |
| National Wastewater Drug Monitoring Program reports                    | Australian Criminal Intelligence Commission        | 2022-23         |
| AODStats   | Turning Point                                      | 2010-2021       |
| Population Level Analysis and Reporting tool (POLAR)                   | SEMPHN   | 2022-23         |
| Primary Mental Health Care Minimum Dataset (PMHC MDS)                  | SEMPHN   | 2022-23         |
| Mortality Over Regions and Time (MORT) books                           | Australian Institute of Health and Welfare         | 2016- 2021      |
| GEN Aged Care  | Australian Institute of Health and Welfare         | 2021-22         |
| Payment statistics   | Services Australia                                 | 2022            |
| Alcohol and Other Drugs Treatment National Minimum Data Set (AOD NMDS) | SEMPHN rediCase                                    | 2023            |

## Chapter 2 Key insights

### Our community

The south east Melbourne community represents one quarter (24%) of the Victorian population – around 1.6 million residents. By 2023, the population is expected to grow to 2 million residents, with the fastest growth occurring down the south east corridor of the catchment – Greater Dandenong, Casey and Cardinia. This growth will lead to changing demographics and subsequent health and service needs across the catchment.

Cardinia and Casey have been identified as two of Victoria's fastest growing LGAs. Younger people under the age of 25 years and families with young children under the age of 15 years are represented in higher proportions in these LGAs, while SEMPHN's older residents (65 years and over) are represented in higher proportions in Mornington Peninsula, Bayside and Kingston.

Cultural and linguistic diversity is higher in the growth corridor LGAs. Greater Dandenong and Casey are the most culturally diverse LGAs (defined by spoken language, origin of country where English is not the main language spoken and recentness of living in Australia) and home to the largest populations of refugees and asylum seekers. The catchment's First Nations residents are in higher proportions in the outer boundaries of the catchment - Cardinia, Frankston and Mornington Peninsula.

There are higher levels of socioeconomic disadvantage in Greater Dandenong, Casey and Frankston: Casey and Greater Dandenong have higher numbers of JobSeeker recipients and Disability Support Pension recipients. Higher rates of family incidents relative to Victoria are also observed in Frankston and Greater Dandenong. Casey and Greater Dandenong also have the highest number of people experiencing homelessness across the catchment.

### General population health

Chronic conditions are long term and persistent illnesses leading to disability and death; substantially affecting a person's quality of life. Compared to Victoria, there were higher rates of people with two or more chronic conditions in Mornington Peninsula and Frankston.

Coronary heart disease is the leading cause of death in the catchment. The associated risk factors of smoking, obesity, and physical inactivity were highest in Greater Dandenong and Cardinia, substantially higher than both the catchment and Victorian averages. Risk of cardiovascular conditions increases with age and as a result areas with older populations have a higher self-reported prevalence of these conditions, such as Mornington Peninsula, Frankston, and Kingston. Men between the age of 55-84 years had the highest self-reported prevalence of cardiovascular conditions, almost twice that of women of similar age. Rates of emergency department presentations for circulatory diseases were highest in Cardinia, Casey, and Frankston, regions which, for the most part, reported a high prevalence of cardiovascular illness or associated risk factors.

Dementia including Alzheimer's disease are progressive chronic diseases impacting approximately 500,000 Australians, with the number of people living with dementia estimated to double in the next 25 years. Dementia has been the second leading cause of death in Australia for men, and the leading cause of death for women since 2018. The largest associated risk factor for dementia is ageing, with an individual's risk of developing dementia approximately doubling every five years after the age of 65 – consequently as a result of a higher life expectancy, women are more likely to be diagnosed with dementia during their lifetime. Both self-reported ABS Census and GP practice data indicate that the Mornington Peninsula had the highest prevalence of residents with dementia

in SEMPHN followed by Casey and Frankston, reflective of the size of their respective elderly population.

The most common cancers experienced Australia-wide were cancers of the prostate, breast, bowel, melanoma, and lung. In 2021, approximately 43,000 SEMPHN residents were living with one or more forms of cancer, including individuals in remission. Just over half (52%) of these residents were female, and the largest proportion of those living with cancer were aged between 55 and 84. Cancer rates for both males and females increased consistently from 55 years of age. LGAs with a higher prevalence of cancer are Mornington Peninsula, Bayside, and Frankston – which is consistent with their older populations and higher risk.

Non-urgent and semi-urgent emergency department presentations per 100,000 residents (unplanned service utilisation) were highest in Frankston, Cardinia, and Mornington Peninsula, which were all higher than the Victorian rate. Inner-city LGAs such as Stonnington and Glen Eira had the lowest rate of ED presentations, potentially as a result of increased access to after-hours primary care services.

## Mental health

Approximately one in five Australians is experiencing a mental illness and one in six an anxiety disorder. Across the catchment, indicators for life satisfaction, mental health disorders, psychological distress, suicide and self-harm indicate there were lower levels of mental health and wellbeing amongst residents in Casey, Frankston, Greater Dandenong, Mornington Peninsula and Cardinia.

GPs are often the first point of contact for people who require mental health service support and are the main referrers for mental health treatment plans. More than 50% of residents accessing mental health services were accessing them through general practice. GPs in Casey, Mornington Peninsula and Greater Dandenong made the most referrals to mental health services, while themselves being amongst the largest providers of the largest number of related mental health services. Within the catchment, there is a gradual increase in the number of mental health related prescriptions dispensed per patient by age, with the most being prescribed for the 85 and older cohort.

Across the nine headspace centres in the SEMPHN catchment, approximately half of the young people aged 12 to 25 years entering the service had very high levels of mental health distress. Wait times to enter into the service varied from 3-21 days with an average of 8 days. Access to appropriate mental health services remain a key focus for the catchment.

## Alcohol and Other Drugs

Addiction to alcohol and other drugs (AOD) in the SEMPHN catchment are elevated relative to the state in many LGAs and in certain demographic groups. Alcohol is a major lifestyle risk factor for chronic diseases and is associated with other risky behaviours such as tobacco use, unsafe sex, violence, drinking and driving, and suicide, while addiction to substances can cause physical, psychological and mental harms.

Consumption of alcohol by residents aged 18 years and above in all but two LGAs in the catchment are high compared to the state. Access to alcohol in the community is driven partially by the number of premises with liquor licence due to increased availability and accessibility. Port Phillip,

Stonnington and Mornington Peninsula LGAs have three of the top five highest rates of adult drinkers in the catchment while having the highest numbers of such premises.

The prevalences of current adult tobacco smokers are highest in Greater Dandenong, Frankston, Cardinia and Mornington Peninsula. Of particular concern is the uptrend seen in the rates of non-smokers using e-cigarettes (or vape) in recent years, especially in younger adults under 40 years of age, with a significant portion believing that vaping is less harmful than tobacco smoking.

Data on the consumption of illicit drugs across the SEMPHN catchment is difficult to access. GP data suggests that there are higher levels of consumption across Casey, Port Phillip, Greater Dandenong, and Frankston. In Victoria, cannabis appears to be the most common drug amongst those aged 14 years and above, but it is worth noting that in the younger population across Australia, the consumption of Ecstasy (MDMA) has been rising again in recent years.

Depending on the indicators used, different LGAs register different levels of service utilisation relating to AOD. However, LGAs such as Frankston, Mornington Peninsula, Casey, Port Phillip and Stonnington see elevated service utilisation relative to Victoria. AOD treatment services across SEMPHN provide a broad range of treatment services and support to people who use alcohol or drugs, and to their families and friends. These services include counselling, rehabilitation, pharmacotherapy, information provision and education programs, and support and case management programs. Consultations with relevant stakeholders have identified many challenges experienced by consumers and service providers including the lack of awareness of existing pathways in the healthcare system to support consumers with different circumstances or having specific personal needs.

## First Nations peoples

Approximately 10,000 residents identify as First Nations peoples in the catchment. The majority of First Nations peoples reside in Casey, and Glen Eira has the fastest growing First Nations population. Attendance in educational institutions from primary through to tertiary is lower relative to the Victorian population in most LGAs but participation rates in vocational education and training is higher. In Greater Dandenong, unemployment rate amongst First Nations peoples appears the highest while average personal and household incomes appear the lowest, which is in line with the lower socioeconomic profile of the LGA. On average, a First Nations person in the catchment earns less than a non-First Nations person and is more vulnerable to experiencing homelessness. A First Nations household in Victoria is also more likely to experience overcrowding.

Poorer health outcomes have been observed in First Nations peoples across many indicators. This includes lower life expectancy and higher burden of disease especially for conditions such as injuries, cancer, heart disease and infant and congenital conditions. There is high prevalence of mental health conditions and suicide for First Nations people across all LGAs. Immunisation rates in young children and antenatal care accessed by pregnant First Nations women are lower than the general population.

Lifestyle contributors to First Nations health burden include tobacco and/or alcohol use (including smoking during pregnancy), and overweight/obesity. Available data also shows that in Australia, illicit drug use (mainly of cannabis) is higher in First Nations peoples compared to non-First Nations people.

## Aged Care

The population of persons aged 65 years and over is increasing faster than all other age groups. As at 30 June 2021, one in six residents in the SEMPHN catchment were aged 65 years and above.



Mornington Peninsula had the largest older population in the catchment (more than one in four residents), while Casey had the smallest older population (one in ten residents). By 2030, it is expected that nearly one in three residents across SEMPHN will be aged 65 and over, and Cardinia and Port Phillip will have the largest ageing populations.

Despite Casey's smaller older population, the LGA has a higher proportion of residents over the age of 65 years who identify as culturally and linguistically diverse and First Nations. Casey also has higher proportions of older people considered vulnerable – unemployed, on low income, who live alone and who require physical assistance. Primary care for older people in LGAs such as Casey thus needs to consider accessibility for culturally diverse populations and the vulnerable groups living amongst them.

Coronary heart disease and Dementia (including Alzheimer's disease) were the main causes of death for older residents in the SEMPHN region. Greater Dandenong, Cardinia, Casey and Mornington Peninsula had the highest rates of residents with heart diseases, while Mornington Peninsula and Casey had the highest number of older Dementia patients in the catchment. In addition, falls were the leading contributor to hospitalised injuries and cause of injury deaths amongst older people.

As at September 2023, there were 154 residential care services, 129 home care services and 121 home support services in the catchment. In Victoria, a third of deaths of older people occur in residential aged care facilities. The average length of stay in permanent residential aged care facilities across SEMPHN was 15 days before transitioning to hospital care, 14 days to return to the community and 43 days due to death. SEMPHN continues to play a proactive role in integrating primary care with residential and home care services.

## Health Workforce

Across the south east of Melbourne, there were 485 general practices and 2,786 general practitioners (GPs). Despite a small increase (1.4%) in the GP workforce from the year prior, only a 1.7% decrease in the full-time equivalent (FTE) was observed. This may reflect a reduction in the average hours worked by GPs and highlight the increasing gap between GP workforce and population growth in the SEMPHN catchment. Throughout 2022, SEMPHN general practitioners provided primary care services to approximately 1.6 million patients, 30,000 more patients than the total population of SEMPHN, indicative of the presence of out-of-catchment/state visitors.

The number of GP services per capita varied across the region, Greater Dandenong and Stonnington had the highest GP services per capita whilst Glen Eira and Port Phillip had the fewest indicative of both primary care service availability and overall population primary care need.

GPs across the SEMPHN catchment spent approximately 50-60% of their time providing general primary care consultations (e.g. brief, standard, long, and prolonged appointments) to patients. However, variation was observed in the proportion of time GPs spent on specific primary care (after-hours services, chronic disease / complex care management, services in RACFs, mental health-related care), potentially indicating areas of high need for more specific primary care service. Regions with high proportions of GP FTE utilised on specific areas of health service include:

- Casey (South) – After-Hours Services (9.1%)
- Cardinia (Bunyip-Garfield) – Chronic Disease / Complex Care Management (11.9%)
- Kingston – Services in RACFs (7.2%)
- Stonnington (West) – Mental Health-related Care (5.2%)

The nursing workforce employed within SEMPHN was substantially larger than the GP workforce in 2022 and has been growing year-on-year across the three largest nursing sectors (GP-settings, hospitals, and aged care facilities). The size of the nursing workforce within each local government area aligned closely with its population, and consistent with this Casey, had the single largest nursing workforce representing over 15% of all SEMPHN nurses.

The mental health workforce (psychiatrists, psychologists, mental health nurses, and mental health occupational therapists) saw a similar level of growth, the rate of mental health professionals per 100,000 catchment residents was substantially lower in SEMPHN when compared to the Victorian average.

First Nations people represented 1.7% of the total health workforce in Australia in 2021. Increasing the representation of First Nations people in the health workforce can improve access to culturally appropriate health services for First Nations Australians. Approximately 0.5% of medical practitioners and 1.5% of all enrolled and registered nurses and midwives identified as Aboriginal and/or Torres Strait Islander across SEMPHN.

## Digital Health

Digital health technologies improve availability and accessibility of health care services for consumers. Uptake of technologies such as clinically compliant software, POLAR, Nellie, telehealth (videocalls), and My Health Record, were substantially lower in practices that were non-accredited than in those that were accredited across the catchment. Given that approximately 25% of all general practices do not have RACGP accreditation, there is opportunity to focus on building digital capability in these hotspots.

Greater differences were observed for technologies such as POLAR and Nellie, when compared to technologies to assist general practices' administration and clinic workload such as clinically compliant software, the HealthLink messaging system, and My Health Record. Supporting practices in obtaining RACGP-accreditation may be a potential avenue to bolster the uptake of digital health technologies throughout the SEMPHN catchment, particularly in areas that are underutilising available technologies.

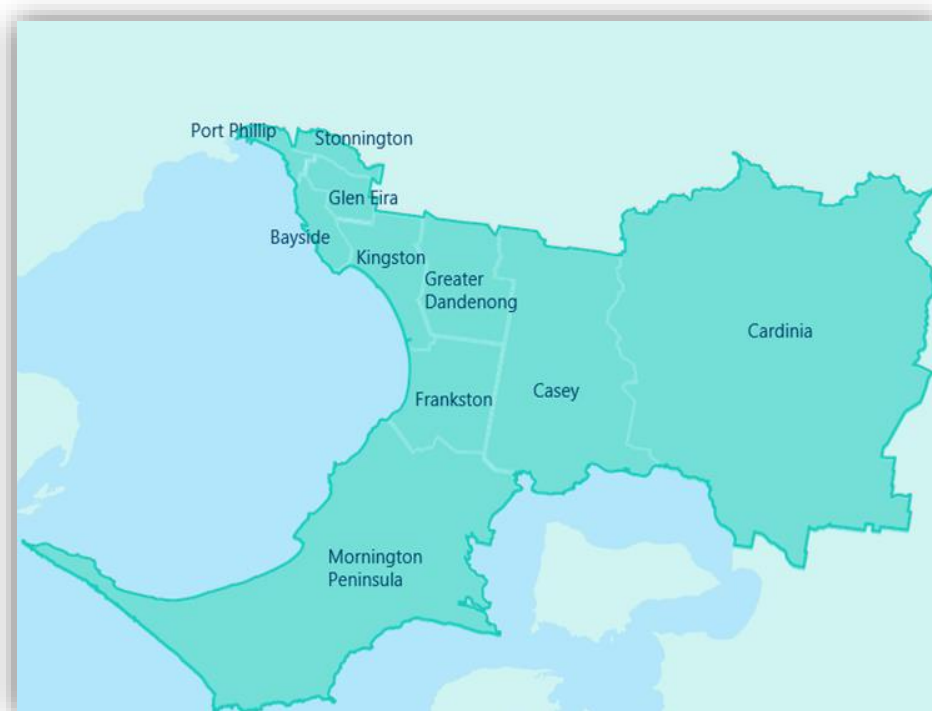
General practitioners across SEMPHN spent the second largest proportion of their GP FTE providing telehealth services to patients. Telehealth utilisation and service provision throughout SEMPHN has increased substantially since 2020, as a response to the COVID-19 pandemic, and currently sits at just under a quarter of all GP FTE provided by SEMPHN general practitioners up from almost zero before 2020. Areas of high telehealth utilisation/provision in 2022 include Stonnington (West), Port Phillip, and Casey (North). Two outer regional catchments within the Cardinia LGA (Bunyip-Garfield & Koo Wee Rup) had the lowest telehealth utilisation/provision under a fifth of their GP FTE potentially indicative of poor telehealth infrastructure in more regional areas.

## Chapter 3 Our community

The South Eastern Melbourne Primary Health Network (SEMPHN) region covers a total geographical area of 2,935 square kilometres across 10 local government areas (LGAs) (Figure 3.1). The catchment also includes 4% of the City of Monash (the suburb of Hughesdale)<sup>1</sup>. Our catchment shares geographic borders with Eastern Melbourne PHN, Gippsland PHN and North Western Melbourne PHN.

Within our catchment, there are three hospital networks (Alfred Health, Monash Health and Peninsula Health). As of August 2023, there were 485 General Practices, 154 Residential Aged Care Facilities, 391 Pharmacies and two Aboriginal Community Controlled Health Organisations<sup>2</sup> in the catchment.

Figure 3.1 Map of the SEMPHN catchment and LGA boundaries



### Population density and growth

Based on 2021 Census data, the SEMPHN catchment is currently home to an estimated 1,563,818 residents (ABS, 2021d), which equates to approximately one quarter (24%) of the Victorian population (Figure 3.2, Appendix Table 2.1.1). From 2016 to 2021, there was a 7.4% increase in population in the catchment, slowing from the 10% increase over the five years prior (2012-2016).<sup>3</sup> In June 2022, the suburb of Malvern in Stonnington was identified as the centre of population of Greater Melbourne.

<sup>1</sup> For the purposes of this report, data from the City of Monash is excluded (unless otherwise stated). The City of Monash is captured within Eastern Melbourne PHN's Annual Health Needs Assessment.

<sup>2</sup> Dandenong and District Aborigines Co-operative Ltd and Ngwala Willumbong Co-operative Limited

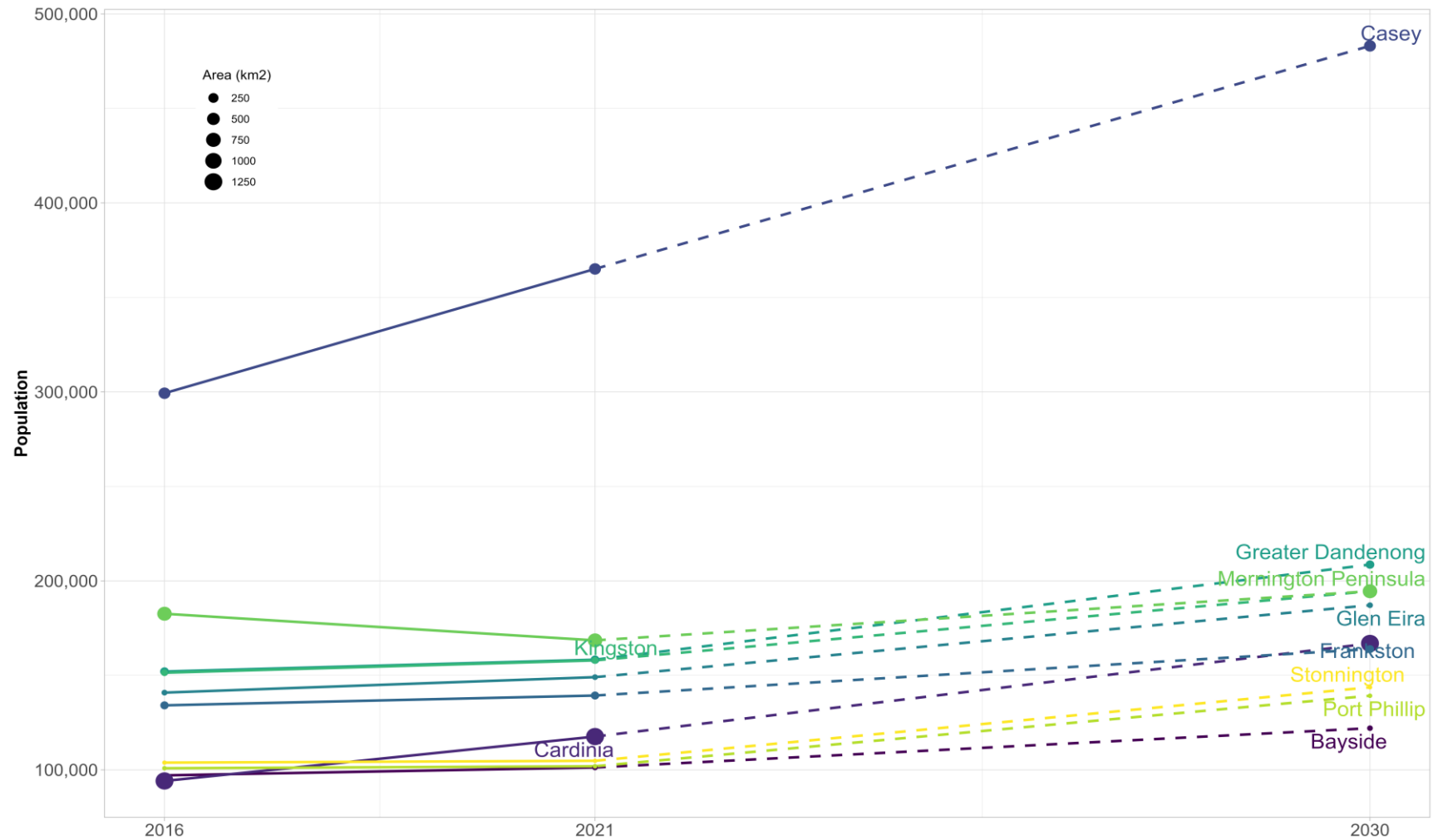
<sup>3</sup> Estimated Resident Population (ERP) for the region in 2021 was 1.6 million people (Australian Bureau of Statistics, 2021b). This decrease in population estimate may be attributed to population movement from the COVID-19 pandemic, where a proportion of Victorian residents moved to regional and rural areas of Victoria or outside of the State to avoid lockdown regulations.

Stonnington, along with and Port Phillip, are the smallest LGAs by land area in the catchment. Both LGAs have slower population growth rates compared to other LGAs (0.9% and 1.1% respectively). Mornington Peninsula is the only LGA which experienced a decline in population (-7.7%) from 2016 to 2021 (ABS, 2021d, 2021e).

The fastest growing area in our catchment has been defined as the 'South East Growth Corridor', which includes the City of Dandenong, City of Casey and Cardinia Shire (VPA, 2012). The catchment is home to two of Victoria's top 10 fastest growing LGAs in 2021-22: Cardinia (5<sup>th</sup>, 2.9%) and Casey (9<sup>th</sup>, 2.4%). By population, Casey is the largest LGA (23.3%) in the catchment and was the second fastest growing LGA (22.0%) from 2016 to 2021. This was just behind Cardinia Shire's 25% population growth rate, covering the largest geographic area in the catchment.

Casey is the sixth most populous LGA in Australia. Four of the top 20 fastest growing SA2s in Australia were all located in the Casey LGA, specifically Casey – South, and particular suburbs of growth were Clyde and Cranbourne with growth rates ranging from 9.7% and 19.7% between 2021 to 2022. Population projections indicate that the catchment will be home to more than two million people by 2030, with Casey being home to the largest population in the catchment (32.3%).

Figure 3.2 Population by LGA, 2016, 2021, 2030

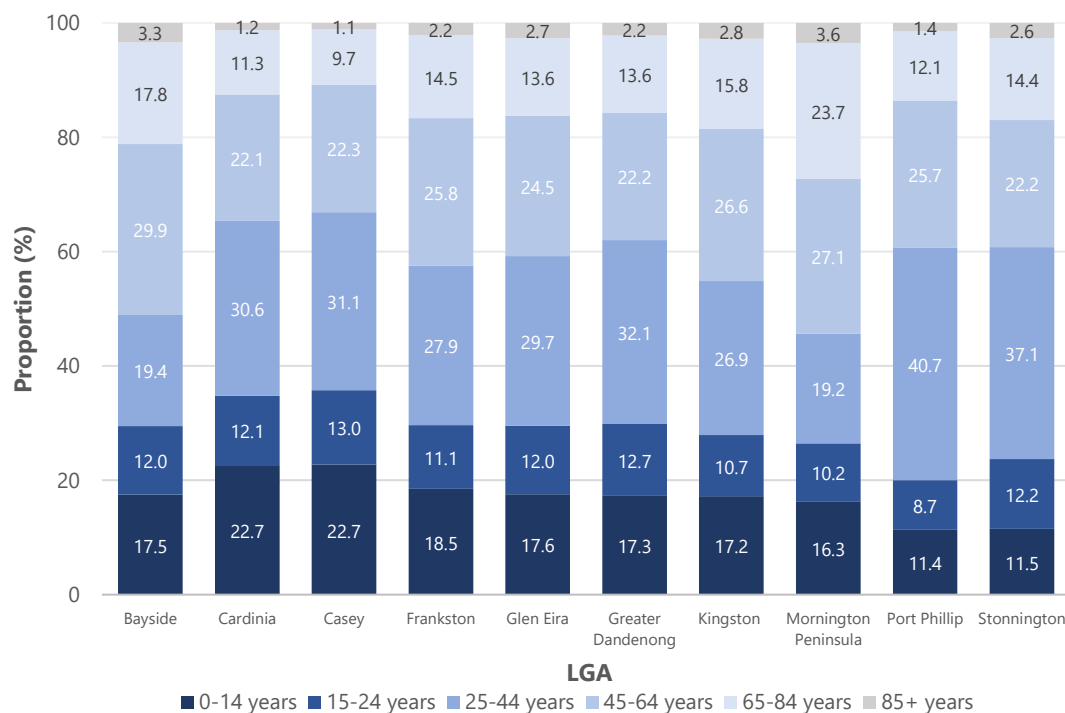


Source: ABS Census 2021, Australian Bureau of Statistics (June 2022), G01 SELECTED PERSON CHARACTERISTICS BY SEX, accessed on 20 August 2022. PHIDU 2022, Torrens University Australia (June 2022), Population projections: Persons, accessed 20 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).

## Age composition

Figure 3.3 shows the age distribution of the populations in LGAs in the catchment. There are higher proportions of older people (65 years and over) living in Mornington Peninsula and Bayside, while the outer LGAs such as Casey and Cardinia have larger younger populations under 24 years.

Figure 3.3 Population age distribution by LGA, 2021



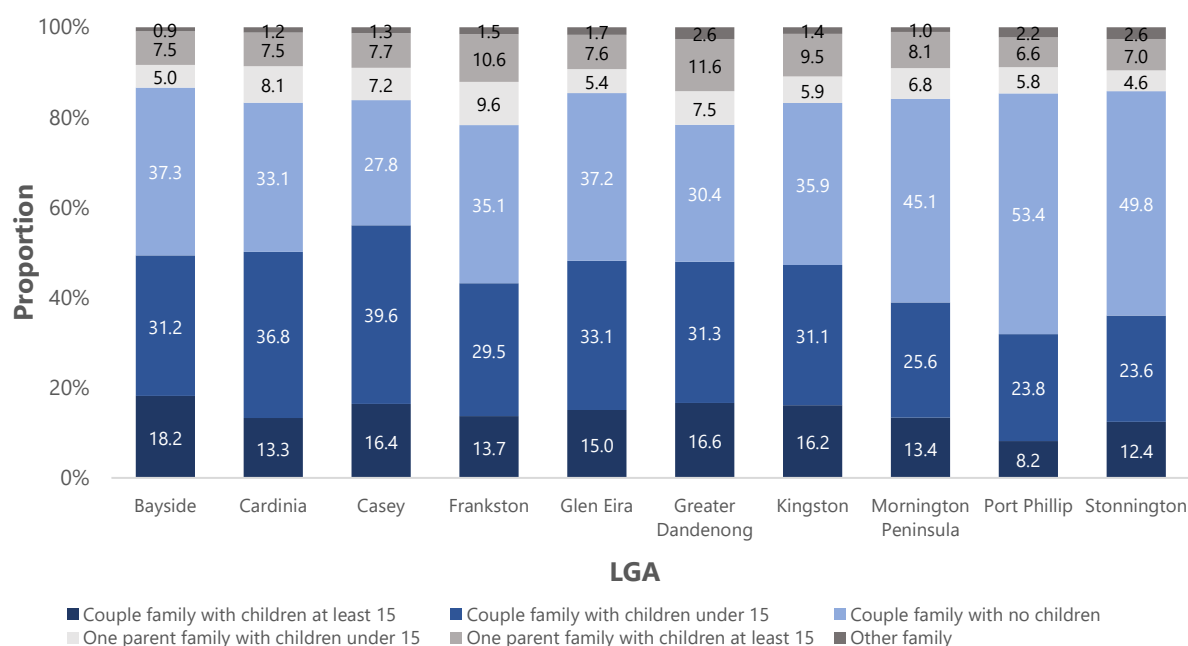
Source: ABS Census 2021, Australian Bureau of Statistics (June 2022), G04 AGE BY SEX, accessed on 20 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).

## Family composition

The family composition of residents varies across LGAs in the catchment (Figure 3.4). The highest proportion of couples with at least one young child under 15 years of age reside in Casey (39.6%) and Cardinia (36.8%). LGAs with the highest proportions of single-parent families with at least one child under 15 are Frankston (9.6%) and Cardinia (8.1%). LGAs with the highest proportions of couples without children are Port Phillip (53.4%), Stonnington (49.8%) and Mornington Peninsula (45.1%). These variations may indicate different primary healthcare service needs across the catchment.



Figure 3.4 Family composition by LGA, 2021



Source: ABS Census 2021, Australian Bureau of Statistics (June 2022), accessed on 5 September 2023. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).

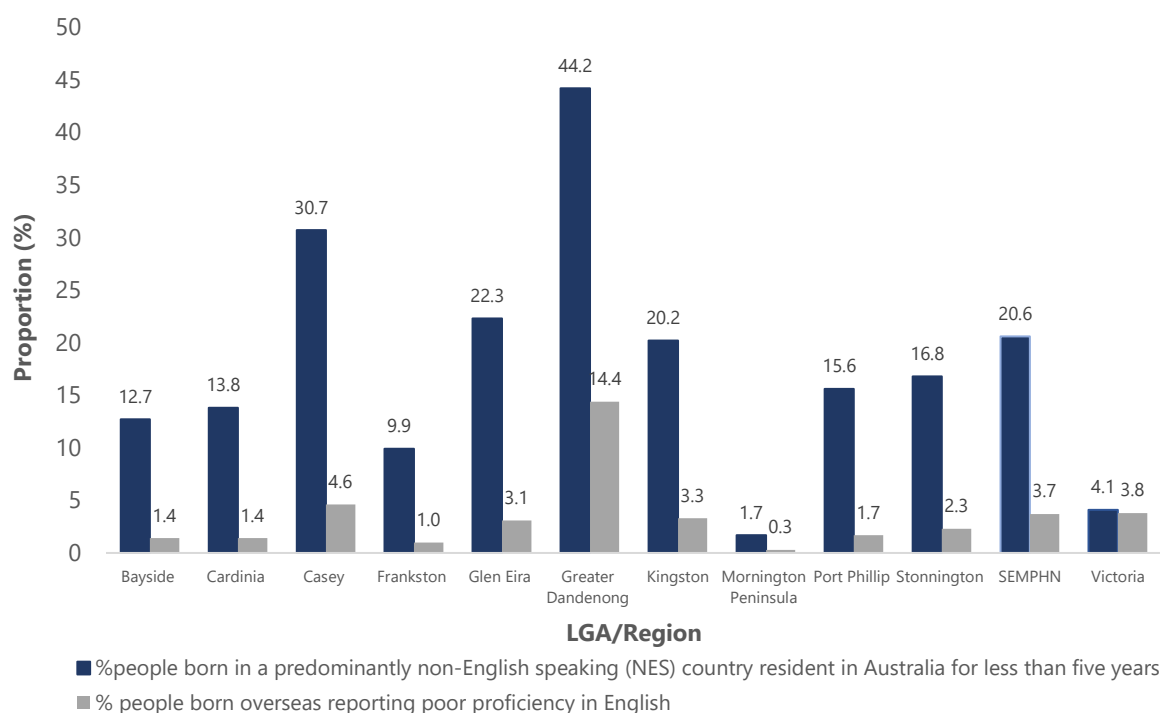
## Cultural and linguistic diversity

Culturally and linguistically diverse (CALD) describes people who were born overseas, speak languages other than the official national languages and/or have lower proficiency of native or national languages, and/or who have parents who were born overseas (AIHW, 2018). Figure 3.4 shows the proportions of residents who were born in predominantly non-English speaking countries who have been in Australia for less than five years and residents who were born overseas reporting poor proficiency in English (see also Appendix Table 2.1.2). These characteristics can be barriers to navigating the health care system and getting access to health care. Accurate and timely language interpretation was identified as central to facilitating engagement between patients and providers at any health-care interface, noting language barriers as hard to navigate and overcome (Harrison et al., 2020).

Based on 2021 ABS Census, approximately a quarter of residents (26.0%, n=408,695) in the SEMPHN catchment were born overseas. As shown in Figure 3.5, Greater Dandenong is the most culturally diverse LGA, with 44.2% (n=69,974) of residents born in a predominantly non-English speaking country who have been in Australia for less than five years (44.2%), and 14.4% (n=22,748) of residents who were born overseas who report poor proficiency in English. Casey is the second most culturally and linguistically diverse LGA, with nearly one third (30.7%, n=112,002) of residents born in a non-English speaking country and who have lived in Australia for less than five years, and 4.6% of residents born overseas and reporting poor proficiency in English.

In 2021, the top five countries of birth for residents across the catchment were India (69,814, 4.5%); China (32,550, 2.1%), Philippines (16,613, 1.1%); Vietnam (21,619, 1.4%) and Malaysia (11,636, 0.7%). (PHIDU, 2021a). The highest proportion of people born overseas are aged 25-44 years (ABS, 2021d).

Figure 3.5 People born in non-English speaking countries and poor proficiency in English by LGA, 2021



Source: PHIDU (based on ABS 2021 Census data) by Primary Health Networks – with component LGAs.

## Refugee and asylum seekers

South east Melbourne is home to a large proportion of Victoria's refugee and asylum seeker population. Refugees and asylum seekers have multiple and complex health needs requiring unique healthcare support, including improved access, coordination and quality of care (Joshi et al., 2013).

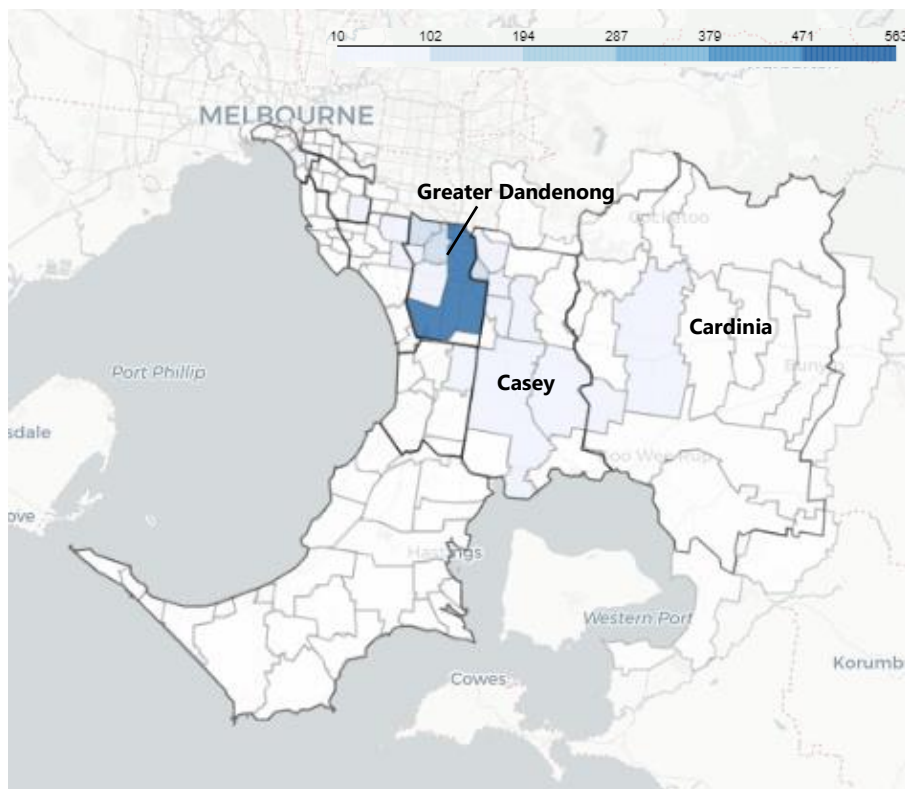
Analysis of data from 2000 to 2016 shows that the SEMPHN catchment has settled 18,547 permanent migrants under the Offshore Humanitarian Program, which was 28.9% of all humanitarian entrants in Victoria (ABS, 2016; PHIDU, 2021c).

- The region's proportion of permanent migrants under the Offshore Humanitarian Program (1.3%) is greater than Victoria (1.1%) and Australia (0.9%).
- The majority (83.9%) of humanitarian migrants in our catchment have settled in Casey and Greater Dandenong.
  - Casey welcomed the second largest number of humanitarian entrants in Victoria (n=8,720) which represented 5.2% of the LGA's total population, just behind Hume (n=9,642) in the north west of Melbourne.
  - Greater Dandenong welcomed the third largest number of humanitarian entrants in Victoria (n=7,857), which represented 5.2% of the LGA's total population.

More recent data (31 March 2023) shows that Victoria was home to 4,697 asylum-seekers who had been granted Bridging Visa E (which allows holders to lawfully stay in Australia while making arrangements to leave, finalise immigration matters or wait for an immigration decision) and thus lived freely in the community (43.4% of Australia's total of 10,828 persons) (Refugee Council of Australia, 2023). In the SEMPHN catchment, the highest number of such asylum-seekers resided in Greater Dandenong as shown in Figure 3.6. The highest numbers of asylum-seekers reside in Dandenong (563 persons), Springvale (148 persons) and Dandenong (136 persons). Unlike asylum-

seekers held in detention centres, those living freely in the community do not receive housing and get very limited support, including healthcare. Most asylum-seekers in Victoria originate from Sri Lanka (1,416, or 30.1% of Victorian total) and Iran (1380, 29.4%).

Figure 3.6 Concentrations of asylum-seekers on Bridging Visa E living freely in the community in SEMPHN LGAs as of 31 March 2023



Source: Refugee Council of Australia. Accessed via <https://www.refugeecouncil.org.au/asylum-community/8/> on 30 August 2023. Bridging Visa E allows holders to lawfully stay in Australia while making arrangements to leave, finalise immigration matters or wait for an immigration decision.

## First Nations peoples

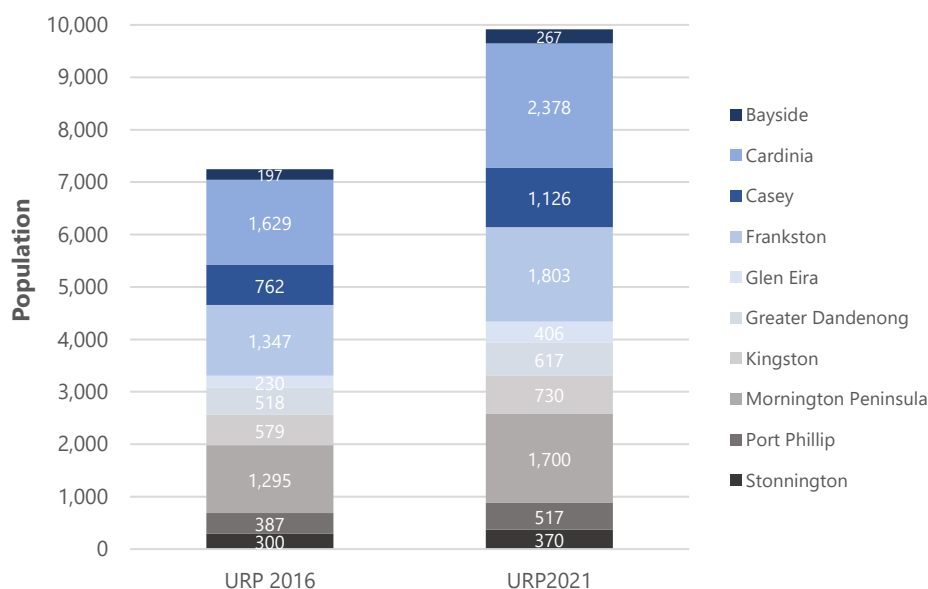
The traditional custodians of the lands and waterways of the SEMPHN catchment are the Boon Wurrung and Wurundjeri peoples. It is estimated that approximately 9,914 First Nations peoples reside in the region, representing 0.6% of the population (ABS, 2021a), although this number is likely to be an underestimation. Based on the ABS 2021 Census, nearly three quarters (70.7%) of First Nations peoples live in the outer region of the catchment: Cardinia (n=2,378), Frankston (n=1,803), Mornington Peninsula (n=1,700) and Casey (n=1,126) (Figure 3.7, Appendix Table 2.1.3).

Glen Eira experienced the largest population growth (76.5%) followed by Casey (47.8%) and Cardinia (46.0%), which are all above the Victorian growth rate for First Nations populations.<sup>4</sup> The largest proportion of First Nations peoples in the region are children aged 5 to 14 years (19.8%, n=1,117), followed by young people aged between 15 to 24 years (18.7%, n=1,855). Older First Nations peoples

<sup>4</sup> It should be noted that the growth rate is calculated against the 2016 estimates, and the high population growth rates, which are indicative of more people identifying as First Nations in 2021 compared to 2016. These increases have also been explained

(over the age of 50<sup>5</sup>) represent 18.6% (n=1,849) of the total population. This is comparable to the older non-First Nations population who represent 16.2% (n=253,563) of the catchment's general population.

Figure 3.7 First Nations peoples population growth by LGA, 2016-2021



Source: Census 2021, Australian Bureau of Statistics (June 2022), I03C AGE BY INDIGENOUS STATUS BY SEX, accessed on 20 August 2022. 2016 Census of Population and Housing, Australian Bureau of Statistics (2017), I03C Age by Indigenous Status by Sex, accessed on 20 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).

## Disability

All LGAs in the SEMPHN catchment have higher proportions of people with core activity limitation compared to Victoria. Core activity limitation is categorised into four domains:

- profound limitation (people with the greatest need for help or who are unable to do an activity)
- severe limitation (people who sometimes need help and/or have difficulty)
- moderate limitation (people who need no help but have difficulty)
- mild limitation (people who need no help and have no difficulty but use aids or have limitations).

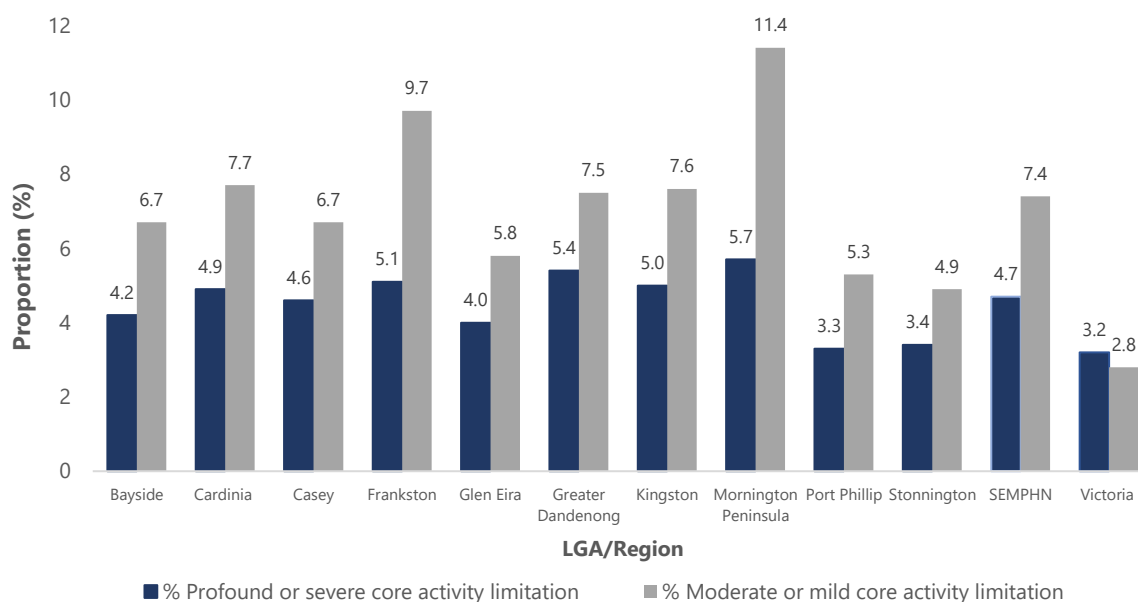
Based on the most recent ABS 2018 Survey of Disability, Ageing and Carers, Mornington Peninsula has the highest proportion of people living with moderate or mild (11.4%) and profound or severe disability<sup>6</sup> (5.7%), which can be partially attributed to an older population (Figure 3.8, Appendix Table

<sup>5</sup> Older First Nations people are defined by AIHW as 50 years and over compared to older non-First Nations population (65 years and over)

<sup>6</sup> Core activity limitation: core activities are communication, mobility and self-care. For core activity limitations, ABS provides data on four levels of severity—profound limitation (people with the greatest need for help or who are unable to do an activity); severe limitation (people who sometimes need help and/or have difficulty); moderate limitation (people who need no help but have difficulty); mild limitation (people who need no help and have no difficulty, but use aids or have limitations).

2.1.4). Casey has the most people with mild or moderate core activity limitation (n=22,804) and profound or severe core activity limitation (n=15,713).

Figure 3.8 Persons living with core activity limitation by LGA, 2018



Source: Survey of Disability, Ageing and Carers for Local Government Areas 2018, Australian Bureau of Statistics, Table 2.3 Local Government Areas (LGAs): Persons with profound or severe core activity limitation by age; Table 3.3 Local Government Areas (LGAs): Persons with moderate or mild core activity limitation by age, accessed on 20 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA within SEMP HN catchment (4%).

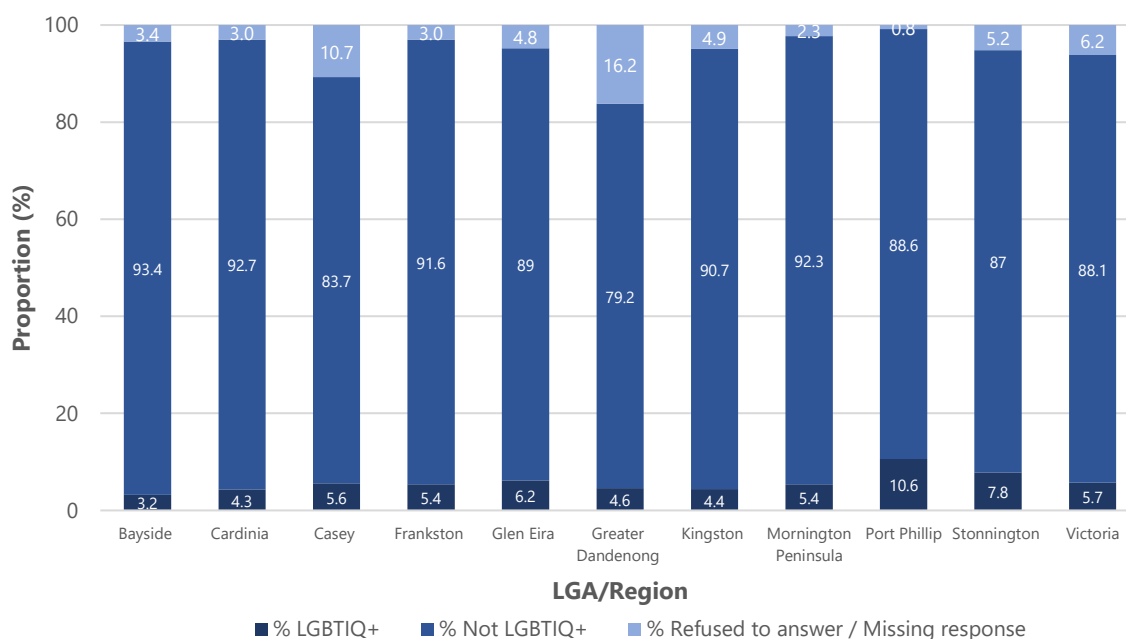
Data on persons with psychosocial disability is not available at the LGA level but the ABS 2018 Survey of Disability, Ageing and Carers states that in Victoria, it is estimated that 294,000 out of 1,098,200 persons (26.8%) have psychosocial disability in 2018.

## LGBTIQ+

As can be seen in Figure 3.9, in 2017, the Victorian Population Health Survey estimated that one in twenty people (5.7%, n=1,300) in the SEMP HN catchment identified as LGBTIQ+<sup>7</sup> (see also Appendix Table 2.1.5). The SEMP HN catchment estimates are comparable to Victorian estimates. The proportion of adults identifying as LGBTIQ+ was higher in those aged 18–34 years. Port Phillip (10.6%), Stonnington (7.8%) and Glen Eira (6.2%) reported LGBTIQ+ populations higher than the Victorian proportion.

<sup>7</sup> Due to COVID-19, this data was not updated in the 2020 survey, and the related survey question has not been included in the survey since 2017.

Figure 3.9 LGBTIQ+ community by LGA, 2017



Source: Victorian Population Health Survey 2017, VAHI (2020), Table 4: Proportion of the adult (18+ years) population, by LGBTIQ+ status and by metropolitan Local Government Area, Victoria, 2017, accessed on 18 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA within SEMPHN catchment (4%).

## Socioeconomic disadvantage

Socioeconomic position is associated with health behaviours, morbidity and mortality. People with lower socioeconomic status have poorer health outcomes and live shorter lives. The Socio-Economic Indexes for Areas (SEIFA) ranks areas across Australia according to different Census variables, including income, education levels, employment and housing conditions. The Index of Relative Socio-economic Disadvantage (IRSD)<sup>8</sup> is a composite measure for disadvantage. The IRSD summarises a range of information about the economic and social conditions of people and households within an area. A low score indicates relative greater disadvantage and high scores indicate relative lack of disadvantage. SEIFA IRSD scores were explored across the SEMPHN catchment as lower socioeconomic groups are at greater risk of poor health, illness, disability and death (AIHW, 2021d).

Figure 3.10 highlights the variation of IRSD across the LGAs in the catchment and suggests that the outer areas of the catchment experience greater levels of disadvantage. Greater Dandenong, with an IRSD score of 895, was found to be the most disadvantaged LGA in the catchment, while Bayside was found to have the least disadvantage (IRSD score of 1,097). Despite various suburbs across the region experiencing high disadvantage, the highest concentration of disadvantage is within the City of Greater Dandenong as indicated by the map. Beyond disparities in employment, education and housing status for many individuals, socioeconomic disadvantages may be experienced by those in the community who are most under-served e.g. First Nations peoples, LGBTIQ+ community (AIHW, 2020d).

<sup>8</sup> The Index has a base of 1,000 for Australia and scores above 1,000 indicate a relative lack of disadvantage and those below indicates relatively greater disadvantage

Figure 3.10 Socioeconomic disadvantage (as Index of Relative Socioeconomic Disadvantage, IRSD) by LGA, 2021

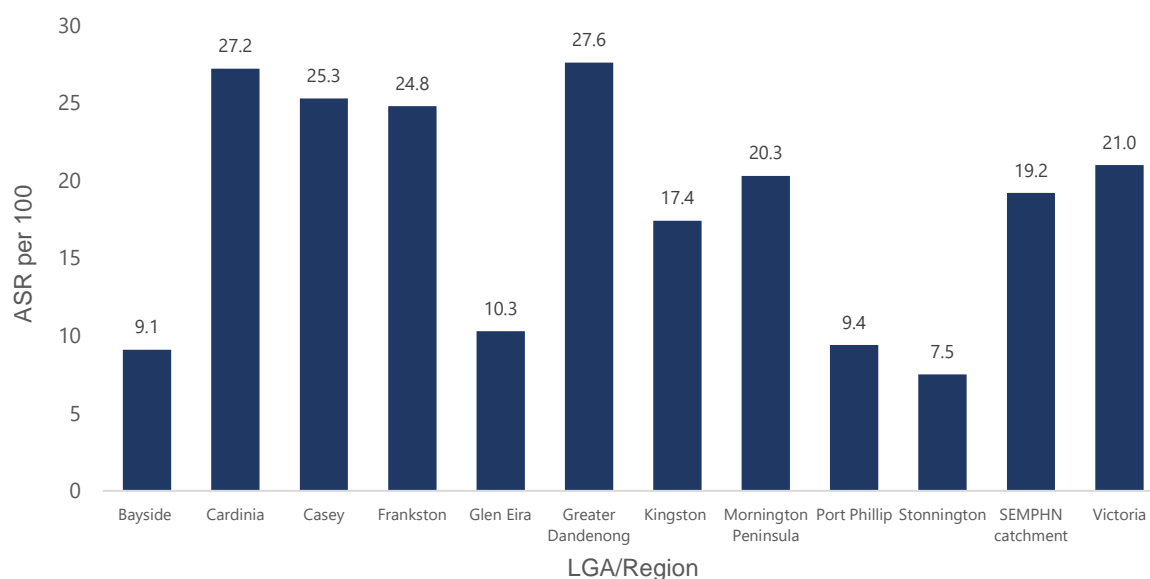
| Region/LGA           | IRSD Score | IRSD Decile |
|----------------------|------------|-------------|
| Bayside              | 1,090      | 10          |
| Cardinia             | 1,021      | 7           |
| Casey                | 995        | 5           |
| Frankston            | 1,003      | 6           |
| Glen Eira            | 1,075      | 10          |
| Greater Dandenong    | 887        | 1           |
| Kingston             | 1,044      | 9           |
| Mornington Peninsula | 1,038      | 8           |
| Port Phillip         | 1,061      | 9           |
| Stonnington          | 1,084      | 10          |

Source: PHIDU Social Health Atlas of Australia, Public Health Network (including Local Government Areas) of residence. 2023. Accessed on 17 August 2023 at [https://phidu.torrens.edu.au/current/maps/sha-aust/phn\\_lga\\_area\\_profile/atlas.html](https://phidu.torrens.edu.au/current/maps/sha-aust/phn_lga_area_profile/atlas.html). Note that IRSD Decile is relative to LGAs within Victoria.

## Education

Education is a key social determinant of health, associated with life expectancy, morbidity and health behaviours. Education attainment has also been linked with better employment opportunities and increased income (Health, 2020). Across the SEMPHN catchment, there is considerable variability in school leaver status. Figure 3.11 suggests that there are lower formal education levels in Greater Dandenong (27.6 per 100 people), Cardinia (27.2 per 100 people) and Casey (25.3 per 100 people) (PHIDU, 2021a) (see also Appendix Table 2.1.6). LGAs having rates well below the Victorian rate (21.0 per 100 people) are: the City of Stonnington (7.5 per 100), Bayside (9.1 per 100) and Port Phillip (9.7 per 100). These LGAs have the highest proportions of people who left school after Year 10.

Figure 3.11 School leavers at Year 10 or below by LGA, 2021



Source: PHIDU 2022, Torrens University Australia (June 2022), Education: People who left school at Year 10 or below, or did not go to school (2016 URP), accessed 20 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).

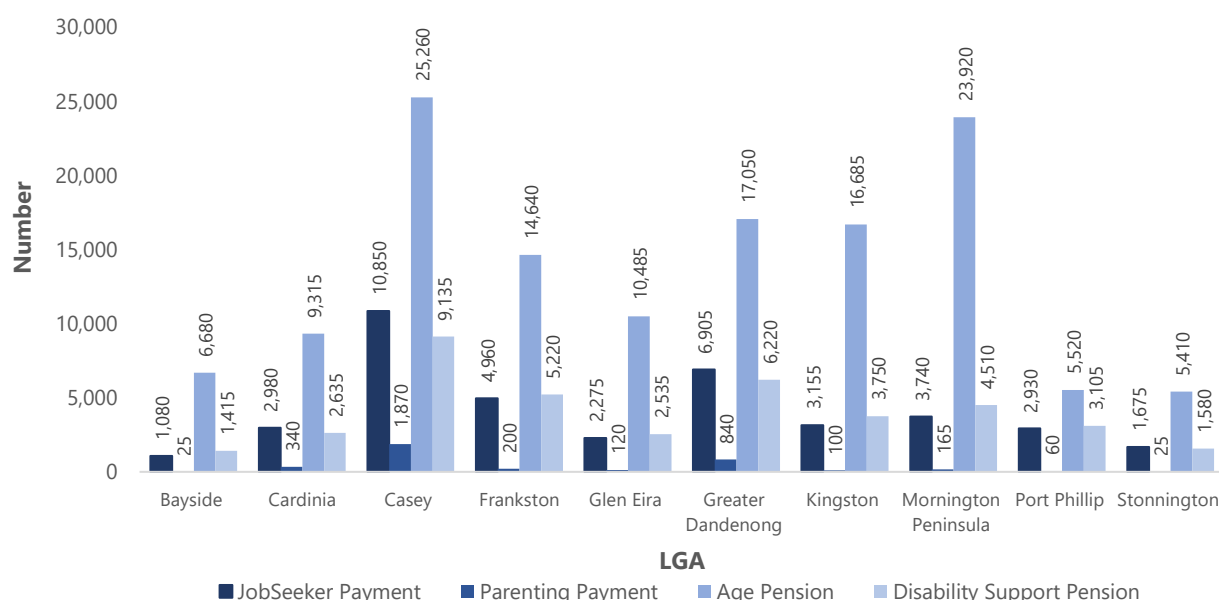


## Income support

Income support payments help with living costs and depends on life circumstances (Services Australia, 2022b). Figure 3.12 shows income support payments received by residents across LGAs in the SEMPHN catchment (Department of Social Services, 2022) (see also Appendix Table 2.1.7).

- The JobSeeker Payment is the main income support payment for recipients aged over 22 years are unemployed and looking for work, or who temporarily cannot work or study because of an injury or illness. Casey recorded highest number of people receiving JobSeeker payments in March 2023 (n=10,850; 26.8% of all people receiving Jobseeker payments in SEMPHN catchment), followed by Greater Dandenong (n=6,905, 17.0%).
- Parenting payments are available for parents unable to work full time due to caring for a young child. This provides income support for parents or guardians to help with the cost of raising children. Casey accounted for almost 50% of all people receiving parenting payments in SEMPHN catchment (n=1,870, 49.9%).
- Age pension is a support payment for both men and women who are 65 years and above. In March 2023, Casey (n=25,260) and Mornington Peninsula (n=23,920) recorded largest number of people receiving Age pensions accounting for 18.7% and 17.7% of all people receiving age pension in SEMPHN catchment.
- Disability Support Payment is an income support payment for people who are unable to work for 15 hours or more per week at or above the relevant minimum wage, independent of a Program of Support due to permanent physical, intellectual or psychiatric impairment. Largest number of people receiving disability payments were from Casey (n=9,135) and Greater Dandenong (n=6,220).

Figure 3.12 Payment recipients by payment type and LGA, March 2023



Source: DSS Payment Demographic Data 2023, Department of Social Services (March 2022), Table: LGA (extracted on 31 March 2023), accessed on 16 August 2023.

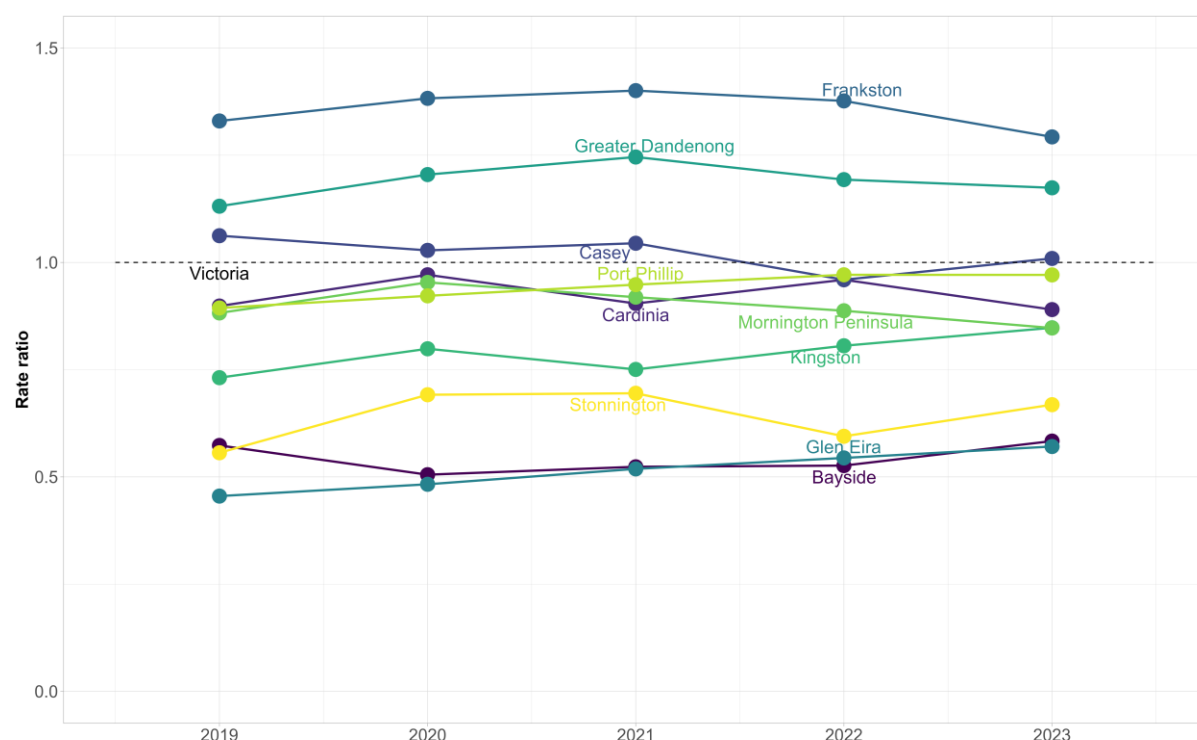
## Family and community safety

Family and community safety are important determinants of health and wellbeing. Family violence has been shown to have long-term negative effects on employment, mental health, and incarceration

rates (Caruso, 2017). Evidence suggests that women report a lower sense of safety and security than men and Australian women's perceptions of safety are among the lowest in developed countries (GIWPS, 2019).

Data from the Victorian Crime Statistics Agency displayed in Figure 3.13 shows the rate ratios of family incidents in SEMPHN LGAs compared to all of Victoria<sup>9</sup> (Crime Statistics Agency, 2023). In the year ending March 2023, compared to the rate of family incidents for Victoria (1,377.7 per 100,000), the rates for the LGAs of Frankston (1,781.0 per 100,000) and Greater Dandenong (1617.5 per 100,000) are markedly higher (1.3 times and 1.2 times respectively). Compared to Victoria, rates of family incidents in the years ending March from 2019 to 2023 have been increasing for the LGAs of Port Phillip, Cardinia, Kingston, Glen Eira and Bayside.

Figure 3.13 Rate ratios of family incidents by LGA, years ending March, 2019 to 2023

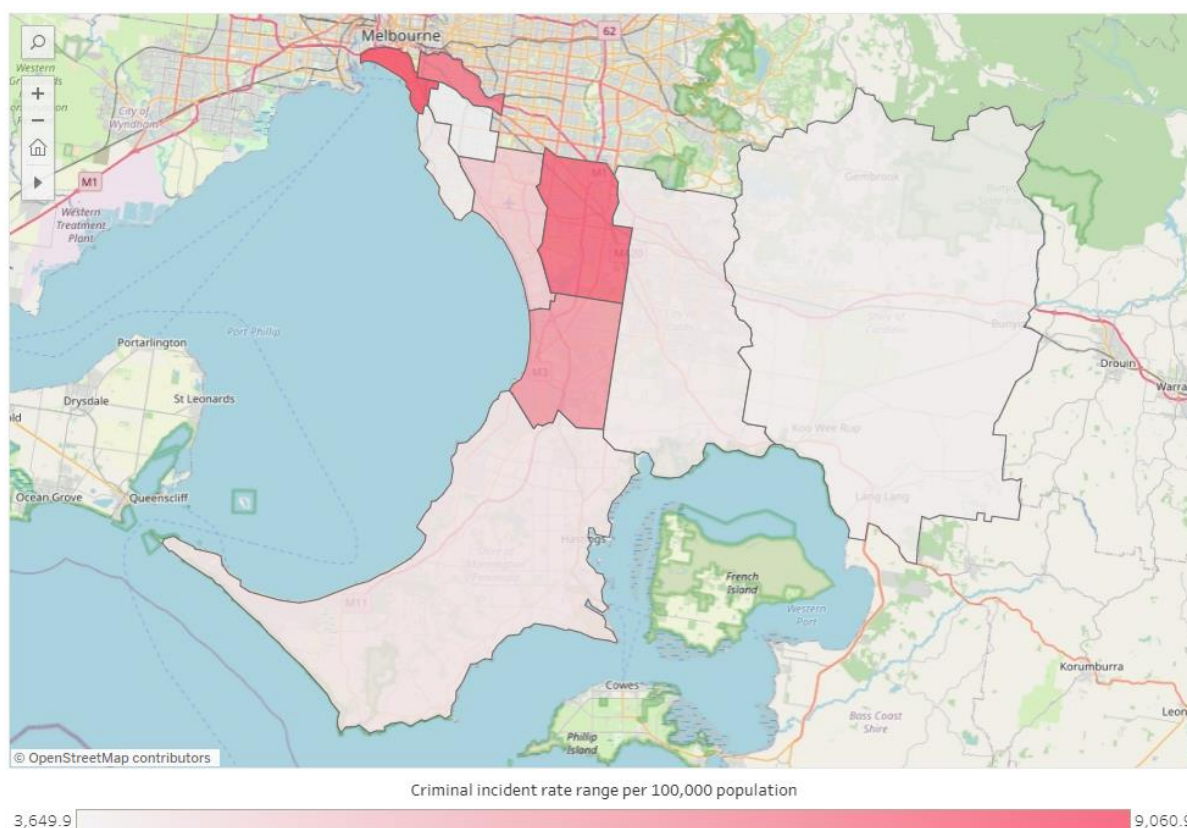


Source: Crime Statistics Agency 2023, June 2023, Table: Family Incidents Year Ending March 2023, accessed on 17 August 2023. (Crime Statistics Agency, 2023)

In the year ending March 2023, compared to the rates of criminal incidents in Victoria (5,344.6 per 100,000) and in the SEMPHN catchment (5,296.1 per 100,000), higher rates are observed in the LGAs of Port Phillip (9,060.9 per 100,000), Greater Dandenong (8356.6 per 100,000), Stonnington (7,797.1 per 100,000) and Frankston (6,695.5 per 100,000) (see Figure 3.14).

<sup>9</sup> Rate ratio was calculated by dividing rate of family incidents (per 10,000) for each LGA by total rate of family Incidents (per 10,000) for all of Victoria. If the rate ratio is 1 (or close to 1), it suggests no difference or little difference in rates (rate of family incidence is the same). A rate ratio greater than 1 suggests an increased rate of family incidents in the LGA compared to Victoria. A rate ratio lesser than 1 suggests a reduced rate in the LGA compared to Victoria.

Figure 3.14 Map of criminal incidents across SEMP HN catchment, 30 March 2023

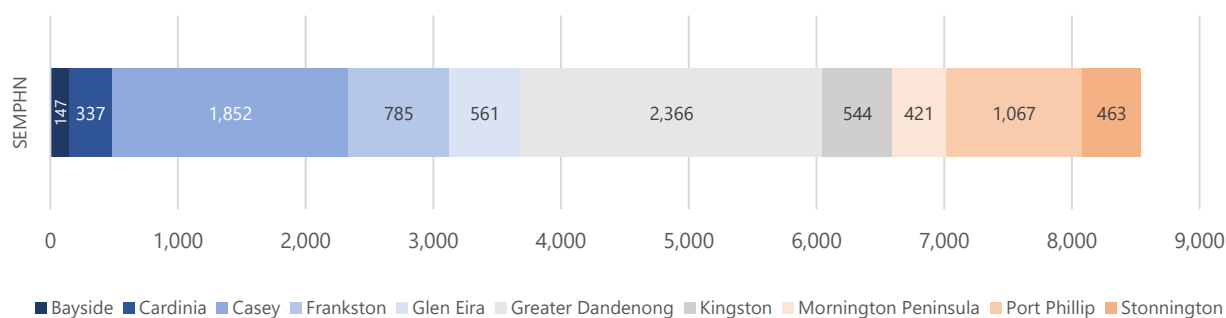


Source: Crime Statistics Agency 2023, June 2023, accessed on 17 August 2023. (Crime Statistics Agency, 2023)

## Homelessness

People may experience homelessness due to social, economic, or health-related factors (Australian Human Rights Commission, 2008). Census data from 2021 indicates that about 8,500 people (0.55%) in the SEMP HN catchment experienced homelessness. As shown in Figure 3.15, the top 3 LGAs by number of people experiencing homelessness in the SEMP HN catchment are Greater Dandenong (n=2,366), Casey (n=1,852) and Port Phillip (n=1,067). However, in terms of rates of homelessness, the LGAs with substantially higher levels of homelessness are Greater Dandenong (149.5 per 10,000) and Port Phillip (104.7 per 10,000), where rates far exceed those for the catchment (54.6 per 10,000) and for Victoria (47.1 per 10,000). As Census data is primarily self-reported data, it can be assumed that these figures are lower than true estimates of homelessness in the region. Dr Michael Fotheringham from AHURI (Parliament of Victoria, 2021) noted that homelessness is spreading beyond Melbourne CBD and is increasingly prevalent across the suburbs (Parliament of Victoria, 2021).

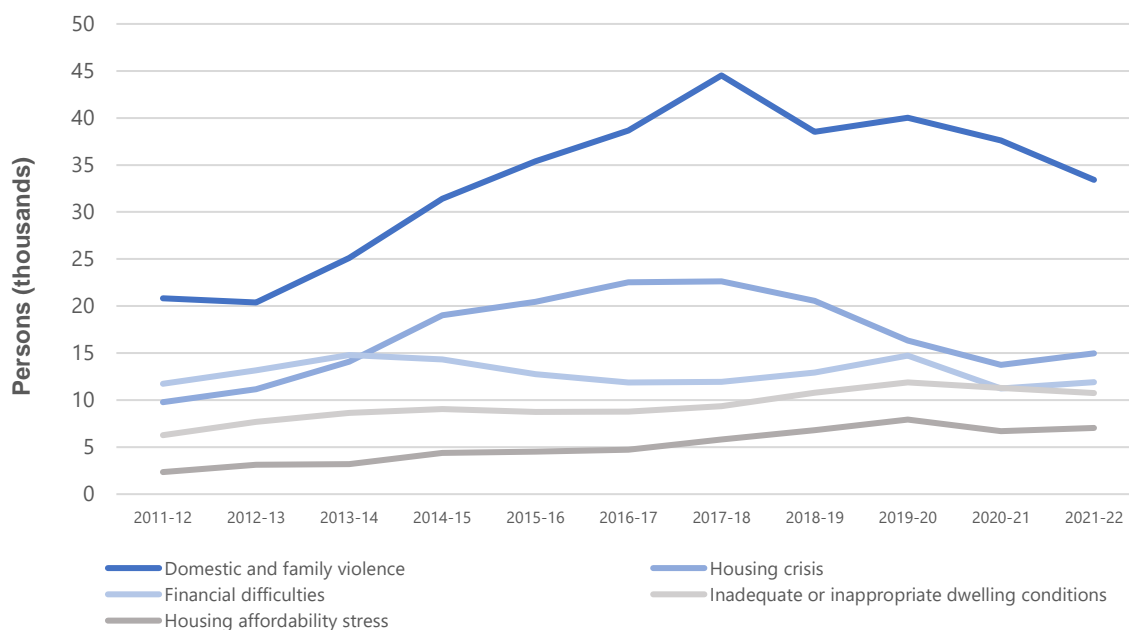
Figure 3.15 People experiencing homelessness by LGA, 2021



Source: ABS Census 2021.

Figure 3.16 shows the reasons people sought homelessness services between the years 2011–12 and 2018–19. The top three reasons were domestic and family violence, housing crisis and financial difficulties.

Figure 3.16 Main reasons for seeking assistance from homelessness services, 2011-12 to 2021-22



Source: Australian Institute of Health and Welfare, Specialist Homelessness Services Collection (SHSC) data cubes, SHSC demographics data cube. Accessed on 17 August 2023.

## Chapter 4 General population health

Australia has a growing and aging population with one of the highest life expectancies in the world, ranking fifth among Organisation for Economic Co-operation and Development (OECD) member countries<sup>10</sup>. In 2021, life expectancy at birth in Australia was 81.3 years for men and 85.4 years for women. Data from 2016 to 2020 show that the median age at death<sup>11</sup> among males in south east Melbourne was 80.6 years and among females was 85.7 years (Australian Institute of Health and Welfare, 2021e).

Nationally, chronic conditions are the leading cause of illness, disability and death; and can substantially affect a person's quality of life (AIHW, 2022c). In June 2021, nearly one in three Australians (31.7%, n=8,064,000) reported they had at least one long-term health condition (AIHW, 2022k), including mental health conditions (8.8%), arthritis (8.1%), diabetes (4.7%), heart disease (3.9%) and cancer (2.9%).

Many people with chronic conditions have comorbidities – the presence of two or more chronic conditions at the same time. There has been a 5% increase in the prevalence of Australians reporting one or more chronic condition in the last 10 years (ABS, 2018). The increase in prevalence has been attributed to several factors, including an ageing population because of longer life expectancy and increase in social and behavioural risk factors such as poor diet and physical inactivity (ABS 2018). The Australian Burden of Disease Study (Australian Institute of Health and Welfare, 2018b) has estimated that Australians lost almost 199 years of healthy life per 1,000 population due to living with illness and dying prematurely (Australian Institute of Health and Welfare, 2018b). To address this increasing burden, the National Preventive Health Strategy 2021-2030 (Department of Health, 2021), acknowledges the need to address the increasing burden of disease and reduce health inequities across population groups and the life course through prevention.

### Leading causes of death

Table 4.1 shows the top 10 leading causes of death in the SEMPHN catchment between 2017-2021. Dementia including Alzheimer's disease was the leading cause of death among females (accounting for 12.6% of all causes), while coronary heart disease was the leading cause for death among males (accounting for 12.4% of all causes). Ischemic heart diseases, and cancers in the digestive and respiratory organs are the top three causes of death in the 65+ years age group. Dementia including Alzheimer's is the leading cause of death followed by organic, including symptomatic, mental disorders<sup>12</sup> are ranked as the second leading cause of death in the 85 years and over cohort.

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<sup>10</sup> The Organisation for Economic Co-operation and Development (OECD) is an international organisation with 38 member countries. OECD works with governments, policy makers and citizens, to establish evidence-based international standards for a range of social, economic and environmental challenges.

<sup>11</sup> Median age at death is interpreted as the age at which exactly half the deaths are deaths of people above that age and half are deaths below that age. Median age at death is calculated based on the age at death in single years.

<sup>12</sup> Definition of Organic, including symptomatic, mental disorders: this classification comprises of a range of mental disorders grouped together on the basis of their having in common a demonstrable etiology in cerebral disease, brain injury, leading to cerebral dysfunction

The data show there is a substantially higher rate ratio for accidental falls compared to other causes of death. Falls are Australia's largest contributor to hospitalised injuries and a leading cause of injury deaths for the older population. In 2019–20, 42% of hospitalised injuries and 40% of injury deaths were due to falls in the older population. The SEMP HN catchment ranked fourth across all PHNs in Australia for deaths due to accidental falls among men (ASR 16.9 per 100,000) and fifth for deaths due to accidental falls among women (ASR 11.9 per 100,000).

Table 4.1 Leading causes of death in SEMP HN catchment, 2017–2021

| Cause of death   | Deaths (n) | All causes (%) | Rate (per 100,000) | Rate ratio (relative to Australia) |
|--|------------|----------------|--------------------|------------------------------------|
| Coronary heart disease (I20–I25)                                   | 4,959      | 10.50          | 48.3               | 0.89                               |
| Dementia including Alzheimer's disease (F01, F03, G30)             | 4,464      | 9.46           | 40.7               | 0.96                               |
| Cerebrovascular disease (I60–I69)                                  | 2,860      | 6.06           | 27.3               | 0.92                               |
| Lung cancer (C33, C34)   | 2,387      | 5.06           | 25.1               | 0.92                               |
| Chronic obstructive pulmonary disease (COPD) (J40–J44)             | 1,805      | 3.82           | 18.0               | 0.81                               |
| Accidental falls (W00–W19)   | 1,512      | 3.20           | 14.1               | 1.45                               |
| Colorectal cancer (C18–C20, C26.0)                                 | 1,473      | 3.12           | 15.3               | 0.90                               |
| Diabetes (E10–E14)   | 1,341      | 2.84           | 13.2               | 0.84                               |
| Heart failure and complications and ill-defined heart disease (I5. | 1,299      | 2.75           | 12.2               | 1.22                               |
| Influenza and pneumonia (J09–J18)                                  | 1,058      | 2.24           | 9.8                | 1.08                               |

Source: Australian Institute of Health and Welfare, 2021.

## Health risk factors

A person is more likely to experience poor health, disease or death, depending on the number of health risk factors they are exposed to throughout their lifetime, increasing their chances of disability or death (AIHW, 2022n). Biomedical risk factors are bodily states that impact an individual's risk of disease (e.g. blood pressure), while behaviour risk factors can be modified by the individual (e.g. diet and smoking). Table 4.2 presents the age standardised rates for selected risk factors per 100 population. It shows that there are disparities across the region for each risk factor.

- **Smoking:** The highest rates of smoking were observed in Greater Dandenong (18.9 per 100), Frankston (18.1 per 100), Cardinia (17.0 per 100) and Mornington Peninsula (16.3 per 100). These rates are above the Victorian rate (15.5 per 100).
- **Alcohol:** Most LGAs (n=7) in the SEMP HN catchment have higher rates of risky drinking compared to the Victorian rate (14.4 per 100): Mornington Peninsula (21.3 per 100), Bayside (19.5 per 100), Port Phillip (19.0 per 100), Frankston (17.2 per 100), Stonnington (7.0 per 100), Kingston (15.5 per 100) and Cardinia (15.3 per 100).
- **Fruit intake:** The low rates of fruit intake were observed in Frankston (45.5 per 100) and Cardinia (49.6 per 100). These rates were lower the Victorian rate (51.5 per 100).
- **Physical inactivity:** The highest rates of Physical inactivity, as measured by low or no exercise in the previous week, were observed in Greater Dandenong (78.2 per 100), Casey (73.6 per 100) and Frankston (68.1 per 100). These rates were much higher than the Victorian rate (64.5 per 100).

- **Obesity:** LGAs with rates of obesity higher than the Victoria rate (31.3 per 100), were Cardinia (36.7 per 100), Frankston (34.6 per 100) and Casey (34.1 per 100).
- **Blood pressure:** Rates of prevalence of high blood pressure across all SEMPHN catchment LGAs are similar to the state (22.7 per 100) and national rate (22.8 per 100).



Table 4.2 Health risk factors (modelled estimates) by LGA, 2017-18

| LGA                     | Estimated rates of current smokers | Estimated rates of adults who consumed >2 standard alcoholic drinks per day on average | Estimated rates of adults with adequate fruit intake | Estimated rates of adults with low or no exercise in the previous week | Estimated rates of adults who are obese | Estimated rates of adults with high blood pressure |
|-------------------------|------------------------------------|--|--|--|---|--|
|                         | ASR per 100                        |  |  |  |   |  |
| Bayside                 | 7.8                                | 19.5   | 54.9   | 50.2   | 21.0                                    | 21.2   |
| Cardinia                | 17.0                               | 15.3   | 49.6   | 67.7   | 36.7                                    | 23.6   |
| Casey                   | 15.1                               | 8.9  | 51.4   | 73.6   | 34.1                                    | 22.8   |
| Frankston               | 18.1                               | 17.2   | 45.5   | 68.1   | 34.6                                    | 21.8   |
| Glen Eira               | 10.4                               | 13.7   | 54.0   | 60.2   | 23.4                                    | 23.0   |
| Greater Dandenong       | 18.9                               | 5.8  | 51.6   | 78.2   | 27.9                                    | 23.5   |
| Kingston                | 13.5                               | 15.5   | 50.7   | 64.0   | 27.5                                    | 21.4   |
| Mornington Peninsula    | 16.3                               | 21.3   | 50.4   | 59.5   | 29.8                                    | 21.9   |
| Port Phillip            | 14.7                               | 19.0   | 50.7   | 54.4   | 24.9                                    | 22.3   |
| Stonnington             | 11.3                               | 17.0   | 57.2   | 51.5   | 20.0                                    | 22.1   |
| <b>SEMPHN catchment</b> | <b>14.6</b>                        | <b>14.4</b>  | <b>51.5</b>  | <b>64.5</b>  | <b>28.7</b>                             | <b>22.4</b>  |
| <b>Victoria</b>         | <b>15.5</b>                        | <b>14.4</b>  | <b>51.5</b>  | <b>65.7</b>  | <b>31.3</b>                             | <b>22.7</b>  |

Source: PHIDU (2021), Social Health Atlas of Australia: Victoria (June 2023 release). Table: Prevalence of selected health risk factors (modelled estimates)

## Chronic conditions

Chronic conditions are long term and persistent illnesses. The number of chronic conditions can be used to indicate the health status (and risk of death) of individuals. Health care can be challenging as well as extremely costly for patients with multiple comorbidities, resulting in unmet care needs and inadequate communication with care providers.

Table 4.3 shows the number of persons and age standardised rates per 1,000 people with two chronic health conditions based on ABS 2021 Census. Mornington Peninsula (75.6 per 1,000), Frankston (70.9 per 1,000), Kingston and Cardinia (56.0 per 1,000) have the highest proportion of people with comorbidities in the SEMPHN catchment and are equal to or above the Victorian rate.

Table 4.3 Rate of persons with two chronic health conditions, 2021

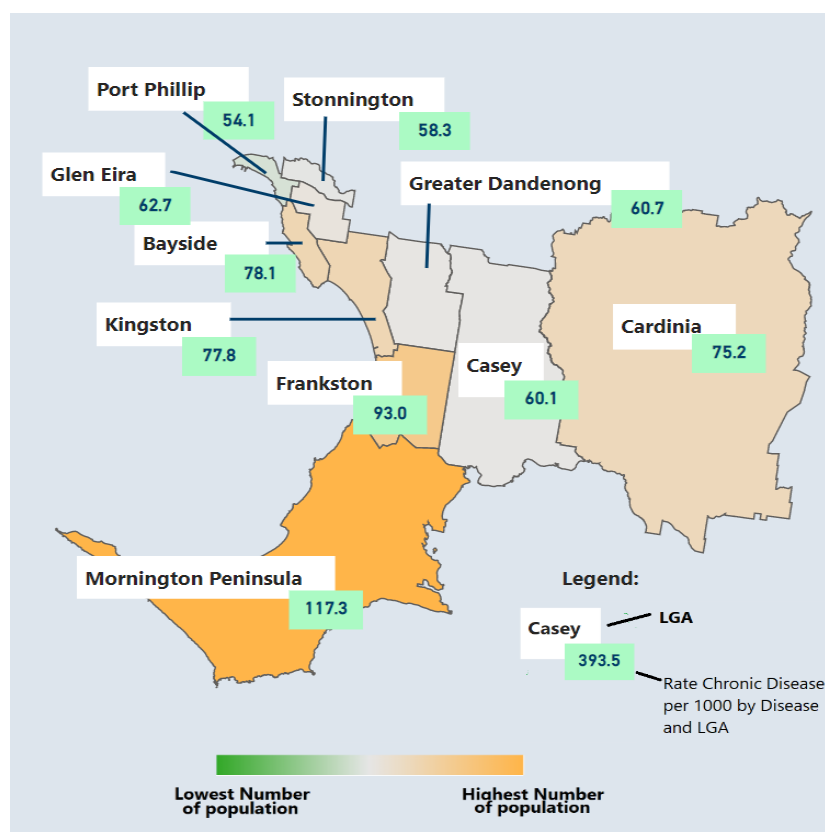
| LGA                     | Number of persons | ASR per 1,000 population |
|-------------------------|-------------------|--------------------------|
| Bayside                 | 9,099             | 52.1                     |
| Cardinia                | 11,411            | 56.0                     |
| Casey                   | 29,243            | 47                       |
| Frankston               | 18,066            | 70.9                     |
| Glen Eira               | 11,925            | 47.7                     |
| Greater Dandenong       | 12,267            | 45.7                     |
| Kingston                | 15,406            | 56.0                     |
| Mornington Peninsula    | 23,272            | 75.6                     |
| Port Phillip            | 7,942             | 46.8                     |
| Stonnington             | 7,938             | 45.3                     |
| <b>SEMPHN catchment</b> | <b>146,569</b>    | <b>54.3</b>              |
| <b>Victoria</b>         | <b>371,819</b>    | <b>57.2</b>              |

Source: Census 2021, Australian Bureau of Statistics (June 2022 release) Table G20: Count of Selected Long-Term Health Conditions by Age by Sex. Please note Monash LGA is excluded due to the small proportion of the LGA falling within the SEMPHN catchment (4%).

## Arthritis

Arthritis describes a range of inflammatory conditions affecting the bones, muscles, and joints, including osteoarthritis and rheumatoid arthritis (AIHW, 2020b). One in five Australians (22%) with arthritis experience high to very high levels of psychological distress, which is twice as likely as people without arthritis (10%) (Australian Institute of Health and Welfare, 2020a). Figure 4.1 shows that the highest rates of arthritis are observed in Mornington Peninsula (117.3 per 1,000), Frankston (93.0 per 1,000) and Bayside (78.1 per 1,000). Demographic profiling shows a higher proportion of older females living with arthritis aged between 55 – 84 years (n=52,788; 46%), compared to men (n=27,722; 25%).

Figure 4.1 Prevalence of arthritis by LGA, 2021

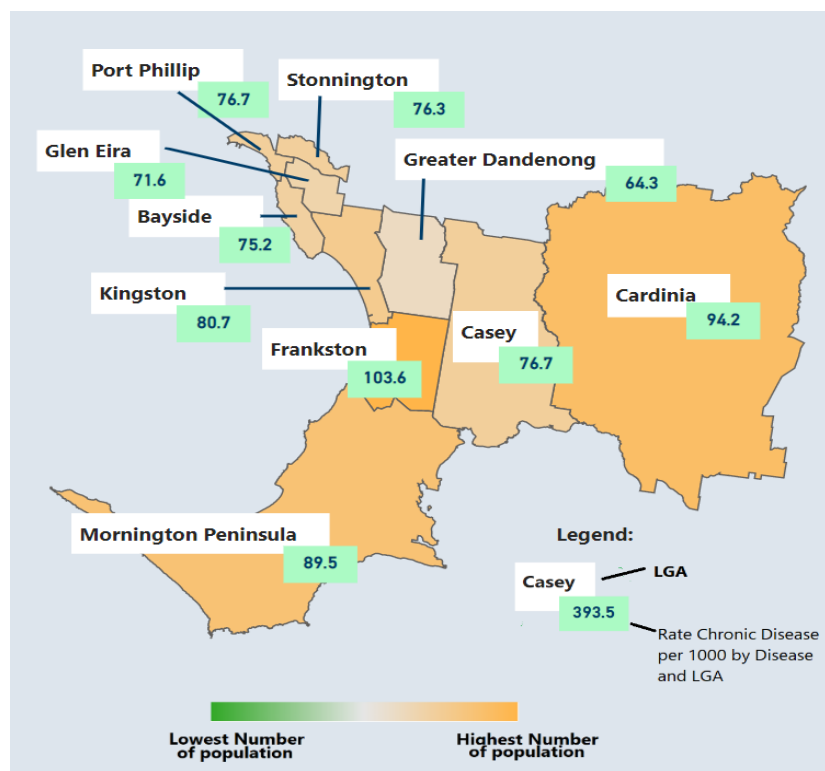


Source: Census 2021, Australian Bureau of Statistics (June 2022 release) Table G19: Type of Long-Term Health Condition by Age by Sex. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMP HN catchment (4%).

## Asthma

Asthma is a chronic respiratory condition. In Australia, around one in ten Australians (10.7%) had asthma in 2020-21. Figure 4.2 shows higher asthma rates were observed in Frankston (103.6 per 1,000) and Cardinia (94.2 per 1,000). There is a higher proportion of males aged between 0 – 14 years (n =10, 414; 8%) living with asthma in the SEMP HN catchment compared to females (n=6,616; 5%) in the same age group (ABS, 2022b). Across all other age groups, a higher proportion of women are living with asthma compared to males. Asthma was the anomaly amongst other chronic conditions reported where a very high prevalence was observed in the 0-14 years age group (n=17,030; 13%) (ABS, 2022b).

Figure 4.2 Prevalence of asthma by LGA, 2021



Source: Census 2021, Australian Bureau of Statistics (June 2022 release) Table G19: Type of Long-Term Health Condition by Age by Sex. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).

## Back pain

Around 4 million Australians (16.4%) are living with back pain (Department of Health and Aged Care, 2020a). Data collected by General Practice via POLAR indicates that within the FY 2022/23, 59,827 active patients in the region had one or more backache<sup>13</sup> diagnoses. This includes diagnoses of backache (n=41,317); lower back pain (n=14,390); chronic back pain (n=6,118); mechanical low back pain (n=1,454) and chronic lower back pain (n=815).

The most commonly diagnosed chronic conditions experienced alongside backache were mental health conditions (n=23,257, 38.9%), within which depression (n=11,965; 51.5%) and anxiety (n=9,996; 43.1%) were the most common co-occurring diagnoses; followed by cardiovascular disease (n=21,586; 36.1%);

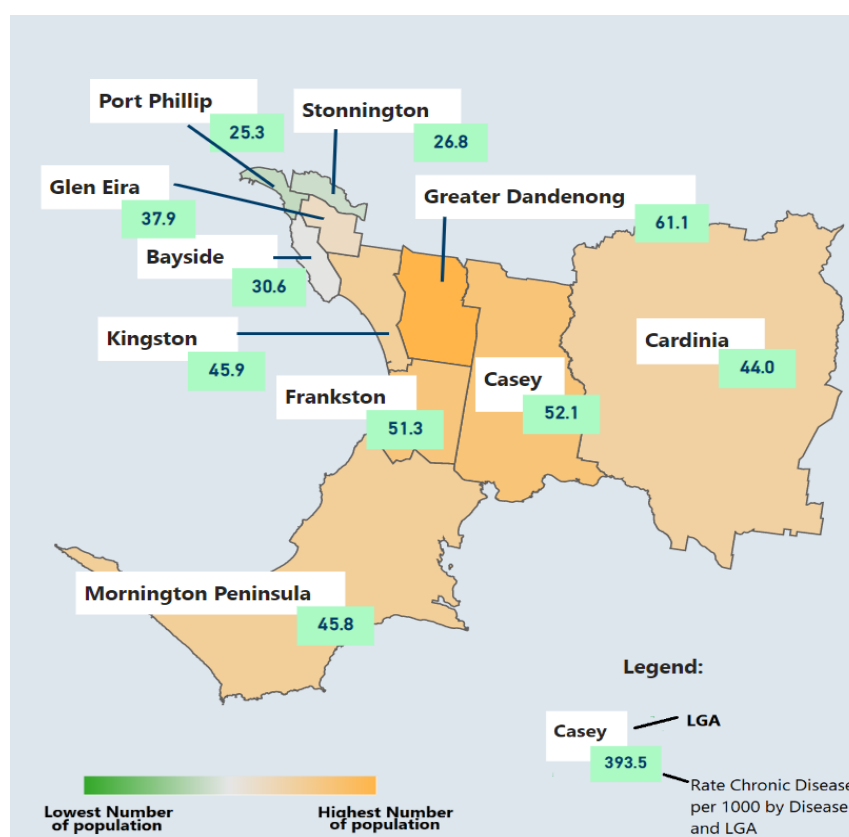
<sup>13</sup> RACGP active; Patients Status – Active; Diagnosis Filters include: chronic disease category: categories included in text; Financial Year: 2022/23 onwards; Data accessed on 3/08/2. Note: patients can have more than one diagnosis and as a result n may not sum to the total.

and respiratory conditions (n=14,741; 24.6%) of which the most common co-occurring diagnosis was asthma (n=10,449; 71.0%).

## Diabetes mellitus

Diabetes mellitus is a group of chronic diseases (Type 1, 2 and gestational) that affect how the body metabolises glucose. Type 2 diabetes is the most common type and mostly preventable chronic condition (Diabetes Australia, 2021). In 2020, approximately 1 in 20 Australians lived with diabetes (Type 1 and 2), and almost 1 in 5 older people aged 80-84 (AIHW, 2022e). National data also indicates an association between diabetes and socioeconomic indicators, suggesting that the prevalence of diabetes is twice as high in those living in the lowest socioeconomic areas (7.0%) compared with the highest socioeconomic areas (3.3%) (Abouzeid et al., 2013). Migrant groups have a higher prevalence of Type 2 diabetes than the Australian-born population, which is often attributed to genetics, lifestyle, environmental and migration-related factors (Tewari & Lin, 2019). Figure 4.3 shows that higher rates of diabetes (excluding gestational diabetes) are observed in Greater Dandenong (61.1 per 1,000), Casey (52.1 per 1,000) and Frankston (51.3 per 1,000). Gender and age distribution analysis (excluding gestational diabetes) shows that there is a higher proportion of men (n=38,145; 54%) living with diabetes compared to women (31,884; 46%) in the SEMPHN catchment. Males between 55 -84 years of age account for 38% (n=26,205) of all people living with diabetes in the region.

Figure 4.3 Prevalence of diabetes mellitus (excluding gestational diabetes) by LGA, 2021



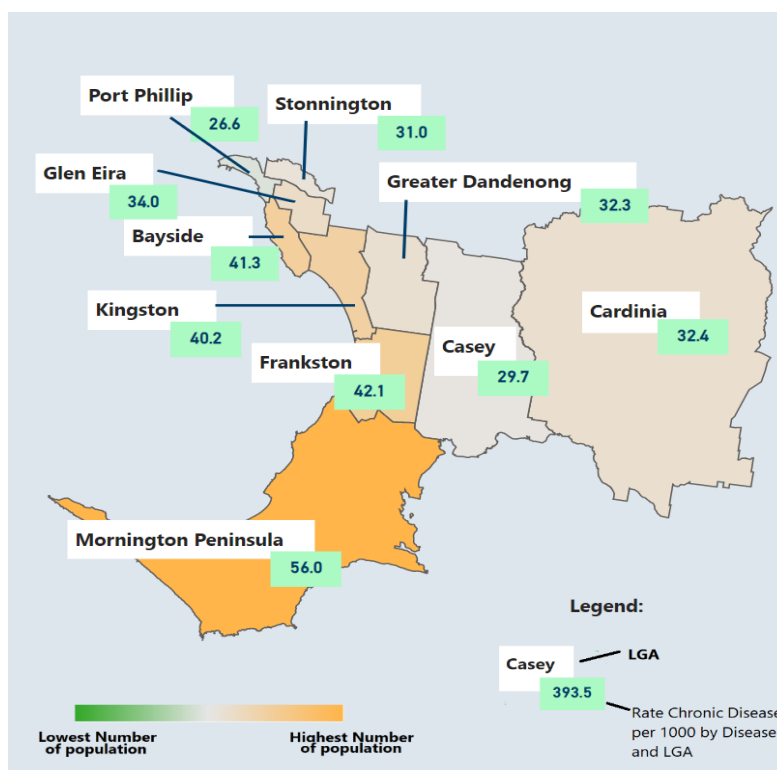
Source: Census 2021, Australian Bureau of Statistics (June 2022 release) Table G19: Type of Long-Term Health Condition by Age by Sex. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).

## Cardiovascular conditions

Cardiovascular conditions (heart, stroke and vascular disease) are a leading cause of death in Australia. In 2017-18, 6.2% of adults had one or more cardiovascular conditions (AIHW, 2021 ). There is higher prevalence of cardiovascular conditions observed in males and in First Nations peoples. Nationally, the proportion of people who report having heart, stroke and vascular disease is significantly higher among those living in the most socioeconomically disadvantaged areas than those in the least disadvantaged areas (6.4% and 4.8%, respectively).

Higher rates of cardiovascular conditions were observed in Mornington Peninsula (56 per 1,000), Frankston (42.1 per 1000) and Kingston (40.2 per 1,000). When comparing rates of strokes in SEMPHN catchment, higher rates were observed in Mornington Peninsula (13.4 per 1,000), Frankston (11.4 per 1000) and Kingston (9.8 per 1000). Higher prevalence of heart diseases was in males aged between 55-84 years (n=26,082; 47%) compared to females in the same age group (n=15,020; 26%).

Figure 4.4 Prevalence of cardiovascular conditions by LGA, 2021



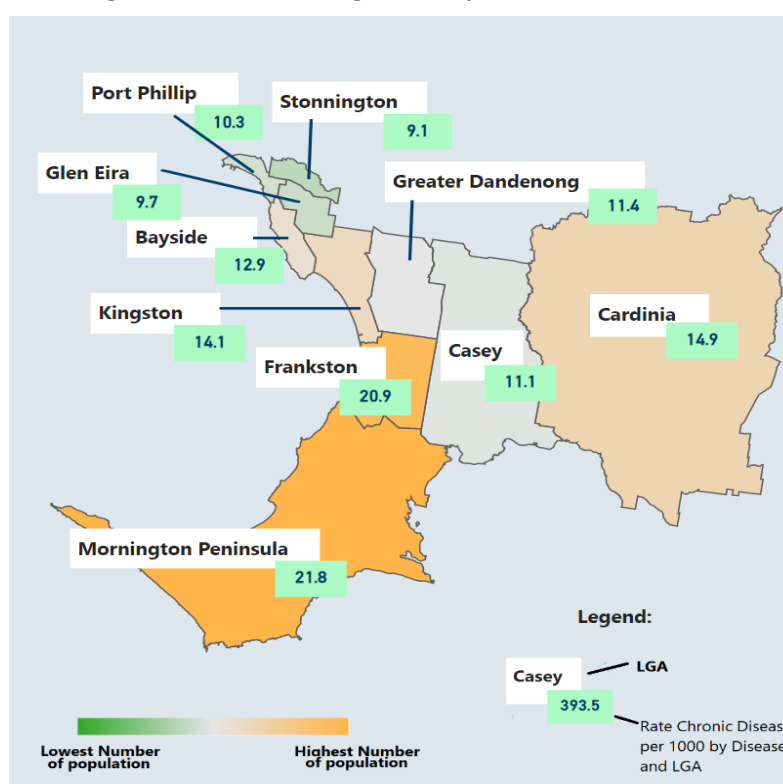
Source: Census 2021, Australian Bureau of Statistics (June 2022 release) Table G19: Type of Long-Term Health Condition by Age by Sex. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).

## Chronic Obstructive Pulmonary Disorder (COPD)

Chronic Obstructive Pulmonary Disorder (COPD) is a group of breathing-related diseases affecting the lungs, including emphysema and chronic bronchitis. COPD is more prevalent in people aged 45 years and in First Nations peoples (AIHW, 2020c). Based on national self-reported data (2018-19), 10% of First Nations peoples aged 45 and over had COPD (an estimated 17,800 people), with a higher rate among women (13%) compared with men (6.7%). The prevalence of COPD among First Nations peoples was 2.3 times as high as for non-First-Nations peoples after adjusting for the difference in age structure (ABS, 2020). Prevalence was higher in the lowest socioeconomic area than in the highest area (men 7.5% and 3.1%, respectively; women 6.6% and 4.0%, respectively) (Australian Institute of Health and Welfare, 2020b).

The estimated prevalence of chronic obstructive pulmonary disease (COPD) for the region is lower than the Victorian average, however, high prevalence (ASR per 100) was observed in Frankston, Cardinia and Port Phillip (Figure 4.5).

Figure 4.5 Prevalence of lung conditions including COPD by LGA, 2021



Source: Census 2021, Australian Bureau of Statistics (June 2022 release) Table G19: Type of Long-Term Health Condition by Age by Sex. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).

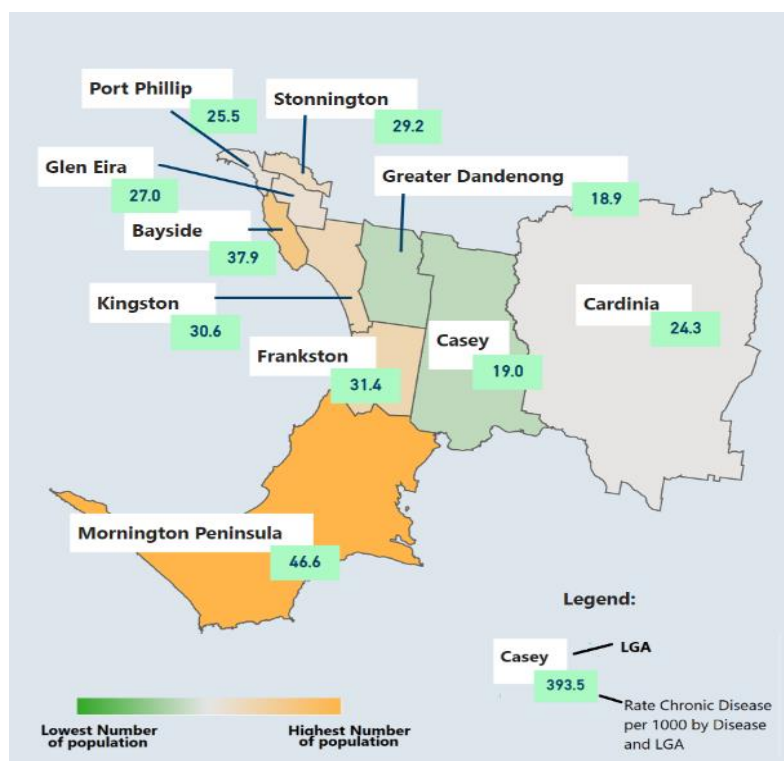
## Cancer and cancer screening

In 2020, there were 48,266 deaths from cancer in Australia (Cancer Australia, 2020). The most common cancers (excluding non-melanoma skin cancer) are prostate, breast, bowel, melanoma, and lung cancer (Cancer Council, 2021). As of 30 June 2021, 43,316 residents in the SEMPHN catchment were living with



some form of cancer, including those in remission. Of this, 22,523 (52.0%) were female. Figure 4.6 shows that higher rates were observed in Mornington Peninsula (46.6 per 1,000), Bayside (37.9 per 1,000) and Frankston (31.4 per 1,000). Gender and age analysis indicates a higher prevalence among persons between 55 and 84 years (n=12,725; 29%), and gender distribution is consistent across all age groups, with prevalence increasing across both males and females over 55 years of age.

Figure 4.6 Prevalence of cancer by LGA, 2021



Source: Census 2021, Australian Bureau of Statistics (June 2022 release) Table G19: Type of Long-Term Health Condition by Age by Sex. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).

Cancer screening programs are a way to detect cancer in the early stages and can, improve survival rates and produce better health outcomes. Australia has three national cancer screening programs:

- National Bowel Cancer Screening Program (NBCSP)
- BreastScreen Australia Program
- National Cervical Screening Program (NCSP).

Table 4.4 Cancer screening participation rates in the SEMPHN catchment by SA3, 2022

| SA3                     | Cancer screening participation  |                                  |                                    |
|-------------------------|---------------------------------|----------------------------------|------------------------------------|
|                         | Bowel cancer (%)<br>(2020-2021) | Breast cancer (%)<br>(2019-2020) | Cervical cancer (%)<br>(2018-2021) |
| Bayside                 | 49.9                            | 48.1                             | 76.9                               |
| Cardinia                | 41.7                            | 44.4                             | 58.6                               |
| Casey – North           | 40.1                            | 44.7                             | 62.8                               |
| Casey – South           | 35.9                            | 42.0                             | 57.0                               |
| Dandenong               | 38.3                            | 42.4                             | 61.2                               |
| Frankston               | 39.3                            | 41.4                             | 60.4                               |
| Glen Eira               | 42.8                            | 47.2                             | 68.3                               |
| Kingston                | 44.4                            | 47.9                             | 69.2                               |
| Mornington Peninsula    | 46.9                            | 48.7                             | 64.7                               |
| Port Phillip            | 41.2                            | 40.6                             | 70.1                               |
| Stonnington – East      | 46.7                            | 48.7                             | 70.9                               |
| Stonnington – West      | 39.6                            | 37.5                             | 73.0                               |
| <b>SEMPHN catchment</b> | <b>41.9</b>                     | <b>44.7</b>                      | <b>64.7</b>                        |
| <b>Victoria</b>         | <b>43.9</b>                     | <b>50.6</b>                      | <b>61.9</b>                        |

Source: AIHW, Cancer screening programs: quarterly data (15 July 2023), National Cancer Screening Programs participation. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).

## Bowel cancer

Bowel cancer screening participation rates have been captured for both males and females who were invited to screen during the relevant 2-year period and returned a completed screening test within that period or by 30 June of the following year. These rates have steadily increased since 2014, when participation rates increased from 37.4% (invited: 154,608 people) to 42% in 2020 (invited: 363,618). The number of SEMPHN residents who participated in the bowel screening programs in 2019-2020 (participated: 152,500) was more than double the number who participated in 2014 (participated 57,748).

The SA3 with the lowest bowel cancer screening participation rate in 2020-2021 was Casey – South (35.9%), followed by Dandenong (38.3%), and Frankston (39.3%), all below the Victorian average participation rate of 43.9%, and the national average of 41.8%

## Breast cancer

Breast cancer screening participation rates were recorded for women in the eligible population age of 50–74 years by BreastScreen Australia over two calendar years (2019-2020). There has been a slight dip since 2014-2015 where participation rates have decreased from 48.9% (invited: 187,473) to 44.7% in 2019-2020 (invited: 214,454). Despite an increase in the number of SEMPHN residents invited to participate in these screening programs since 2014, the number of women participating has increased from 91,674 in 2014, to 95,939 in 2019-2020.

The SA3s with the lowest breast cancer screening participation rates in 2019-2020 were Stonnington – West (37.5%) followed by Port Phillip (40.6%), and Frankston (41.4%), which were all below the Victorian average participation rate of 43.9%, and the national average of 49.9%.

## Cervical cancer

Cervical cancer screening rates were measured for women in the eligible population (women aged 25-75 years) who had a least one cervical screening test (primary screening or 12-month repeat HPV test) from 2018 to 2021. Fewer than half of the SA3s comprising the SEMPHN catchment reported participation rates higher than the Victorian Average of 69.1%. SA3s reporting the lowest participation rates for 2018-2021 were Casey – South (57.0%), Cardinia (58.6%), and Frankston (60.4%)

## Immunisation

Immunisation protects against communicable diseases (Australian Institute of Health and Welfare, 2021b). Children who do not receive complete and timely vaccinations are at risk of contracting vaccine-preventable diseases and the short and long-term health consequences. Victorian coverage rate for one-year-olds sits just below the 95% target (93.8% as on 30 June 2023). Nationally, no state or territory has coverage rates for two-year-olds above the target rate of 95% - Victoria's rate on 30 June 2023 was 91.9%. The Victorian coverage rate for five-year-olds sits marginally below the target rate of 95% (94.9% as on 30 June 2023) (Australian Department of Health, 2021).

Childhood immunisation rates in the SEMPHN catchment are lower than state averages (see Table 4.5). Children living in areas of the least socioeconomic disadvantage were slightly more likely to be fully immunised at age two compared to those living in the greatest disadvantage areas (91% compared with 89%).

Table 4.5 Immunisation coverage for children as at 30 June 2023

| Immunisation rates for vaccines in the national schedule | SEMPHN catchment (%) | Victoria (%) | National (%) |
|--|----------------------|--------------|--------------|
| 1 year   | 93.8                 | 93.8         | 93.4         |
| 2 years  | 91.7                 | 91.9         | 91.4         |
| 5 years  | 94.7                 | 94.9         | 94.1         |

Source: Australian immunisation Register, 2023

## Maternal and child health

### Fertility

In 2021, Victoria's fertility rate<sup>14</sup> was approximately 1.52 babies per woman, below the Australia-wide total fertility rate (TFR) of 1.70. In 2019, the TFR for Aboriginal and Torres Strait Islander mothers was 2.32 babies per woman. Since 1976, the TFR for Australia has been below replacement level (insufficient to replace the woman and her partner). The TFR required for replacement is currently considered to be around 2.1 babies per woman. There were 75,363 births registered in Victoria in 2021, women aged 30-34 years continue to have the highest fertility rate, followed by women aged 25-29 years (Women's Health

<sup>14</sup> The Total Fertility Rate (TFR) measures the average number of babies born to a woman throughout her reproductive lifetime.

Atlas, 2020). Half of the LGAs in the SEMPHN catchment had fertility rates higher than the Victoria average (1.53) (Table 4.6).

Table 4.6 Number of births and fertility rates by LGA, 2021

| LGA                  | Estimated resident population | Number of births | Age-specific fertility rate <sup>15</sup> |
|----------------------|-------------------------------|------------------|---|
| Bayside              | 10,7541                       | 851              | 1.54                                      |
| Cardinia             | 116,193                       | 1,792            | 1.90                                      |
| Casey                | 364,600                       | 5,464            | 1.87                                      |
| Frankston            | 143,338                       | 1,727            | 1.72                                      |
| Glen Eira            | 158,216                       | 1,673            | 1.38                                      |
| Greater Dandenong    | 168,362                       | 1,946            | 1.63                                      |
| Kingston             | 167,293                       | 1,667            | 1.55                                      |
| Mornington Peninsula | 168,862                       | 1,479            | 1.75                                      |
| Port Phillip         | 116,476                       | 1,089            | 1.02                                      |
| Stonnington          | 118,614                       | 998              | 0.97                                      |
| <b>Victoria</b>      | <b>6,694,884</b>              | <b>75,363</b>    | <b>1.52</b>                               |

Source: PHIDU, Total fertility rate (2021)

### Smoking during pregnancy

Overall, a lower proportion of women smoked during pregnancy across the SEMPHN catchment compared to the Victorian average (6.1 compared with 7.0 per 100), however there are SA3s within the SEMPHN catchment where rates are substantially higher, for example, Cardinia (9.7 per 100), Frankston (9.6 per 100), and Casey – North (8.6 per 100) (Table 4.7).

<sup>15</sup> The age-specific fertility rate (ASFR) is the number of live births (registered) during the calendar year, according to the age of the mother, per 1,000 of the female estimated resident population of the same age at 30 June. The 2020 release is the most recent data release made available by ABS.

Table 4.7 Women who smoked while pregnant by SA3, 2021

| SA3                     | Smoked during the first 20 weeks of pregnancy (n) | Women who gave birth (n) | Smoked during the first 20 weeks (%) |
|-------------------------|---|--------------------------|--------------------------------------|
| Bayside                 | 13  | 847                      | 1.5                                  |
| Cardinia                | 186   | 1,908                    | 9.7                                  |
| Casey – North           | 139   | 1,609                    | 8.6                                  |
| Casey – South           | 334   | 4,170                    | 8.0                                  |
| Frankston               | 177   | 1,848                    | 9.6                                  |
| Glen Eira               | 24  | 1,776                    | 1.4                                  |
| Greater Dandenong       | 134   | 2,369                    | 5.7                                  |
| Kingston                | 38  | 1,362                    | 2.8                                  |
| Mornington Peninsula    | 106   | 1,515                    | 7.0                                  |
| Port Phillip            | 37  | 1,160                    | 3.2                                  |
| Stonnington – East      | n.p.  | 407                      | n.p.                                 |
| Stonnington – West      | 8   | 618                      | 1.3                                  |
| <b>SEMPHN catchment</b> | 1,198   | 19,589                   | 6.1                                  |
| <b>Victoria</b>         | <b>5,525</b>                                      | <b>79,363</b>            | 7.0                                  |

AIHW (Australian Institute of Health and Welfare). National Perinatal Data Collection (NPDC) 2021, Table 5.9: Women who gave birth, who smoked tobacco during the first 20 weeks of pregnancy, by Statistical Area Level 3 of mother's usual residence, 2021.

## Antenatal care

The care a mother receives while pregnant (antenatal care) is associated with better outcomes for both mother and baby. Regular antenatal care in the first trimester is associated with better maternal health, fewer interventions in late pregnancy and positive child health outcomes. Across south east Melbourne, most mothers (93.1%) who gave birth in 2021 attended five or more antenatal visits, with the lowest proportions observed in Mornington Peninsula (59.3%) and Frankston (55.5%) (Australian Institute of Health and Welfare, 2020c) (Table 4.8) .

Table 4.8 Women who attended 5 or more antenatal visits by SA3, 2021

| SA3                     | Number                     |                            | Percent                    |
|-------------------------|----------------------------|----------------------------|----------------------------|
|                         | 5 or more antenatal visits | Total women who gave birth | 5 or more antenatal visits |
| Bayside                 | 778                        | 826                        | 94.2                       |
| Cardinia                | 1,835                      | 1,876                      | 97.8                       |
| Casey – North           | 1,537                      | 1,575                      | 97.6                       |
| Casey – South           | 3,676                      | 4,030                      | 91.2                       |
| Frankston               | 926                        | 1,669                      | 55.5                       |
| Glen Eira               | 1,691                      | 1,746                      | 96.8                       |
| Greater Dandenong       | 593                        | 616                        | 96.3                       |
| Kingston                | 1,113                      | 1,282                      | 86.8                       |
| Mornington Peninsula    | 861                        | 1,451                      | 59.3                       |
| Port Phillip            | 1,094                      | 1,142                      | 95.8                       |
| Stonnington – East      | 391                        | 398                        | 98.2                       |
| Stonnington – West      | 593                        | 616                        | 96.3                       |
| <b>SEMPHN catchment</b> | 16,737                     | 18,933                     | 88.4                       |
| <b>Victoria</b>         | <b>72,853</b>              | <b>78,288</b>              | <b>93.1</b>                |

Source: AIHW (Australian Institute of Health and Welfare). National Perinatal Data Collection (NPDC) 2021, Table 5.7: Women who gave birth, who attended 5 or more antenatal visits(a), by Statistical Area Level 3 of mother's usual residence, 2021

The National Institute of Health and Clinical Excellence (NICE) guidelines suggest that the first antenatal visit occurs before 10 weeks of pregnancy. This also allows arrangements to be made for tests that are most effective early in the pregnancy (e.g., gestational age assessment, testing for chromosomal anomalies) (Department of health and Aged Care, 2021a). However, additional data suggests that only 86.2% (16,062) of women in SEMPHN catchment who gave birth attended an antenatal visit in the first trimester (less than 14 weeks). The lowest rates were observed in Port Phillip (n=861, 73.8%) and Stonnington (West) (n=514, 82.0%).

### Mothers who gave birth aged under 20 years

Teenage pregnancy rates are declining across Australia. This decrease has been attributed to greater personal control over fertility rather than an increase in terminations (Marino et al. 2016). From 2005 to 2015, there has also been a change in the age distribution of teenage mothers. The proportion of mothers aged 16 decreased from 8.7% to 6.9% while the proportion of mothers aged 19 increased from 42% to 46% (AIHW 2018). For calendar year 2021, the overall rate of teenage pregnancies was 3.3 births per 1,000 teenage mothers in the SEMPHN catchment. Pockets of higher rates are observed in Greater Dandenong reporting 7.3 births per 1,000, followed by Casey – South and Cardinia (5.4 births per 1,000). Data in several LGAs have not been published due to low numbers and concerns about maintaining confidentiality and potential data quality (Table 4.9).

Table 4.9 Teenage mothers aged 15–19 years by SA3, 2021

| SA3  | Teenage mothers (n) | Females aged 15–19 years (n) | Births per 1,000 teenage mothers |
|--|---------------------|------------------------------|----------------------------------|
| Bayside  | n.p.                | 3,406                        | n.p.                             |
| Cardinia   | 19                  | 3,535                        | 5.4                              |
| Casey – North  | 15                  | 4,349                        | 3.4                              |
| Casey – South  | 38                  | 7,062                        | 5.4                              |
| Frankston  | 19                  | 3,743                        | 5.1                              |
| Glen Eira  | n.p.                | 4,315                        | n.p.                             |
| Greater Dandenong  | 29                  | 5,124                        | 5.7                              |
| Kingston   | n.p.                | 3,397                        | n.p.                             |
| Mornington Peninsula   | 18                  | 4,656                        | 3.9                              |
| Port Phillip   | n.p.                | 1,653                        | n.p.                             |
| Stonnington – East   | 0                   | 1,355                        | 0.0                              |
| Stonnington – West   | n.p.                | 1,126                        | n.p.                             |
| <b>SEMPHN catchment</b>  | 146                 | 43,721                       | 3.3                              |
| n.p. not publishable because of small numbers, confidentiality, or other concerns about the quality of the data. Data was not summarised at state level. |                     |                              |                                  |

Source: AIHW (Australian Institute of Health and Welfare). National Perinatal Data Collection (NPDC) 2021, Table 5.10: Teenage mothers who gave birth, aged between 15 and 19, by Statistical Area Level 3 of mother's usual residence, 2021

## Low birth weight

Low birth weight is a key indicator of a baby's immediate health and a determinant of their future health. Low birth weight babies (weight at birth is less than 2.5 kilograms), are at higher risk of complications in infancy or are more likely to die. Long-term health effects can include poor cognitive development and risk of developing chronic diseases later in life.

In 2021, 6.3% (n=1,206) of total births in the SEMPHN catchment (n=19,796) had low birthweight. Higher proportions of low birthweight births were observed in Greater Dandenong (7.8%, n=185), followed by Casey – South (7.0%, n=294) and Mornington Peninsula (6.9%, n=107) (Table 4.10).



Table 4.10 Low birthweight births, by SA3, 2021

| SA3  | Low birthweight births (n) | Total births (n) | Low birthweight births (%) |
|--|----------------------------|------------------|----------------------------|
| Bayside  | 47                         | 869              | 5.4                        |
| Cardinia   | 102                        | 1,912            | 5.3                        |
| Casey – North  | 103                        | 1,619            | 6.4                        |
| Casey – South  | 294                        | 4,189            | 7.0                        |
| Frankston  | 98                         | 1,872            | 5.2                        |
| Glen Eira  | 87                         | 1,794            | 4.8                        |
| Greater Dandenong  | 185                        | 2,386            | 7.8                        |
| Kingston   | 62                         | 1,375            | 4.5                        |
| Mornington Peninsula   | 107                        | 1,559            | 6.9                        |
| Port Phillip   | 71                         | 1,177            | 6.0                        |
| Stonnington – East   | 18                         | 413              | 4.4                        |
| Stonnington – West   | 32                         | 631              | 5.1                        |
| <b>SEMPHN catchment</b>  | 1,206                      | 19,796           | 6.1                        |
| <b>n.p.</b> not publishable because of small numbers, confidentiality, or other concerns about the data quality. Data was not summarised at state level. |                            |                  |                            |

Source: AIHW (Australian Institute of Health and Welfare). National Perinatal Data Collection (NPDC) 2021, Table 5.11: Low birthweight live births, by Statistical Area Level 3 of mother's usual residence, 2021

## Unplanned service utilisation

### Emergency department presentations

Table 4.11 shows that Frankston (28,980.9 per 100,000), Cardinia (26,425.1 per 100,000), and Mornington Peninsula (26,604.5 per 100,000) have high rates of total emergency department presentations compared to other LGAs across the region and above the Victorian rate. Stonnington has the catchment's lowest rates of emergency department presentations (14,719.8 per 100,000) followed by Glen Eira (16,166.8 per 100,000).

### Circulatory diseases

Rates (ASR per 100,000) for ED presentations for diseases of the circulatory system are higher than the Victorian rate in Cardinia (1,825.3 per 100,000) followed by Casey (1,660.1 per 100,000), and Frankston (1,326.2 per 100,000) compared to Victoria (1,183.8 per 100,000).

### Respiratory diseases

Rates (ASR per 100,000) for ED presentations for diseases of the respiratory system are higher than the Victorian rate in Frankston (1,977.2 per 100,000), followed by Mornington Peninsula (1,878.8 per 100,000) and Cardinia (1,825.3 per 100,000), compared to Victoria (1,872.4 per 100,000).

Table 4.11 Emergency department presentations by LGA, 2019-2020

| LGA                  | Resuscitation presentations |                 | Emergency presentations |                 | Urgent presentations |                 | Semi-urgent presentations |                 | Total presentations to the emergency department |                 |
|----------------------|-----------------------------|-----------------|-------------------------|-----------------|----------------------|-----------------|---------------------------|-----------------|---|-----------------|
|                      | (n)                         | ASR per 100,000 | (n)                     | ASR per 100,000 | (n)                  | ASR per 100,000 | (n)                       | ASR per 100,000 | (n)   | ASR per 100,000 |
| Bayside              | 97                          | 85.3            | 2,714                   | 2,414.8         | 8,314                | 7,646.8         | 7,904                     | 7,473.7         | 19,918  | 18,455.2        |
| Cardinia             | 152                         | 146.0           | 5,410                   | 5,043.2         | 13,491               | 12,162.8        | 9,271                     | 8,007.5         | 29,721  | 26,425.1        |
| Casey                | 410                         | 127.8           | 15,770                  | 4,752.6         | 38,226               | 11,074.4        | 25,045                    | 6,895.3         | 83,082  | 23,654.0        |
| Frankston            | 288                         | 200.7           | 8,047                   | 5,576.9         | 18,650               | 12,994.5        | 12,545                    | 8,774.0         | 41,542  | 28,980.9        |
| Glen Eira            | 141                         | 90.5            | 3,762                   | 2,423.8         | 10,778               | 6,888.3         | 9,175                     | 5,842.7         | 25,328  | 16,166.8        |
| Greater Dandenong    | 262                         | 157.6           | 6,846                   | 4,112.8         | 17,038               | 10,069.3        | 12,523                    | 7,358.4         | 38,664  | 22,849.7        |
| Kingston             | 185                         | 107.7           | 5,888                   | 3,447.7         | 15,082               | 8,938.1         | 11,910                    | 7,175.2         | 34,539  | 20,584.2        |
| Mornington Peninsula | 284                         | 146.7           | 8,809                   | 4,687.2         | 20,214               | 11,265.9        | 15,320                    | 9,111.6         | 46,629  | 26,604.5        |
| Port Phillip         | 139                         | 124.4           | 2,572                   | 2,306.7         | 10,036               | 8,940.9         | 10,210                    | 9,078.7         | 25,159  | 22,316.1        |
| Stonnington          | 98                          | 81.7            | 1,935                   | 1,658.2         | 7,074                | 5,984.6         | 6,720                     | 5,752.4         | 17,330  | 14,719.8        |
| <b>Victoria</b>      | <b>10,935</b>               | <b>165.4</b>    | <b>231,589</b>          | <b>3,503.6</b>  | <b>670,806</b>       | <b>10,101.9</b> | <b>626,977</b>            | <b>9,424.3</b>  | <b>1,659,943</b>                                | <b>24,988.6</b> |

Source: PHIDU, Torrens University 2023, Social Health Atlas of Australia, Table: Emergency department presentations, by triage category; Emergency department presentations, by principal diagnosis

## Hospital admissions

Table 4.12 shows that hospital admission rates vary across LGAs. Of note,

- the rate of hospital admissions in the region for chronic disease mirrors that of Victoria. However, there is a higher admissions rate in the cluster of LGAs in the outer south-eastern area. These areas are frequently identified as having a higher prevalence of morbidity and risk factors within their population. Admissions (ASR per 100,000) for total chronic conditions for all hospitals in 2018-19 were highest in Casey (1,974.7 per 100,000), Frankston (1,897.1 per 100,000) and Cardinia (1,825.9 per 100,000).
- admissions for vaccine-preventable conditions in Greater Dandenong are almost twice the Victorian rate. Admissions in 2018-19 for all hospitals (ASR per 100,000) were highest in Greater Dandenong (494.2 per 100,000), Casey (283.1 per 100,000) and Port Phillip (264.0 per 100,000).
- hospital admissions for potentially preventable conditions are higher in Frankston (3,677.3 per 100,000), Casey (3,397.9 per 100,000), Greater Dandenong (3,349.1 per 100,000) and Cardinia (3,325.2 per 100,000) – which are above the Victorian rate.

Table 4.12 Hospital admissions by LGA, 2019-20

| LGA                  | Hospital admissions for chronic conditions |                 | Hospital admissions for vaccine-preventable conditions |                 | Hospital admissions for potentially preventable conditions |                 |
|----------------------|--|-----------------|--|-----------------|--|-----------------|
|                      | (n)  | ASR per 100,000 | (n)  | ASR per 100,000 | (n)  | ASR per 100,000 |
| Bayside              | 622  | 499.2           | 152  | 130.2           | 1,419  | 1,344.9         |
| Cardinia             | 1,282                                      | 1,361.4         | 180  | 175.6           | 2,539  | 2,642.7         |
| Casey                | 4,173                                      | 1,485.8         | 699  | 224.4           | 7,954  | 2,723.4         |
| Frankston            | 1,859                                      | 1,287.4         | 245  | 168.9           | 3,478  | 2,621.7         |
| Glen Eira            | 1,150                                      | 754.1           | 272  | 177.1           | 2,341  | 1,684.7         |
| Greater Dandenong    | 2,230                                      | 1,397.0         | 726  | 444.3           | 4,413  | 2,941.9         |
| Kingston             | 1,553                                      | 875.2           | 317  | 182.5           | 3,079  | 1,958.8         |
| Mornington Peninsula | 1,973                                      | 872.2           | 255  | 125.6           | 3,809  | 2,066.6         |
| Port Phillip         | 872  | 870.7           | 283  | 260.8           | 2,021  | 2,062.9         |
| Stonnington          | 598  | 524.4           | 145  | 126.1           | 1,282  | 1,233.1         |
| <b>Victoria</b>      | <b>74,492</b>                              | <b>1,141.0</b>  | <b>13,844</b>  | <b>208.8</b>    | <b>142,102</b>   | <b>2,162.5</b>  |

Source: PHIDU, Torrens University 2021, Social Health Atlas of Australia, Table: Admissions by principal diagnosis – Persons;  
Potentially preventable hospitalisations – Vaccine-preventable condition

## After hours

SEMPHN commissions accredited general practices across the SEMPHN catchment to extend their opening hours on weekdays and weekends. After-hours primary care, particularly through general practices, offer an alternative for individuals who require medical assistance outside of typical business hours other than the public hospital emergency department, which may result in a better continuity of care delivered by an individual's regular general practitioner (GP) and reduce demand on emergency services. Most recent Medicare Benefits Schedule (MBS) data (2018-19) indicated that just under 30% of SEMPHN residents had received a Medicare-subsidised after-hours GP attendance, the fifth highest proportion of all PHNs.

In 2023, SEMPHN undertook an after-hours needs assessment to evaluate the current state of after-hours service availability, population need, unmet demand, and the current patient journey involved in accessing these services. Two population demographics, parents with young children (under the age of 9 years) and individuals over the age of 75 years (particularly those living alone) were identified as substantial utilisers of primary care services and/or hospital emergency departments during the after-hours period. In addition to this, several populations were identified based on potential challenges and barriers that impacted their after-hours patient journey such as refugees/asylum seekers, culturally and linguistically diverse (CALD) communities, First Nations people, and people experiencing homelessness. GP practice data accessed through POLAR indicated that the post-work period (e.g., 6-8 pm) was the busiest after-hours period with a large proportion of all after-hours GP activities occurring within these hours.

SEMPHN funds accredited general practices across the SEMPHN catchment to increase and sustain effective and accessible face-to-face primary care (GP and Registered Nursing services). Analysis of a consumer experience survey of after-hours clinics conducted in 2022 (SEMPHN, 2022a), identified that most consumers preferred access to after-hours clinics during weekdays (645, 78.5%); with 385 (42.8%) preferring to access clinics before or after business hours during the week. Just over 30% (n=271), accessed the clinics for urgent treatment, followed by 19.8% (n=177) accessing clinics for regular care or follow up. Across all consumers surveyed, 42.1% (n=375), identified after-hours clinics as their regular GP. Almost one in two (48.5%) consumers had stated they had no out of pocket expenses, making these services affordable and accessible. However, 30.2% (n=269) identified consultation fees as a challenge, followed by the cost of medication (n=93, 10.4%). Although often recognised as a challenge, travel costs were identified by only 11 (1.2%) consumers as a challenge to accessing care.

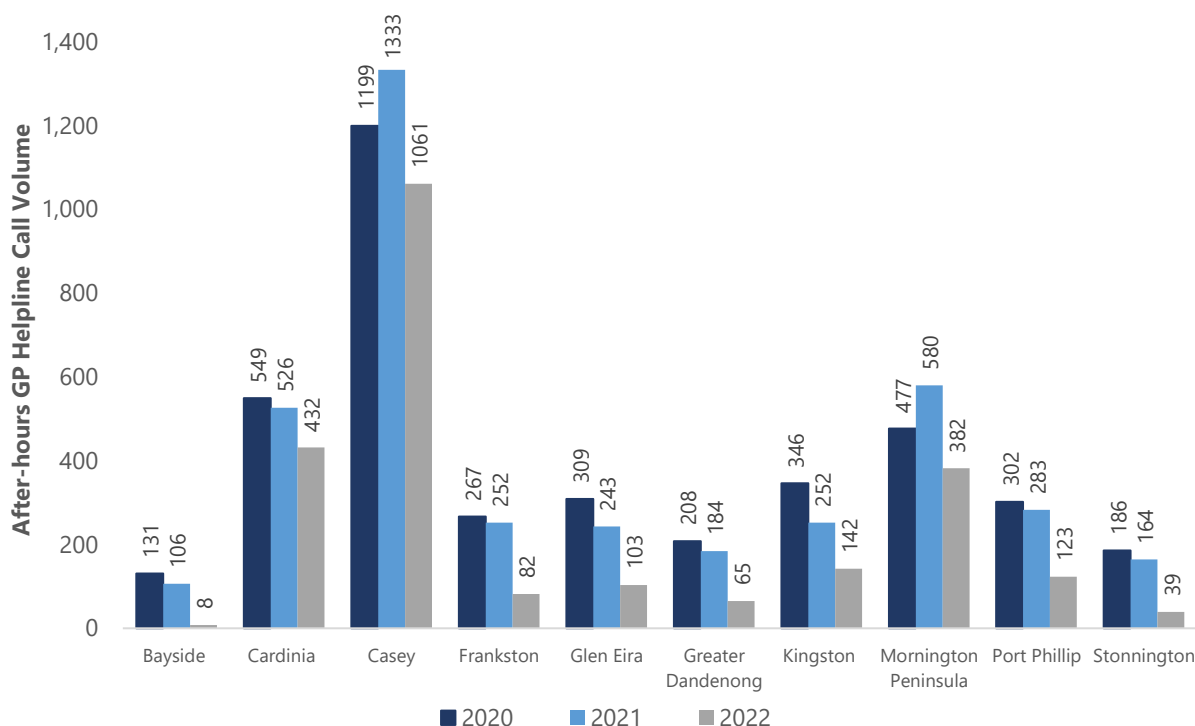
## HealthDirect Helplines

The nurse-on-call (nurse triage) and after-hours GP helplines are 24/7 telehealth avenues provided by Health Direct for patients to contact a registered nurse or general practitioner to discuss, in real-time, health-related issues. The patient is then assessed/triaged by a nurse, and either transferred to an on-call general practitioner and/or recommended a course of action (e.g., attend the emergency department, call 000, after-hours GP consultation, and next-day GP consultation). Utilisation of these helplines varied across the SEMPHN catchment and patient demographics such as age, sex/gender, and cultural background. Call volume to both the nurse triage and after-hours GP helplines remained stable or experienced a marginal growth year-on-year between 2016 and 2022, perhaps due to increasing awareness around their presence and improved capacity during and post COVID-19.

## After Hours GP Helpline

Between January and September 2022, there were 2,443 calls to the after-hours GP helpline from postal areas present within the SEMPHN catchment, which was a 12.3% decrease from the same period in 2021, potentially because of the post COVID-19 environment where patients can access face-to-face GP services. Figure 4.7 illustrates the volume of calls to the after-hours GP helpline from the LGAs within SEMPHN.

Figure 4.7 After-hours GP helpline calls by LGA and year.



Casey experienced the largest call volume of any LGA across 2020, 2021, and 2022 reflecting its position as the most populous region within SEMPHN with the highest proportion of young families with children under the age of 9 years, a demographic which made up approximately 30% of the call volume to the after-hours GP helpline between January 2020 and September 2022. This was followed by Cardinia and Mornington Peninsula. The largest decreases in call volumes between years were observed in the inner-metro LGAs of Bayside, Stonnington and Frankston. It is worthwhile noting that Greater Dandenong recorded substantially fewer calls per 1,000 residents (0.8 per 1,000) when compared to neighbouring regions such as Casey (3.7 per 1,000), Kingston (1.5 per 1,000) and Frankston (1.2 per 1,000).

## Chapter 5 Mental health

Mental health is ‘a state of wellbeing in which every individual realises their own potential, can cope with the normal stressors of life, can work productively and fruitfully, and is able to make a contribution to their community (WHO, 2022). This includes a person’s emotional, psychological, and social wellbeing, which can significantly affect a person’s quality of life.

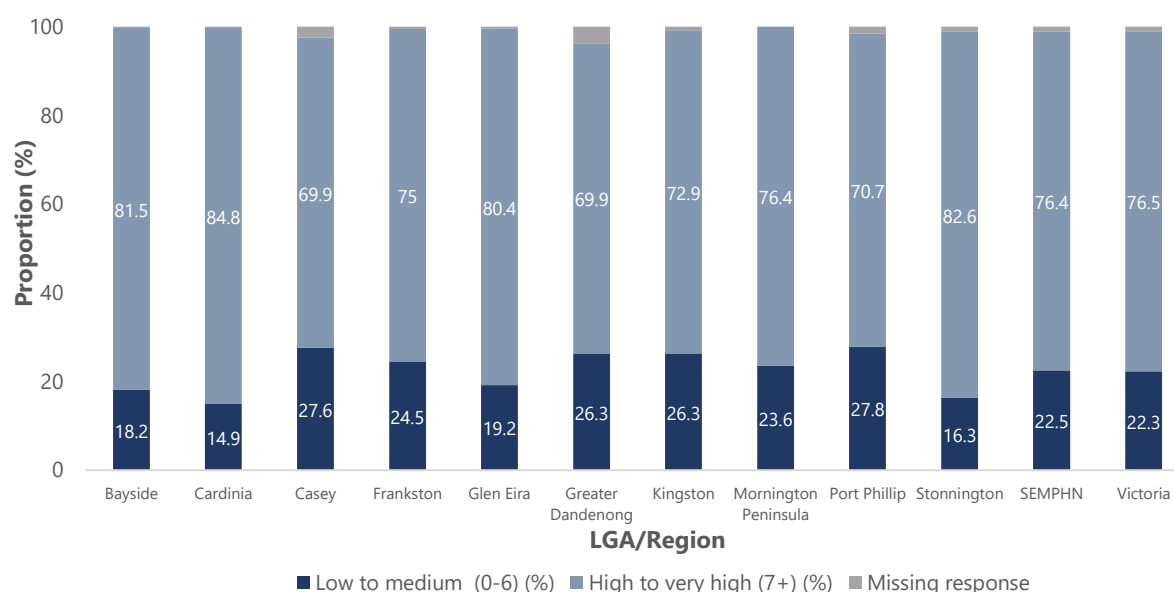
Mental illness can be defined as ‘a clinically diagnosable disorder that significantly interferes with a person’s cognitive, emotional or social abilities’ (National Mental Health Commission, 2018). Mental illness covers a range of conditions, including anxiety disorders, affective disorders, psychotic disorders and substance use disorders (Australian Institute of Health and Welfare, 2021d). In the 12 months prior to the 2020-21 National Study of Mental Health and Wellbeing survey, one in five Australians (21.4%) experienced a mental health disorder (AIHW, 2022m), and in 2020-21, one in six Australians (16.8%) experienced an anxiety disorder (Beyond Blue, 2022). Different population and age groups are more likely to experience mental health issues during their lifetime (AIHW, 2022l). These include people living in regional and remote areas, First Nations peoples, culturally and linguistically diverse (CALD) communities and the LGBTIQ+ community (Mental Health Australia, 2022).

### Life satisfaction

Life satisfaction is a self-reported measure of a person’s wellbeing and happiness. Using the Office of National Statistics 4 (ONS4) scale which the 2021 Victorian Population Health Survey (VPHS) has adopted to measure life satisfaction, survey respondents were asked to indicate how satisfied they were with their lives by choosing a score on a 11-point scale of 0 to 10. A response between 0–4 was classified as being low, 5–6 medium, 7–8 high, and 9–10 was very high, based on the ONS4 classification (Office for National Statistics, 2018). The survey found that life satisfaction in Australia fell from a score of 7.5 out of 10 in 2019 to 7.2 in mid-2020.

The VPHS found lower rates of life satisfaction across half the SEMPHN catchment compared to the Victorian average as shown in Figure 5.1 (see also Appendix Table 2.3.1). High rates of low to medium life satisfaction were observed in Port Phillip (27.8%), Casey (27.6%), Greater Dandenong (26.3%) and Kingston (26.3%).

Figure 5.1 Life satisfaction by LGA, 2020

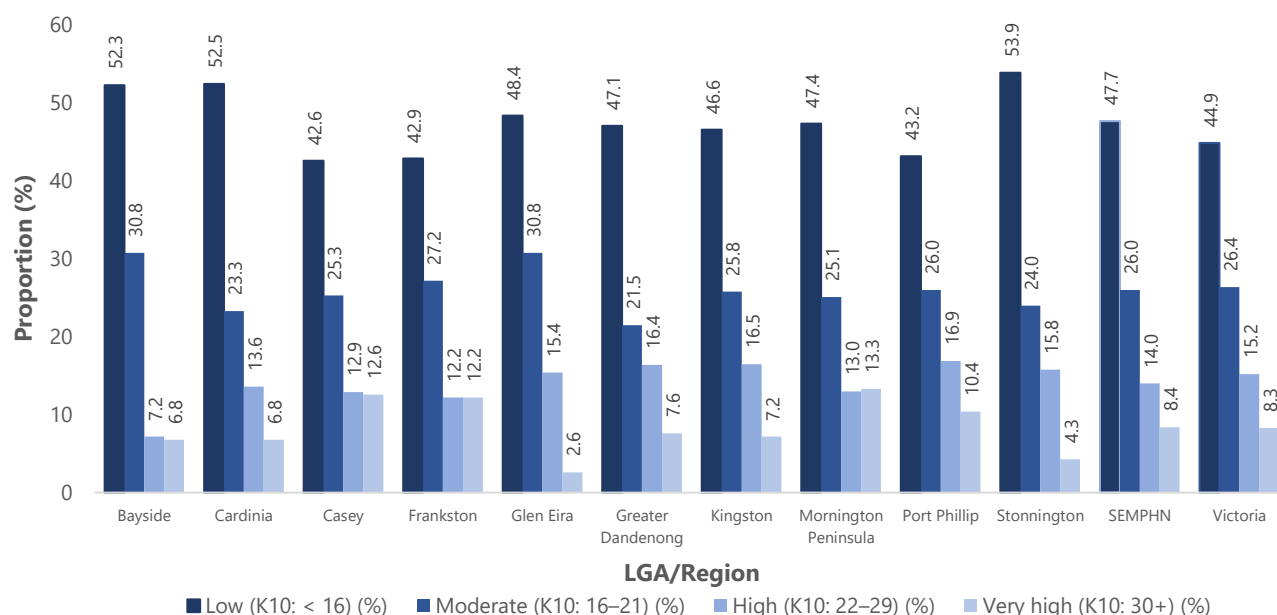


Source: Victorian Population Health Survey Dashboard, 2020. Estimates by LGA (Mental Health and Wellbeing – Life satisfaction).

## Psychological distress

Psychological distress is a group of mental and physical symptoms associated with mood. Psychological distress in Victorians has increased since the COVID-19 pandemic (Australian Bureau of Statistics, 2021). The ABS 2021 Census found that more than one in four (27%) people living in Victoria experienced high or very high levels of psychological distress, compared to 18% other jurisdictions across Australia. Higher levels of psychological distress (score of 22 or above) were recorded in Port Phillip (27.3%), Mornington Peninsula (26.3%), Casey (25.5%) and Frankston (24.4%) (Figure 5.2, Appendix Table 2.3.2).

Figure 5.2 Psychological distress (K10) by LGA, 2020



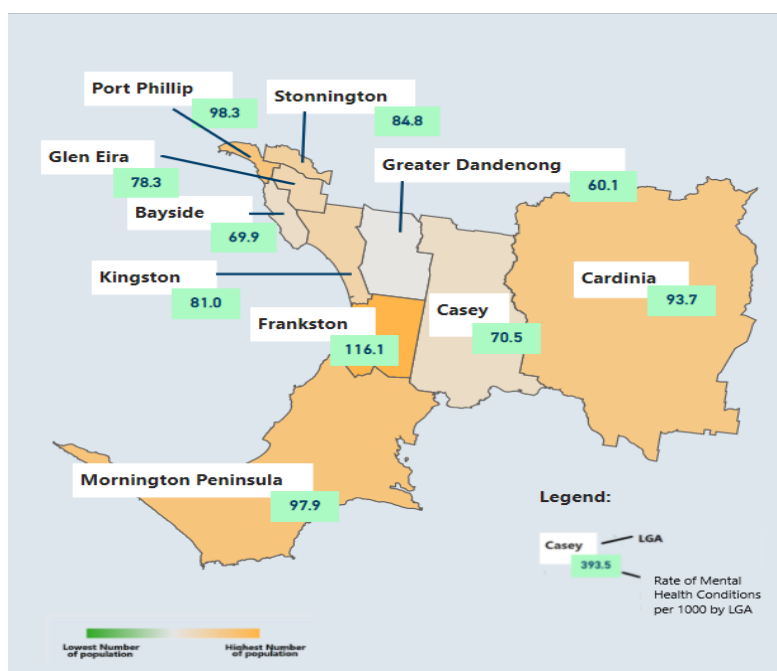
Source: Victorian Population Health Survey Dashboard, 2020; Estimates by LGA (Mental Health and Wellbeing – Level of psychological distress)

## Mental health conditions

According to the ABS 2021 Census, as of 30 June 2021, nearly one in 10 people (n=129,277, 82.7 per 1,000) in the SEMPHN catchment experienced a mental health condition (including depression or anxiety). This estimate is slightly lower compared to that for Victoria (n=571,149; 87.8 per 1,000), and Australia (n=2,231,546, 87.7 per 1,000). Higher rates of mental health conditions were observed in Frankston (116.1 per 1,000 people), Port Phillip (98.3 per 1,000) and Mornington Peninsula (97.9 per 1,000) (Figure 5.3). Age and gender profiles of people living with a mental health condition in the SEMPHN catchment show that females aged between 25-34 years had higher rates of mental health conditions (n=15,724, 121.6 per 1,000), and men aged 25-34 years (n=8,459, 65.4 per 1,000) and 35-44 years (n=8,429, 65.2 per 1,000).



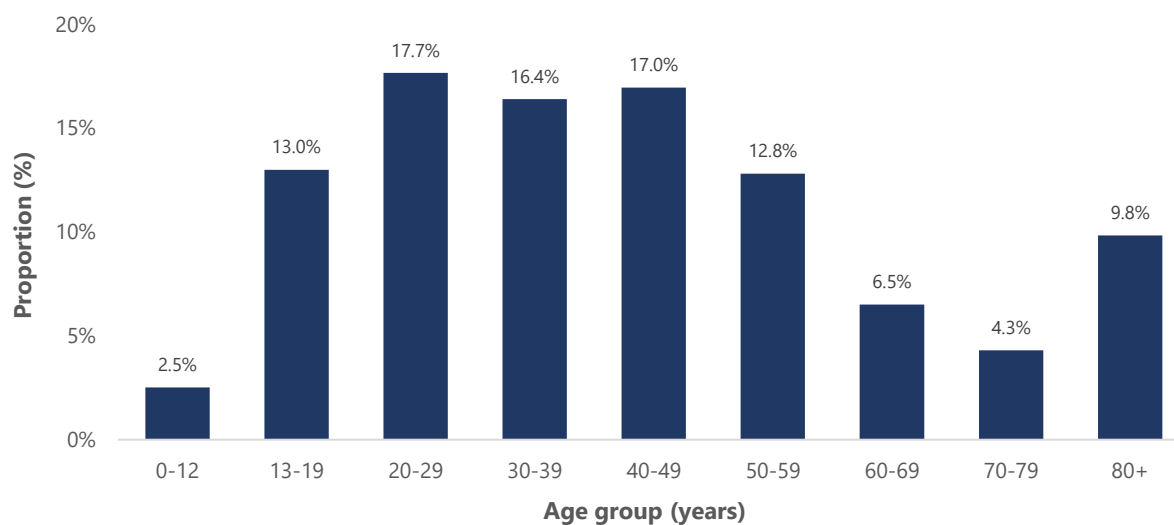
Figure 5.3 Prevalence of mental health conditions, per 1,000 people, by LGA, 2021



Source: ABS 2021 Census, Australian Bureau of Statistics (June 2022 release) Table G19: Type of Long-Term Health Condition by Age by Sex. Please note Monash LGA is excluded due to the small proportion of the LGA falling within the SEMPHN catchment (4%).

Figure 5.4 shows the age distribution of consumers receiving mental health services commissioned by SEMPHN. Consumers seeking the most mental health support through SEMPHN-commissioned services were aged 20-49 years (51.1%).

Figure 5.4 Age distribution of SEMPHN mental health service consumers, 2022-23

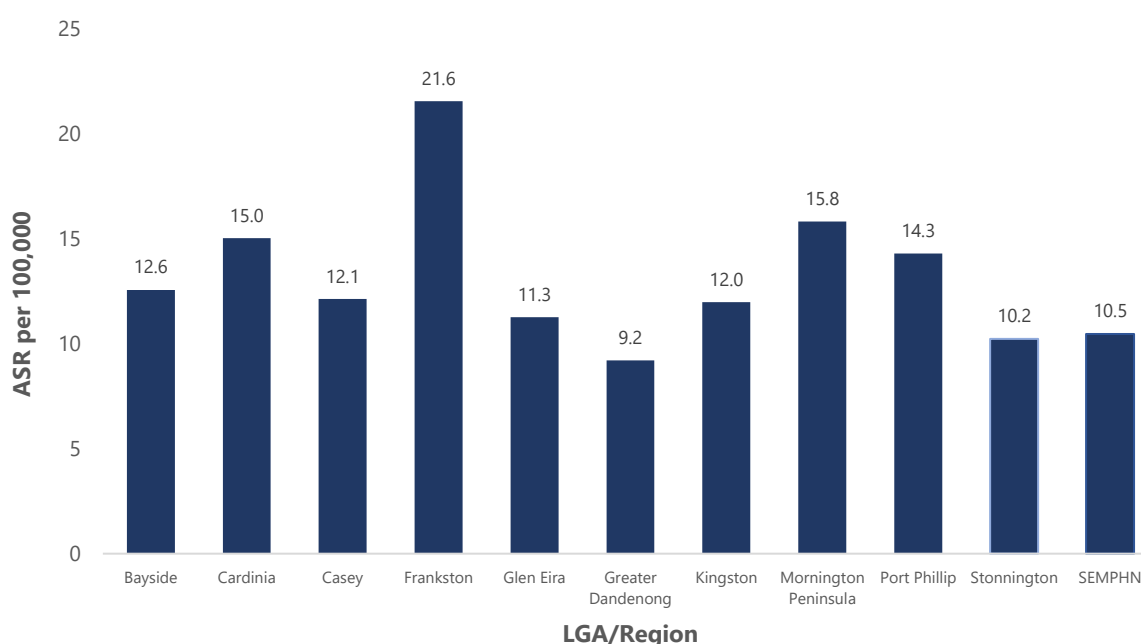


Source: rediCASE data, SEMPHN Mental Health Report (Data dump for the period 01/07/2021 to 31/07/2023)

## Suicide and self-harm

In 2021, 3,144 Australians died by suicide. Every day, eight to nine Australians take their life; one in four are male. Nationally, suicide is the leading cause of death for people aged between 15 and 44 years (AIHW, 2022d; Lifeline, 2022). General practice data extracted from POLAR shows that in 2022-23, 14% (n=548) of SEMPHN-commissioned mental health referrals had consumers who had a reason for referral cited as a recent history of suicide attempt or at suicide risk (South Eastern Melbourne PHN, 2022b). The rate of death by suicide or self-inflicted injuries in SEMPHN catchment in those under 75 years of age (10.5 per 100,000) is similar to the Victorian rate (10.6 per 100,000) (Figure 5.5) (PHIDU, 2021c). Highest rates are observed in Frankston (21.6 per 100,000), Mornington Peninsula (15.8 per 100,000) and Cardinia (15.0 per 100,000).

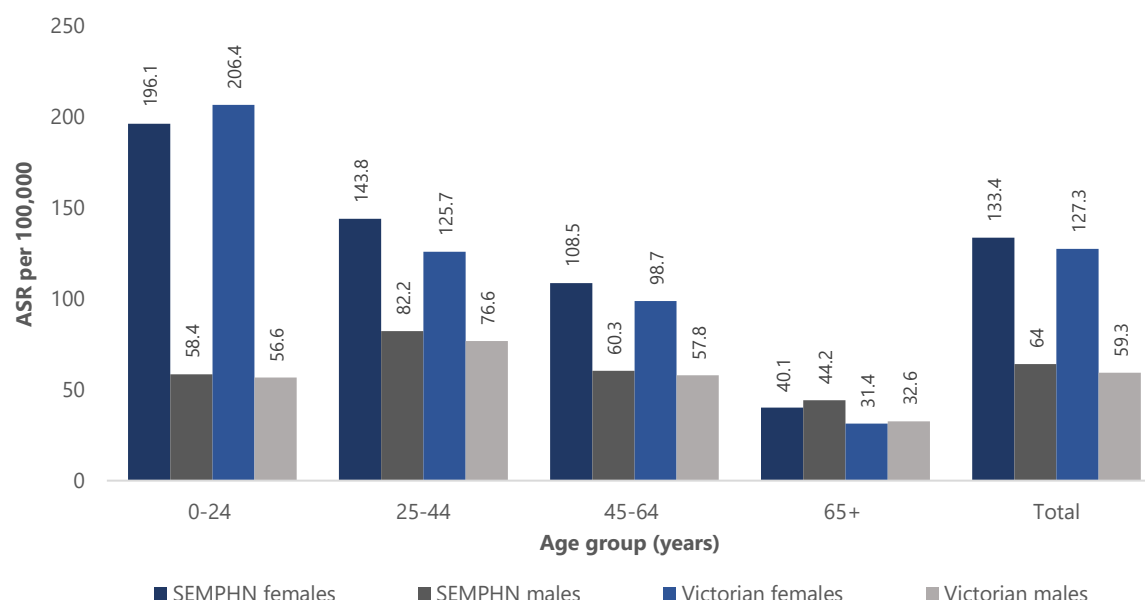
Figure 5.5 Deaths by suicide and self-inflicted injuries in persons aged 0-74 years by LGA, 2016-20



Source: Public Health Information Development Unit, 2021.

Self-harm is defined as the deliberate cause of pain or injury to oneself. This can include cutting, burning, hitting oneself or the abuse of drugs, alcohol and medication, including overdosing (Lifeline, 2021). Hospitalisations due to intentional self-harm are higher for women and young people, where the highest rates in 2020-21 (Lifeline, 2021) were observed in females aged 15-19 years (698 per 100,000) and females aged 20-24 years (363 per 100,000). Figure 5.6 (see also Appendix Table 2.3.3) shows that compared to Victoria, the SEMPHN catchment has higher rates of intentional self-harm hospitalisations for both men and women except in females aged 0-24 years (AIHW, 2021e).

Figure 5.6 Intentional self-harm hospitalisations by age and sex, 2020–21



Source: AIHW, Suicide and Self-harm Monitoring National Hospital Morbidity Database, Table NHMD S7: Intentional self-harm hospitalisations, by Primary Health Network areas, age, and sex, 2020–21.

## Service use

### General practice

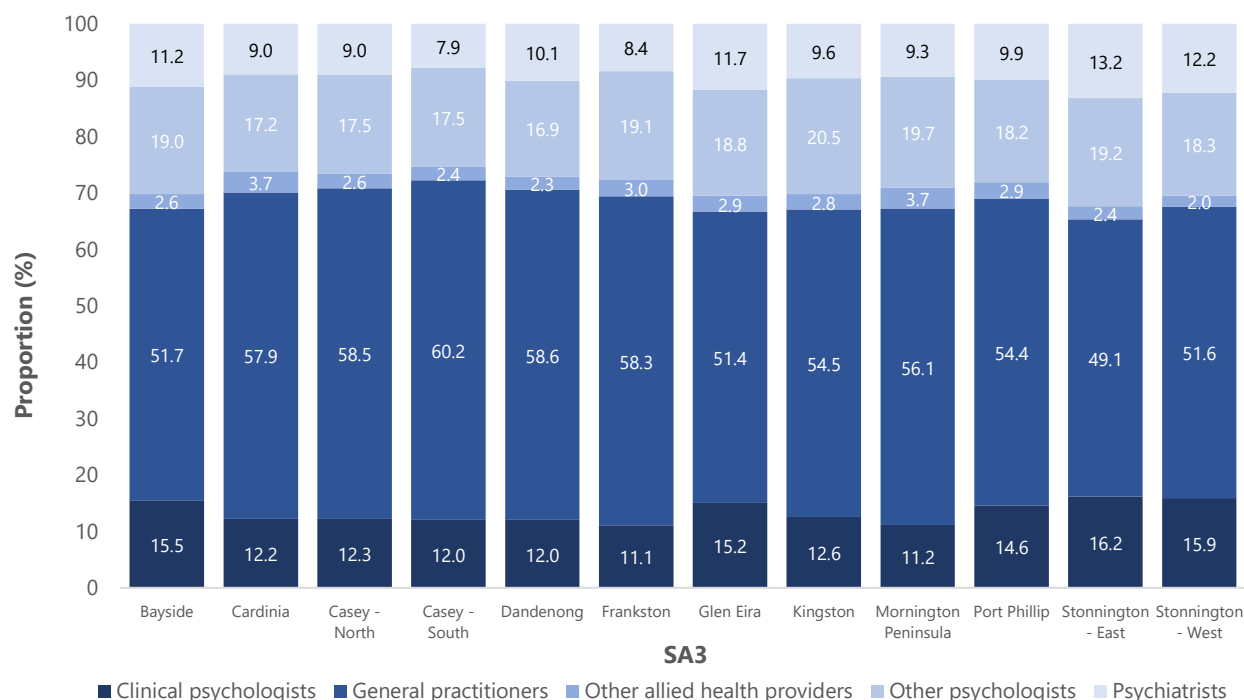
In 2021–22, 2.7 million Australians (11% of the population) received Medicare-subsidised mental health-specific services<sup>16</sup>. In this year, the number of people receiving Medicare-subsidised mental health-specific services increased from 1.5 million (6.9% of Australians) compared to that in 2010–11. Victoria and Queensland had the highest proportions of the population receiving services (11% of the population) (AIHW, 2022I). Patients in Victoria reported approximately the same average number of Medicare-subsidised mental health-specific services per patient compared to the national average (5 services per patient).

Figure 5.7 shows the utilisation of MBS mental health-related services in general practice across the SEMPHN catchment in 2020–21 (numbers for 2021–22 are not available). Across all SA3 levels<sup>17</sup>, more than 50% of people receiving Medicare-subsidised mental health services were accessing it through a general practitioner. Across Victoria, the number of MBS mental health-related services provided by GPs increased by 10.0% from 2019–20 to 2020–21 (AIHW, 2020e).

<sup>16</sup> Key definitions of Medicare-subsidised mental health-specific services as defined by provider type can be found here: <https://www.aihw.gov.au/reports/mental-health-services/mental-health-services-in-australia/report-content/medicare-subsidised-mental-health-specific-services/data-source-and-key-concepts>

<sup>17</sup> Statistical Areas Level 3 (SA3) are geographical areas built from whole Statistical Areas Level 2 (SA2). These are areas with both geographic and socio-economic similarities. In many cases, these areas are defined by existing administrative boundaries, such as State Regional Development Areas or one or more Local Government Areas.

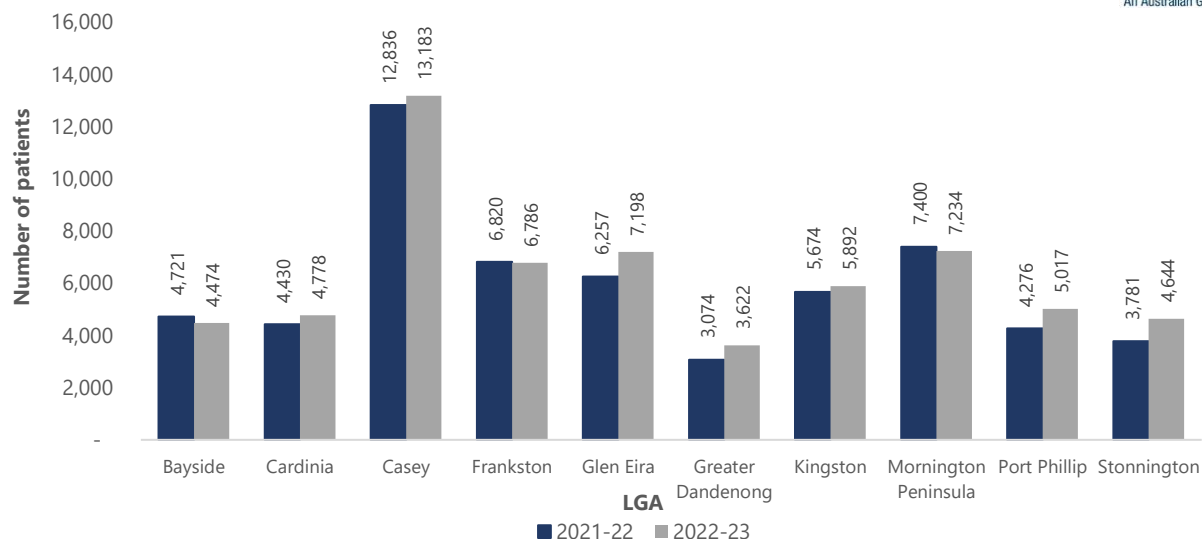
Figure 5.7 Distribution of people receiving Medicare-subsidised mental health-specific services by Statistical Area 3 (SA3) and provider, 2020–21



Source: Table MBS.22: Medicare-subsidised mental health-specific services and people receiving Medicare-subsidised mental health-specific services, by SA3 area and provider, 2020–21

A mental health treatment plan is completed when a patient is referred by a GP to a mental health professional (e.g. a psychologist or psychiatrist). In 2022–23, a total of 62,828 patients received treatment plans from GPs in the SEMP HN catchment, a 6.0% increase compared to the previous financial year. Figure 5.8 shows the number of such patients in the catchment by LGA. Casey saw the highest number of such patients (13,183 in 2022–23). The highest year-on-year percentage increases were seen in Stonnington (22.8%), Greater Dandenong (17.8%) and Port Phillip (17.3%).

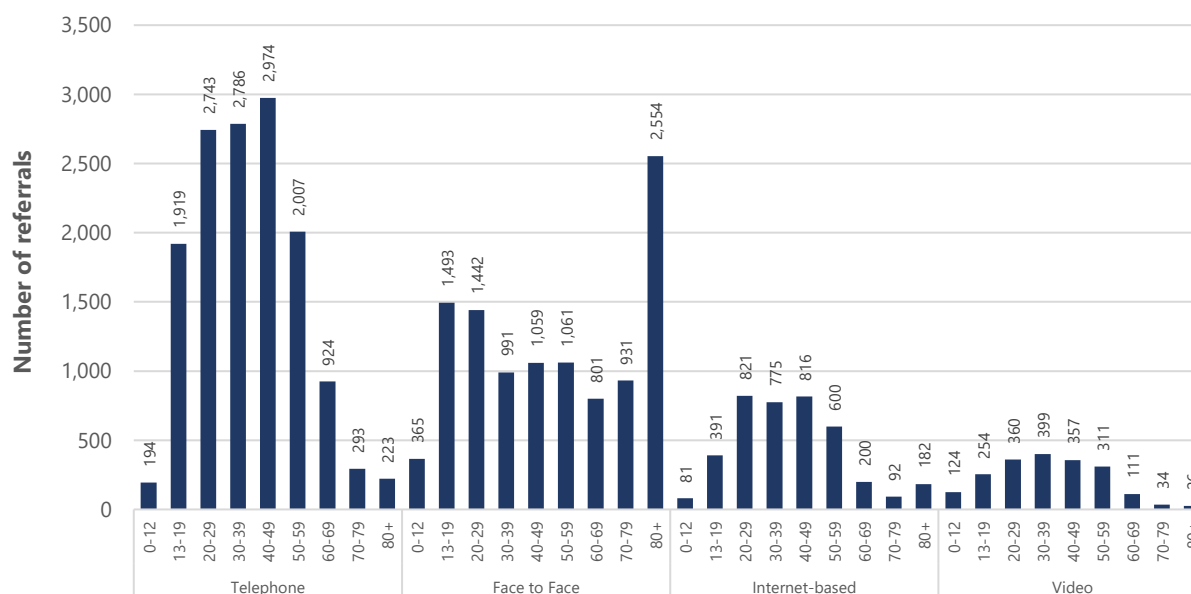
Figure 5.8 Patients receiving GP mental health treatment plans in SEMP HN catchment by LGA, 2021–22 and 2022–23



Source: SEMPHN POLAR data, 2023

Figure 5.9 shows the distribution of mental health service delivery mode by age group for SEMPHN-commissioned services in 2022-23. Services delivered by telephone and face-to-face were the most popular modes. Notably, those aged 70 years and above far preferred face-to-face services compared to via the telephone. Less preferred were services delivered via internet and video.

Figure 5.9 Modes of mental health service delivery by age group in SEMPHN catchment, 2022-23



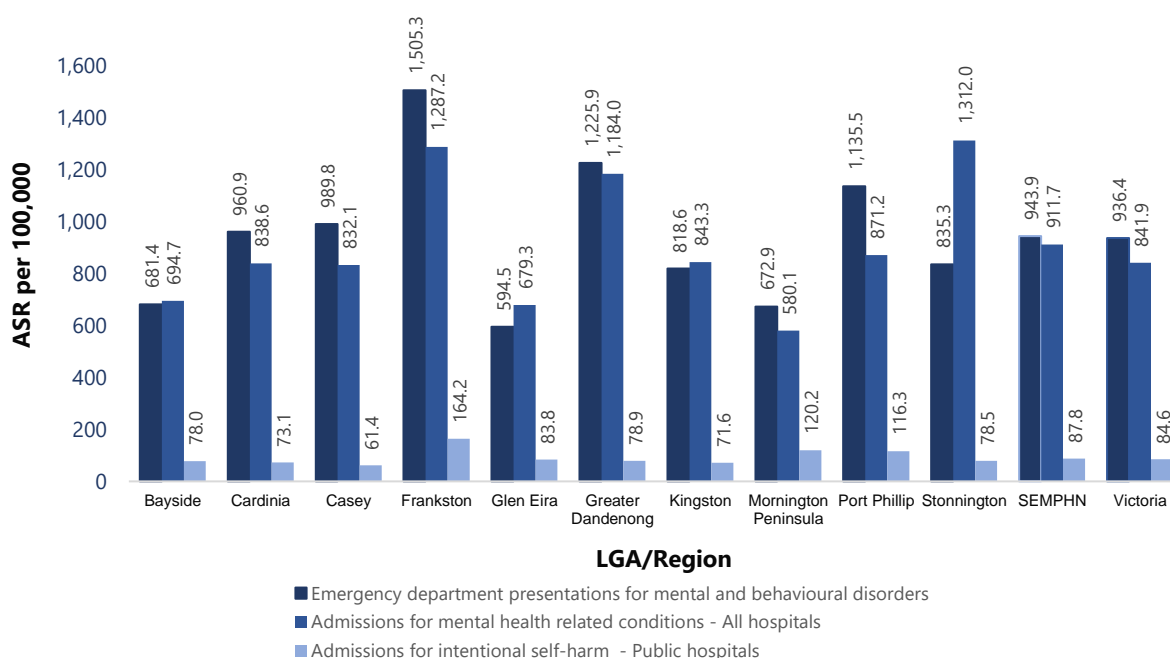
Source: SEMPHN rediCASE, 2022-23

## Emergency departments and hospitals

Figure 5.10 shows the number and rate of age emergency department presentations and hospital admissions for mental health and self-harm in 2019-2020 (see also Appendix Table 2.3.4) (PHIDU, 2021c).

Frankston (1,505 per 100,000), Greater Dandenong (1,225.9 per 100,000), Port Phillip (1,135.5 per 100,000), Casey (989.8 per 100,000) and Cardinia (960.9 per 100,000) had higher rates of mental health-related emergency department presentations compared to Victoria (936.4 per 100,000). However, rates of admissions into hospitals for persons with mental health related conditions did not mirror this geographically. Higher rates of mental health related public hospital admissions were observed in Stonnington (1,312.0 per 100,000), Frankston (1,287.2 per 100,000), Greater Dandenong (1,184.0 per 100,000), Port Phillip (871.2 per 100,000) and Kingston (843.3 per 100,000) compared to Victoria (841.9 per 100,000). Substantially higher rates of hospital admissions related to intentional self-harm were observed in Frankston (164.2 per 100,000), Mornington Peninsula (120.2 per 100,000) and Port Phillip (116.3 per 100,000) compared to Victoria (84.6 per 100,000).

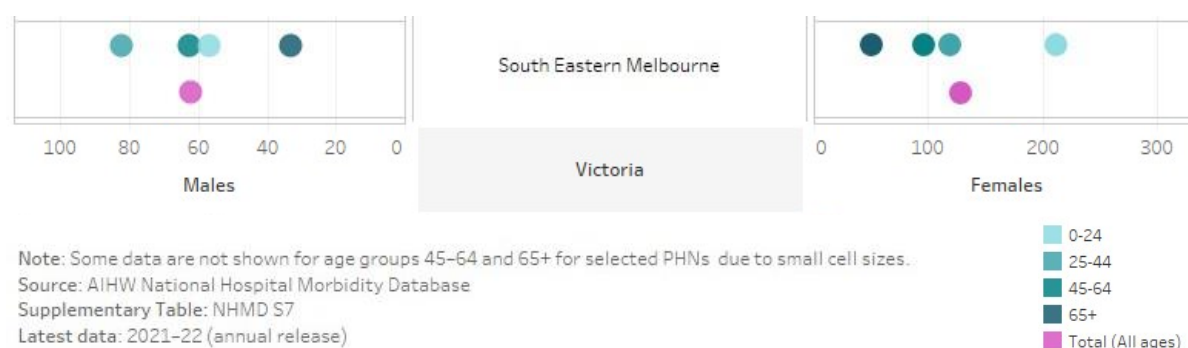
Figure 5.10 Mental health-related emergency department presentations and hospital admissions by LGA, 2019-2020



Source: Public Health information Development Unit, 2019-20

The latest data for 2021-22 displayed in Figure 5.11 indicates that the females saw the highest rates of intentional self-harm hospitalisations compared to males, with the female age group of 24 years and under recording the highest rates (211.4 per 100,000) (AIHW, 2023b). In comparison, the age group of 25-44 years is the most at-risk age group for males (82.1 per 100,000).

Figure 5.11 Intentional self-harm hospitalisations by age and sex, SEMPHN, 2021-22



## Head to Health

In the SEMPHN catchment, Head to Health received 2,983 calls across 1,783 clients during 2022-23, with an average of 8.2 routed calls per day, with an average call duration of 6:06 minutes (NWPHN, 2023). Of 600 referrals, 381 (63.5%) were referred by GPs and 216 (36.0%) through self-referrals. About a third (34%) of all completed Intake Access and Referrals (IARs) were flagged for suicide risk. Of referrals where the level of care was assessed, 21% were categorised as low intensity, 70% were of moderate intensity, and 7% were of high intensity.

## SEMPHN-commissioned services

Since the establishment of many SEMPHN-funded mental health services in 2017, there has been continued growth in the number of consumers accessing these services. In 2022-23, 5,906 referrals were made to a SEMPHN-commissioned mental health service, which resulted in the commencement of 3,929 episodes of care for 3,720 (South Eastern Melbourne PHN, 2023b). The highest proportions of mental health referrals were for clients residing in Casey (16.8%), Mornington Peninsula (14.2%) and Greater Dandenong (13.7%) (Table 5.1).

Table 5.1 Clients of SEMPHN-commissioned mental health services by LGA, 2022-23

| LGA                                  | Number       | Proportion (%) |
|--------------------------------------|--------------|----------------|
| Bayside                              | 86           | 2.3            |
| Cardinia                             | 251          | 6.7            |
| Casey                                | 626          | 16.8           |
| Frankston                            | 491          | 13.2           |
| Glen Eira                            | 205          | 5.5            |
| Greater Dandenong                    | 510          | 13.7           |
| Kingston                             | 260          | 7.0            |
| Mornington Peninsula                 | 528          | 14.2           |
| Port Phillip                         | 289          | 7.8            |
| Stonnington                          | 165          | 4.4            |
| Others/Not stated                    | 309          | 8.3            |
| <b>SEMPHN catchment<sup>18</sup></b> | <b>3,720</b> | <b>100.0</b>   |

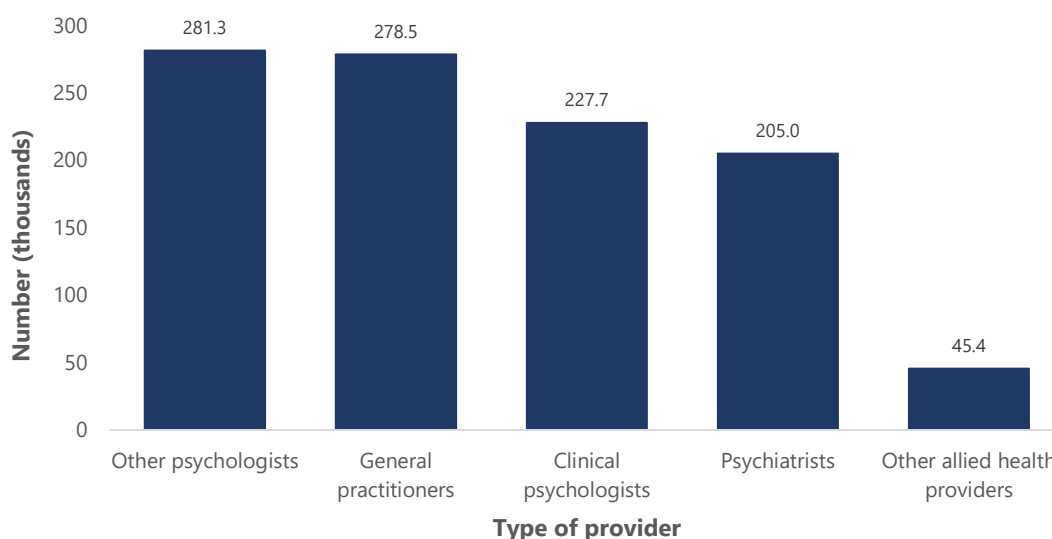
Source: PMHC MDS SVI dashboard, 2022-23

Figure 5.12 shows that in 2021-22 for the SEMPHN catchment, 'other psychologists' (which includes other psychology services involving clinical psychologists and other psychologists) and general practitioners provided the largest number of mental health-related funded services compared to mental health professionals, followed by clinical psychologists and psychiatrists.

<sup>18</sup> Unable to make comparisons at state level as the data is gathered on internal data platforms and is not available at state level within these systems.



Figure 5.12 Mental health-related funded services, by profession type, SEMP HN, 2021-22



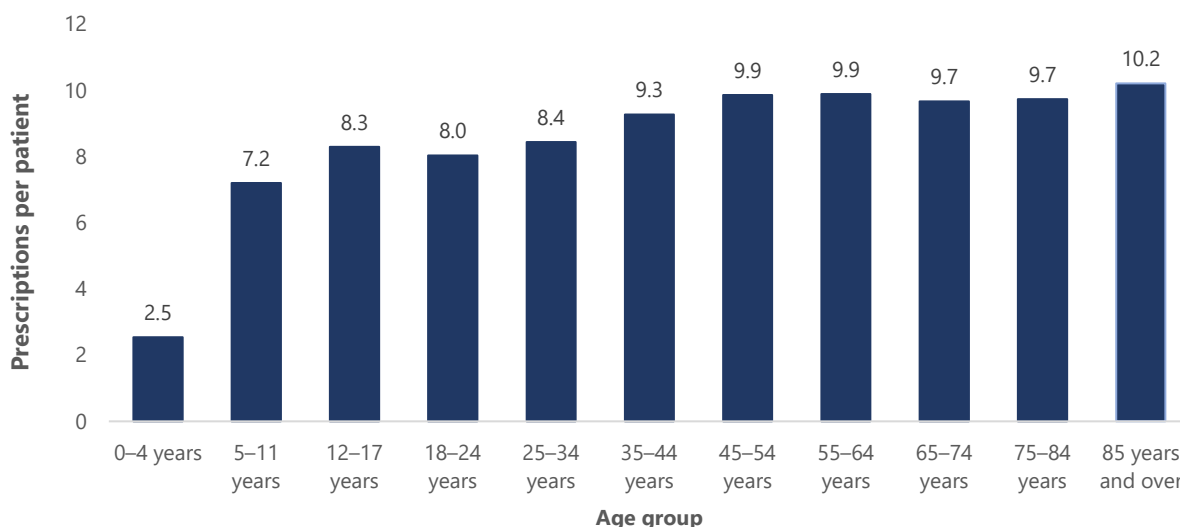
Source: Mental Health collections, AIHW 2023.

### Mental health-related prescriptions

In 2021-22, 4.7 million patients (18% of the Australian population) filled a prescription for a mental health-related medication, with an average of 9.4 prescriptions per patient (AIHW, 2021f). Mental health-related prescriptions were classified according to the ATC Classification System (WHO, 2019). The mental health-related medications in Figure 5.13 include psycholeptics, antipsychotics, anxiolytics, hypnotics, sedatives, psychoanaleptics, antidepressants, and psychostimulants, agents used for ADHD and nootropics (AIHW, 2021f)<sup>19</sup>. The figure shows the proportions of mental health related prescriptions dispensed per patient across all age groups in 2021-22. For those above the age of 45 years, the average prescriptions per patient in the SEMP HN catchment was higher than the national average of 9.4 prescriptions per patient, in 2021-22 (AIHW, 2021f).

<sup>19</sup> Table PBS.1: Drug groups defined for this report as mental health-related medications in the PBS and RPBS data

Figure 5.13 Mental health related prescriptions dispensed by number of patients across various age groups in the SEMPHN catchment, 2021–22



Source: AIHW, Table PBS.23: Patients and mental health-related prescriptions dispensed (subsidised and under co-payment), by PHN and demographic variables, 2014-15 to 2021–22

### Psychosocial support provided by SEMPHN-commissioned services

SEMPHN provides treatment plans for clients which is primarily based around the delivery of psychosocial support services that focus on building capacity and stability in one or more of the following areas:

- social skills and friendships, family connections
- managing daily living needs
- financial management and budgeting
- finding and maintaining a home
- vocational skills and goals, including volunteering
- educational and training goals
- maintaining physical wellbeing, including exercise
- building broader life skills, including confidence and resilience.

These services are usually delivered by a range of non-clinical providers, including peer support workers with lived experience of mental illness (PMHC MDS, 2019). Between FY 2020/21 and FY 2021/22, 3.41% of reported episodes among SEMPHN commissioned services had the principal focus of treatment coded as Psychosocial Support (n=25), which resulted in 1,271 service contacts during this period with 93.9% attended service contacts (n = 1,193). Of the episodes reported for Psychosocial support, 48.0% (n = 12) had a duration of more than 60 days, 12% (n=3) had a duration of 7-30 days and 12% (n=3) had a duration between 31-60 days. Of the clients receiving psychosocial support, 20% were classified as having a risk of suicide (n=5). Of the service contacts that commenced for psychosocial support in FY 2021-22, 18 (1.42%) were conducted via video, 452 (35.6%) were conducted via the telephone, 185 (14.6%) were internet based, and 124 (9.8%) were conducted face to face.

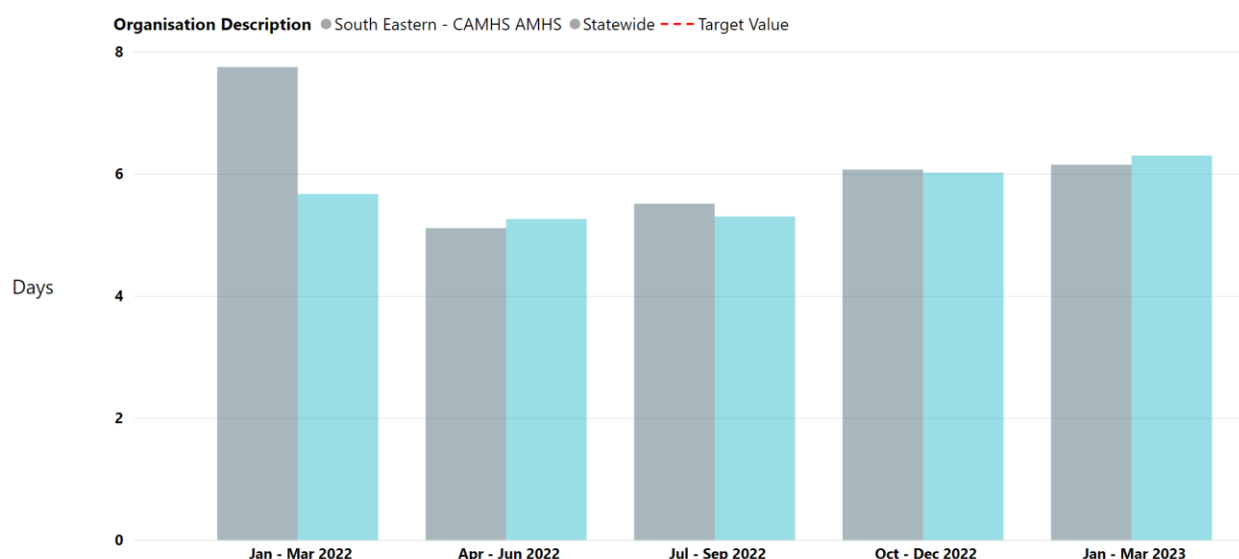
### Child and youth services

For children and adolescents, there continues to be a gap in services commonly referred to as the 'missing middle'. This refers to youth whose mental health episode is not 'acute enough' for Child and Adolescent

Mental Health Services (CAMHS) yet too complex for many primary mental healthcare services. Consultation with service providers and community-identified services such as headspace show that they are not appropriately provisioned for young people with complex and persistent mental illness. However, they often find themselves supporting young people when they are acutely unwell due to lack of available hospital services and because they not meeting some eligibility criteria for tertiary mental health care services (South Eastern Melbourne PHN, 2023b). CAMHS provide specialist mental health treatment and care to children and adolescents up to 18 years of age. These services assess and treat children and adolescents (0-18 years) with moderate to severe, complex, and disabling problems and disorders, and assist those with less severe problems with information and advice about where and how to get help and facilitate referral as appropriate.

Figure 5.14 below shows that in January to March of 2023, younger residents in the region experienced longer stays (on average) in South Eastern Melbourne Child and Adolescent Mental Health Services (CAMHS) than other Victorian residents in other state-wide services.

Figure 5.14 Average number of days that the child or adolescent consumers was admitted into a mental health inpatient unit, up to March 2022-23



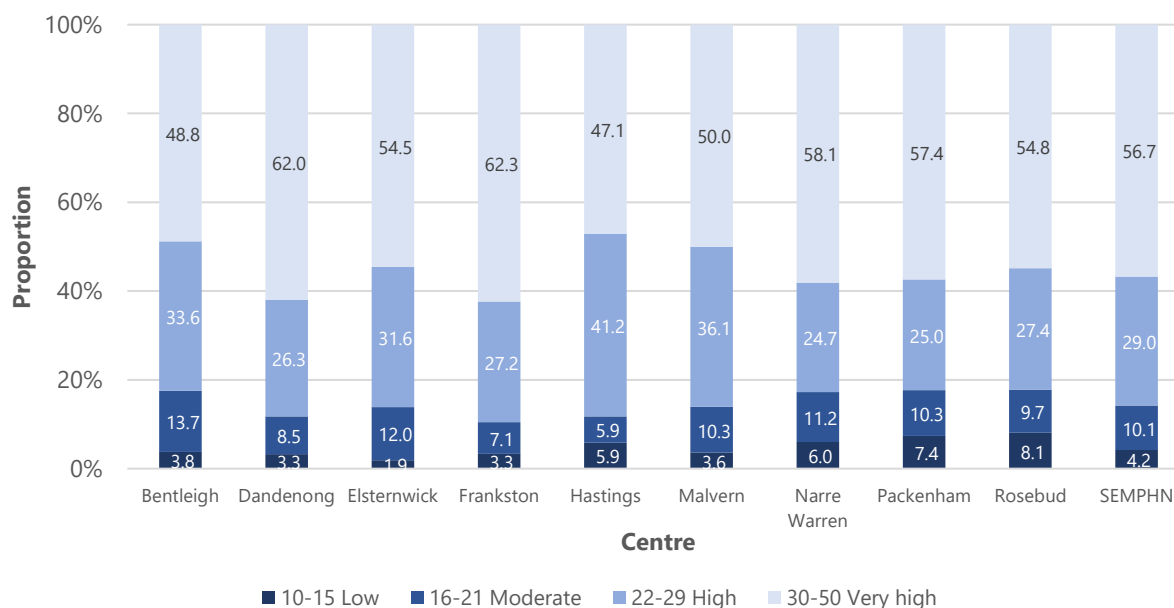
Source: (Victorian Agency for Health Information, 2021)

## headspace

headspace, was created as Australia's national youth mental health initiative in 2006 in response to create a more accessible and effective health system for young people (aged between 12 to 25 years) with mental and substance use disorders. Services provided include telehealth mental health consultations, sexual health services, alcohol and other drug services, work and study services, and an early psychosis intervention program to improve the lives of young people and their families affected by psychosis (headspace, 2023). There are nine headspace centres across the South East Melbourne region, Bentleigh,

Dandenong, Elsternwick, Frankston, Hastings, Narre Warren, Pakenham, Malvern<sup>20</sup> and Rosebud (headspace, 2021). Psychological distress (as measured by the K10 score) at commencement of episode of care, was compared across various centres to determine the prevalence of distress among young people in the catchment accessing mental health services through headspace and shown in Figure 5.15.

Figure 5.15 K10 scores across episodes of care when clients first started their episode of care (%) across headspace centres in SEMPHN catchment, 2022-23



Source: headspace Dashboard. Table accessed via [https://reporting.headspace.org.au/#/views/HeadspaceCentreReportingSuite6\\_0-Detail/6\\_0ClinicalPresentation?iid=3](https://reporting.headspace.org.au/#/views/HeadspaceCentreReportingSuite6_0-Detail/6_0ClinicalPresentation?iid=3)

headspace centres define wait times as the number of calendar days between the date the centre first received either the young person's referral or the first contact to make an appointment, and the date the young person's intake or access occasions of service was recorded.

For 2022-23, across all centres, 97.6% (n=3,939) of episodes that commenced with an intake/access session, 44.9% (n=1,767) commenced within 1 day, 24.2% (n=955) commenced between 2-7 days, 17.3% (n=682) commenced between 8-22 days and 13.6% (n=535) commenced after 22 days.

In the same financial year, the average wait time to intake/access by headspace centres was an average of 8.6 days across all headspace centres (n=3,939), with wait times being highest in July and August 2022 (10.7 and 10.6 days respectively).

<sup>20</sup> In compliance with headspace reporting rules, Malvern headspace centre is not reported in Figure 5.8, as it showed fewer than 10 episodes commenced with valid K10 scores (all with moderate K10 scores).

Table 5.2 Number of episodes and average wait time by headspace centre in the SEMPHN catchment, 2022-23

| Centre        | Number of episodes | Wait times (days) |
|---------------|--------------------|-------------------|
| Bentleigh     | 1,167              | 3.0               |
| Dandenong     | 424                | 11.7              |
| Elsternwick   | 948                | 3.1               |
| Frankston     | 974                | 10.8              |
| Hastings      | 55                 | 14.8              |
| Malvern       | 316                | 3.1               |
| Narre Warren  | 447                | 21.2              |
| Packenham     | 129                | 20.4              |
| Rosebud       | 172                | 13.5              |
| <b>SEMPHN</b> | <b>4,632</b>       | <b>8.1</b>        |

Note: Out of the 4,632 episodes recorded across all centres, only 3,939 episodes had valid wait times recorded.

Source: Headspace, 2023. Accessed via <https://reporting.headspace.org.au/#/views/headspaceCentres-WaitTimesV2/WaitTime1-Overview?iid=4>

## Stakeholder engagement

Stakeholder engagement and market analysis provide insights into the current and ongoing needs of consumers and the community in relation to mental health services. Stakeholder consultations and surveys have been undertaken with consumers and service providers across the region since 2016, highlighting key barriers and opportunities for mental health service access:

- lack of consumer awareness about existing services
- lack of affordable transport and distance to attend services
- lack of available after-hours appointments, including after-hours
- poor consumer experience
- shortage of culturally appropriate services
- concerns related to privacy
- stigma-related issues, especially with suicide prevention services
- mental illness and suicide prevention

Community members reported several barriers specific to suicide prevention services, including:



- stigma about suicide, which deters people from reaching out, having conversations, and seeking help some population groups (e.g., older men) reluctant to engage with health professionals
- suicidal ideation or suicidality being treated as an acute issue, e.g. emergency department (ED) presentation

Opportunities exist to improve mental health and psychosocial support services in the region.

Consultations with service providers, consumers and carers identified areas for improvement (Table 5.3) and highlighted essential elements for delivering psychosocial support services in the community.

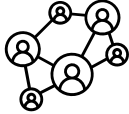

- Assertive outreach
- Patient navigation/support facilitation
- Personalised assistance
- Decision-making support, and
- Peer support services.

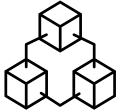


Table 5.3 Stakeholder perspectives for mental health service delivery improvement in the SEMPHN catchment

|   |   |
|---|---|
| <p><b>Service provider</b></p>       | <ul style="list-style-type: none"> <li>• Continue funding to create stability in service delivery.</li> <li>• Co-located, integrated services.</li> <li>• Intake processes tailored to the circumstances of people accessing the service (e.g., no phone, no permanent address, limited or no proficiency in English).</li> <li>• Increase efforts to allow same worker/service/care team to support consumers throughout their journey.</li> <li>• Increase focus on the functional needs of consumers (e.g., social skills, finance, physical health) alongside addressing mental health needs.</li> <li>• Provide activities to increase social connections.</li> <li>• Access to services for communities or demographic groups identified by service providers as having unmet needs.</li> </ul> |
| <p><b>Consumer and carers</b></p>  | <ul style="list-style-type: none"> <li>• Individual and group therapies that are consumer centred.</li> <li>• Provision of supported long-term, permanent accommodation that includes clinical care.</li> <li>• Strategies to facilitate low turnover of staff.</li> <li>• Improve the competency and skills of the workforce.</li> <li>• Availability of a 24/7 telephone helpline.</li> </ul>   |

## Market analysis

Table 5.4 Mental health service market analysis across the SEMPHN catchment

|   |  |
|---|--|
| <p><b>Workforce and provider capability</b></p>  | <p>The shortage of mental health professionals (in the south-eastern Melbourne region) is significantly affecting the service provider market and its ability to deliver mental health programs. Consultation with service providers identified several challenges for recruitment and retention of skilled Mental Health professionals:</p> <ul style="list-style-type: none"> <li>• shortage of qualified Mental Health professionals in south-eastern Melbourne</li> <li>• lack of secured continuity of funding for some programs</li> <li>• increased state-funded services with increased salary opportunities</li> <li>• lower reporting burden for state-funded services.</li> </ul> <p>Consultation with service providers and ongoing market analysis identified an increased capability among service providers and prospective service providers in the SEMPHN commissioning process.</p> <p>Key improvements include:</p> <ul style="list-style-type: none"> <li>• Improvement in market approach responses such as RFT, RFP and EOI. Local providers are improving their ability to address selection criteria and demonstrate their capability and proposed models of care in an effective way for SEMPHN evaluation panels.</li> <li>• Commissioned service providers are becoming more familiar with contract management processes compared with previous grant funding requirements. They have increased their efforts in relationship management and maintaining communication about challenges and successes with service delivery and their impact on the community.</li> </ul> |
| <p><b>Service quality</b></p>                  | <p>SEMPHN has a highly competitive market for youth mental health services. Each market approach SEMPHN launches for a youth mental health service attracts high-quality, sustainable organisations with positive reputations embedded in the local community. This helps with the success of the region's youth mental health services and the opportunities and support offered to young residents with mental health concerns.</p>  |

|  |   |
|--|---|
| <p><b>Diversification of providers</b></p>                    | <p>Observations of the SEMPHN market have identified that service providers are taking opportunities to diversify their service offerings. For example, AOD service providers have used their experience with comorbidities to lead mental health services. This has positive effects for the market and the integration of services for community members with co-existing AOD and MH concerns.</p>  |
| <p><b>Uncertainty in market</b></p>                           | <p>As part of the final report of the Royal Commission into Victoria's Mental Health System, it was recommended that Local Hospital Networks should deliver headspace services in Victoria. Feedback from service providers highlights the uncertainty among existing headspace lead agencies. Service providers are in a position where they must wait and see what actions are taken on the Commission's recommendation.</p> <p>In addition, service providers are uncertain about funding. Service providers are increasingly confused and uncertain about the recent inquests and Royal Commission recommendations.</p>   |
| <p><b>Increasing real estate and operational costs</b></p>  | <p>Commercial real estate costs in the region's key locations are increasing significantly. The high cost of operations in major suburban centres such as Dandenong, Cranbourne, Pakenham, and Frankston tend to be largely attributed to high lease costs.</p> <p>The added challenge in these regions is forecasting the size of the service. Typical service and demand challenges exist within SEMPHN-commissioned services; however, with short-term (12-24 months) contracts service providers find it difficult to invest in larger premises due to uncertainty of longer-term funding and the implications this may have on their existing service delivery and consumers.</p> <p>Growth of services becomes challenging without appropriate venues to accommodate increasing numbers of consumers and overall demand for services.</p> <p>These real estate challenges further complicate service model innovation, as service providers are unable to use funding for the capital improvements that would be required to customise new facilities to suit specific consumer needs, such as new consultation facilities or improved entry space to welcome consumers in a more culturally appropriate way.</p> |



## Chapter 6 Alcohol and other drugs

Approximately 40,000 Victorians receive treatment for addiction to alcohol and drugs every year (Victoria State Government, 2021). The consumption of alcohol and other drugs (AOD) can significantly impact not only the individual but also their family, social connections, and the community. The National Drug Strategy 2017-2026 has been designed to prevent and minimise alcohol, tobacco and other drug-related health, social, cultural and economic harms among individuals, families and communities (Department of Health, 2017). The approach works across three pillars: (1) demand reduction, (2) supply reduction and (3) harm reduction, and identifies key priority populations most at risk and who are often underserved:

- Aboriginal and Torres Strait Islander people
- People with mental health conditions
- Young people (15-24 years)
- Older people (65 years and over)
- People in contact with the criminal justice system
- Culturally and linguistically diverse populations
- LGBTQIA+ community

### Alcohol

There is no safe level of alcohol consumption. Drinking alcohol can increase the risk of injury, violence and a person developing health problems, including cancer, cardiovascular, cerebrovascular, liver and digestive diseases (AIHW, 2017). The Australian Alcohol Guidelines recommend that to reduce health and injury risks, no more than four standard drinks should be consumed on any one day, and no more than 10 standard drinks should be consumed per week. The Guidelines also recommend that anyone under the age of 18 years should not drink alcohol (NHMRC, 2020). The National Health Survey 2020-21 reported that one in four (25.8%) Australians aged 18 years and over exceeded the Guidelines in 2020-21<sup>21</sup>. This includes those who either consumed more than 10 drinks in the last week and/or consumed five or more drinks on any day at least monthly in the last 12 months (ABS, 2022a).

While a state-wide breakdown of the latest the National Health Survey 2020-21 is not due to be released until December 2023, national trends show people aged 18-24 years were more than three times as likely as those aged 75 years and over to have consumed five or more standard drinks on any day in the last year at least monthly (22.0% compared to 6.5%) (ABS, 2022a). Alcohol use is associated with other risky behaviours such as tobacco use, unsafe sex, violence, drinking and driving, and suicide. Published research on the relationship between adolescent drinking patterns and parental attitudes to drinking, parental modelling of alcohol use and parental supply of alcohol to adolescents recommend that interventions targeting teenage drinking adopt a family counselling approach (Australian Government Department of Health, 2020; Australian Institute of Health and Welfare, 2018a, 2019; Ten to Men, 2020).

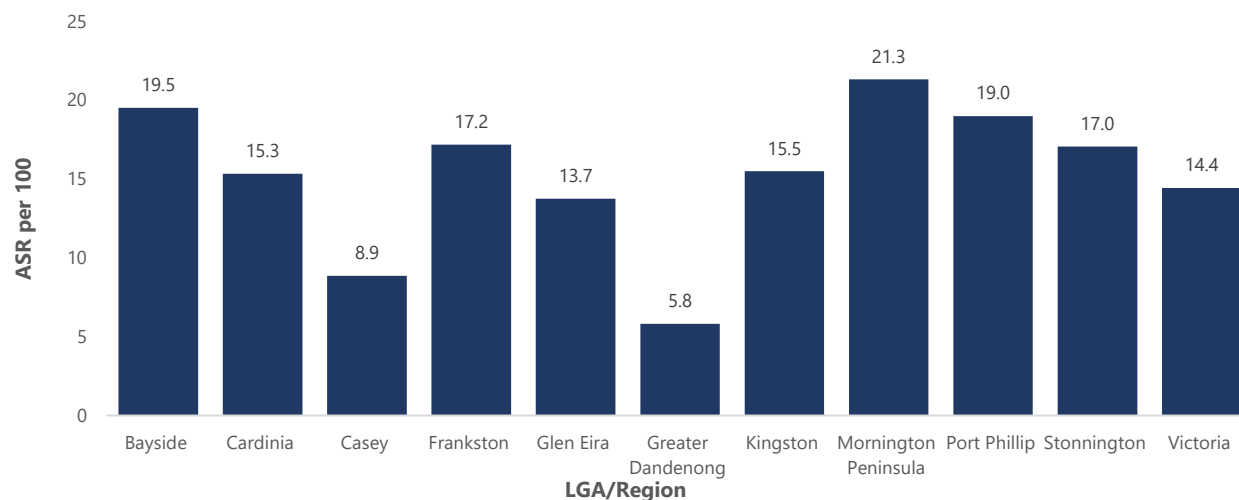
The National Health Survey 2017-18 found that rates of alcohol consumption among people aged 18 years and over in the SEMPHN catchment were higher than in Victoria (ASR 14.4 per 100). Figure 6.1

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<sup>21</sup> Exceeding the guideline is interpreted as consuming more than 10 standard drinks in the week prior to survey or consuming 5 or more standard drinks on any day in the last year at least monthly (12 occasions per year) or exceeding both components.

shows that there were higher rates of risky drinking in Bayside (ASR 19.5 per 100), Port Phillip (ASR 19.0 per 100), Mornington Peninsula (ASR 21.3 per 100) and Stonington (ASR 17.0 per 100).

Figure 6.1 Adults who consumed more than two standard alcoholic drinks per day on average by LGA, 2017-18



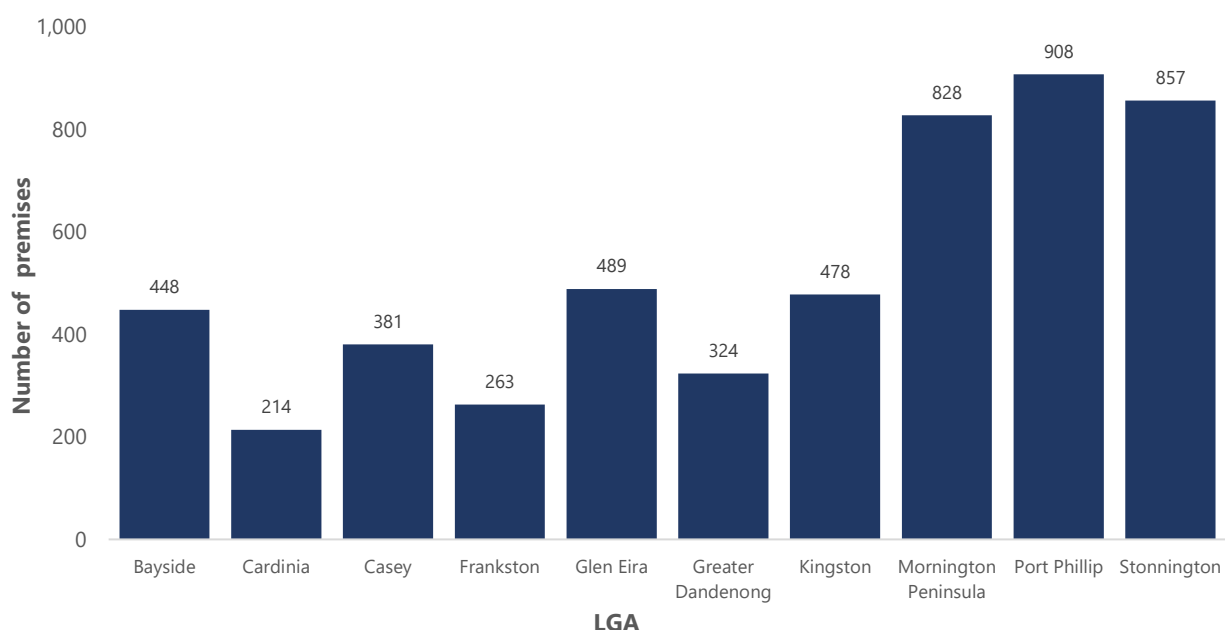
Source: PHIDU, Social Health Atlas of Australia (June 2022), Table: Prevalence of selected health risk factors (modelled estimates), accessed [phidu.torrens.edu.au/social-health-atlases/graphs](https://phidu.torrens.edu.au/social-health-atlases/graphs). Data is based on the National Health Survey 1917-18.

Alcohol consumption is also monitored through the National Wastewater Drug Monitoring Program (NWMP). While alcohol consumption overall has remained consistent across time in the capital regions across Victoria, there were elevated consumptions observed in 2018 (The Australian Criminal Intelligence Commission, 2021). A steady increase is observed in the regional areas in Victoria, with a spike in consumption observed in late 2019 (The Australian Criminal Intelligence Commission, 2021).

## Liquor licencing

Research has shown that the density of alcohol outlets may indicate excessive alcohol consumption in the area and related harms in the region (Campbell et al., 2009). Higher outlet density is associated with increased alcohol consumption and related harms, including medical harms, injury, crime, and violence in the community. In 2021-22, Victoria has a total of 25,105 premises with a liquor license (Turning Point, 2023). Figure 6.2 shows the number of premises with liquor licenses across LGAs in the SEMPHN catchment.

Figure 6.2 Premises with a liquor license by LGA, 2021-22

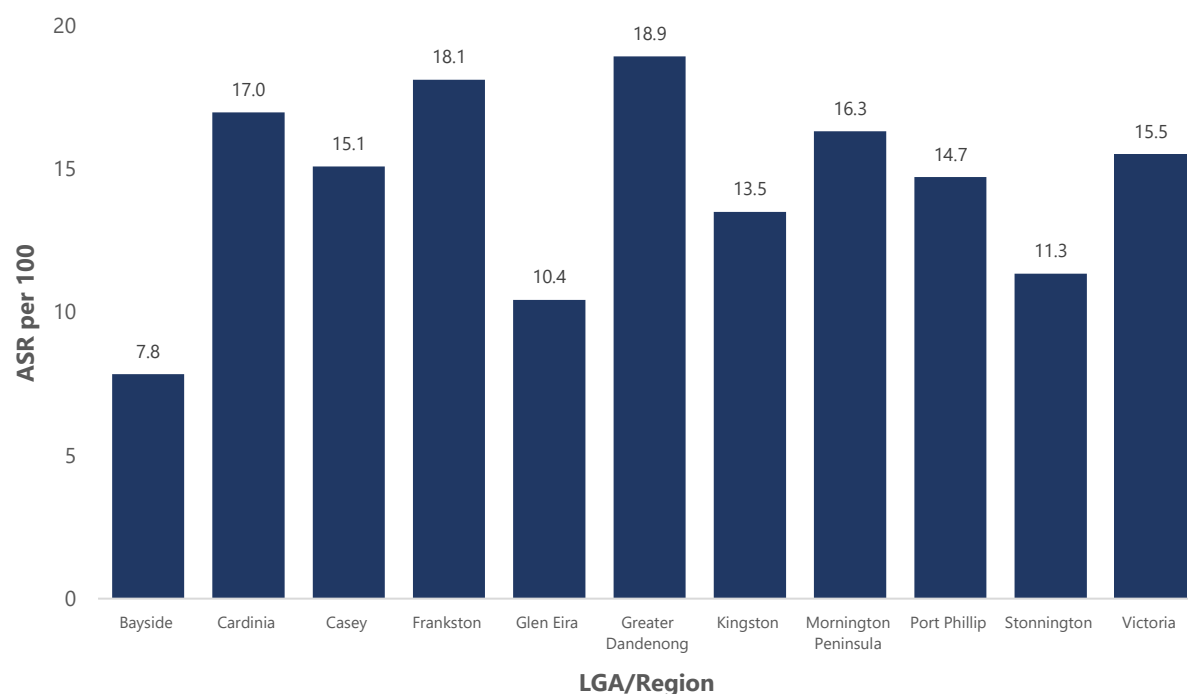


Source: Turning Point, 2023 (AODStats) accessed via <https://aodstats.org.au/explore-data/liquor/>

## Tobacco and nicotine

Data from the 2019 National Drug Strategy Household Survey indicates there has been a sharp decline in the number of smokers across Australia, with the number of people aged 14 and over who identified as a daily smokers declining by 14.8% in 2019 compared to 2010 (n=2,700,000); and the number of people (14 years and over) who identified their smoking status as “never smoked” increasing by 25.7% in 2019 compared to 2010 (n=10,500,000). Figure 6.3 shows the estimated rates of people aged 18 years and above who identified as current smokers by LGA across the SEMPHN catchment, 2017-18, compared to the Victorian rate. LGAs with rates higher than the state are Greater Dandenong (18.9 per 100), Frankston (18.1 per 100), Cardinia (17.0 per 100) and Mornington Peninsula (16.3 per 100).

Figure 6.3 Current adult smokers by LGA, 2017-18



Source: PHIDU, Social Health Atlas of Australia (June 2023), Table: Prevalence of selected health risk factors (modelled estimates), accessed via [phidu.torrens.edu.au/social-health-atlases/graphs](https://phidu.torrens.edu.au/social-health-atlases/graphs). Data is based on the National Health Survey 1917-18.

## E-cigarettes

Data from the 2019 National Drug Strategy Household Survey reports a statistically significant increase in the proportion of non-smokers using e-cigarettes in the age groups 18-24 and 25-39 years (6% and 7.9% increases from 2016 to 2019 respectively). (AIHW, 2020f). The Victorian Smoking and Health Survey found almost double the number of Victorian adults reporting vaping in 2022 (estimated 308,827 users) compared to 2018-19 (estimated 154,895 users). Almost one quarter of all Victorian adults currently using e-cigarettes have never smoked (VicHealth, 2022). *“Curiosity”* (54.2%) was the most commonly cited reason for using electronic cigarettes among Australians aged 14 years and over in 2019, followed by *“to help them quit smoking”* (32.5%) and (22.8%) stated that they believed e-cigarettes were *“less harmful than regular cigarettes”* (AIHW, 2019).

## Illicit drugs

Illicit drugs include illegal drugs (e.g. cocaine), pharmaceuticals used for non-medical reasons (e.g. over the counter codeine) and other psychoactive substances (e.g. synthetic cannabis) (Department of Health and Aged Care, 2021b). The National Drug Strategy Household Survey (NDSHS) (2019) shows the proportions of people aged 14 and over who reported recent illicit drug use had increased in the SEMPHN catchment (2.0% increase from 2016 to 2019), Victoria (2.0% increase) and Australia (0.8% increase) (Table 6.1).

Table 6.1 Illicit drug use in Australia in people aged 14 and over, 2016 and 2019

| Illicit drug | 2016 (%) | 2019 (%) | Change (%) |
|--------------|----------|----------|------------|
| SEMPHN       | 15.5     | 17.5     | +2.0       |
| Victoria     | 15.2     | 17.2     | +2.0       |
| Australia    | 16.0     | 16.8     | +0.8       |

Source: AIHW, National Drug Strategy Household Survey (2019). Table 7.13: Recent illicit use of any drug(a), people aged 14 and over, by sex and state/territory, 2007 to 2019 (per cent)

According to the same survey, the most used illicit drugs in Australia are cannabis (11.6%), cocaine (4.2%) and ecstasy (3.0%) (Table 6.2).

Table 6.2 Recent drug use, people aged 14 and over for Victoria, 2016 and 2019

| Illicit drug  | Victoria |          |            | Australia |          |            |
|---|----------|----------|------------|-----------|----------|------------|
|   | 2016 (%) | 2019 (%) | Change (%) | 2016 (%)  | 2019 (%) | Change (%) |
| <b>Illicit (excluding pharmaceuticals)</b>                |          |          |            |           |          |            |
| Cannabis  | 9.9      | 11.5     | 1.6        | 10.4      | 11.6*    | 1.2        |
| Ecstasy   | 2.4      | 3.7*     | 1.3        | 2.2       | 3.0*     | 0.8        |
| Meth/amphetamine  | 1.5      | 1.5      | 0          | 1.4       | 1.3      | -0.1       |
| Cocaine   | 2.5      | 5.2*     | 2.7        | 2.5       | 4.2*     | 1.7        |
| Hallucinogens   | 1.1      | 2.0*     | 0.9        | 1.0       | 1.6*     | 0.6        |
| Inhalants   | 1.1      | 1.8*     | 0.7        | 1.0       | 1.4*     | 0.4        |
| Ketamine  | 0.6      | 1.9*     | 1.3        | 0.4       | 0.9*     | 0.5        |
| Any illicit <sup>22</sup> excluding pharmaceuticals       | 12.2     | 14.6*    | 2.4        | 12.6      | 14.1*    | 1.5        |
| <b>Illicit use of any drug</b>                            |          |          |            |           |          |            |
| Any opioid <sup>23</sup>                                  | 3.6      | 2.7*     | -0.9       | 3.7       | 2.8*     | -0.9       |
| Any illicit   | 15.0     | 17.1*    | 2.1        | 15.6      | 16.4     | 0.8        |
| * Statistically significant change between 2016 and 2019. |          |          |            |           |          |            |

Source: AIHW, National Drug Strategy Household Survey (2019). Table 7.14: Summary of recent(a) drug use, people aged 14 and over, by state/territory, 2007 to 2019.

Further, data from the National Waterways Drug Program (The Australian Criminal Intelligence Commission, 2022) shows that in April 2022:

- Victoria ranked first nationally in capital city consumption of methylamphetamine, heroin and ketamine, and second highest for cocaine consumption.

<sup>22</sup> Illicit use of at least 1 of 12 classes of drugs (excluding pharmaceuticals) in the previous 12 months in 2019. The number and type of drug used varied over time.

<sup>23</sup> Includes use of heroin, non-medical use of painkillers/pain-relievers and opioids or non-medical use of methadone/buprenorphine.

- Regional Victoria ranked first nationally for ketamine consumption and second highest for heroin and oxycodone consumption.

Monthly consumption rates of illicit drugs in Melbourne and in regional Victoria for available data over the last half a decade are comparable for ketamine, methylamphetamine, methylenedioxyamphetamine (MDA) and methylenedioxymethamphetamine (MDMA), but are generally higher in regional Victoria for cannabis, fentanyl, nicotine and oxycodone.

## Patterns of use

Socioeconomic factors and experiences in marginalisation expose individuals to social and structural vulnerability resulting in financial instability, drug dependencies and violence. Personal history of self-harm is the leading risk factor in drug-induced deaths across all drug types (except for cocaine, where the leading risk factor is disruptions of family separations or divorce) (Australian Institute of Health and Welfare, 2021a).

In younger Australians, Ecstasy (MDMA) use declined from 12.0% in 2004 to 7.0% in 2016, then rose again to 9.8% in 2019. This was the first time an increase was reported in Ecstasy use for people in their twenties in more than a decade, with usage returning to a similar level reported in 2001 (10.4%) (Australian Institute of Health and Welfare, 2021c). Cocaine use among people in their 20s was at its highest level in 2019. Much of the rise in cocaine use among people in this age group occurred between 2016 and 2019, from 4.3% in 2001 to 6.9% in 2016 and up to 12.0% in 2019.

According to a 2020 Victorian survey<sup>24</sup> conducted to inform the Illicit Drug Reporting System, heroin use has remained stable in recent years. More than eight in ten participants reported heroin use in the six months prior to the survey (85.0%). This was significantly higher than heroin use across Australia (63.0%). Similarly, the frequency of heroin use (88.0% reported weekly use of heroin) remained stable over the years in Victoria but much higher than the national average. The changes were observed in heroin availability, with significantly fewer participants (51.0%) perceiving heroin as 'very easy' to obtain in 2020 compared to 68.0% in 2019 (National Drug and Alcohol Research Centre, 2020). Different trends were observed for pharmaceutical opioids, prescribed and non-prescribed (sourced illicitly). In Victoria, the most prescribed pharmaceutical opioids in 2020 were methadone (52.0%), buprenorphine-naloxone (15.0%), and morphine (8.0%); and non-prescribed were methadone (10.0%), morphine (8.0%), and oxycodone (7.0%).

The use of Ecstasy-related stimulants and other illicit drugs remained stable or decreased across Australia when COVID-19-related restrictions were introduced in 2020, primarily due to impediments to socialisation. While data is currently still unavailable, an uptake in use could have been possible post-COVID-19 restrictions. However, heterogeneity in drug use patterns during COVID-19 suggests a probable diversity of responses, particularly with economic, social, and other stressors associated with COVID-19 (Price, 2022).

<sup>24</sup> In 2020, interviews were conducted with 179 participants in Victoria. Participants were recruited via advertisements in needle syringe programs and other harm reduction services, as well as via peer referral. The sample comprised of 59% of male, with participant mean age being 44 years. Most of the sample reported being unemployed (92%), over half (58%) reported having post-school qualification, and 12% reported not having fixed address. Nine percent reported being Aboriginal and/or Torres Strait Islanders (a significant decrease compared to 2019, 24%).

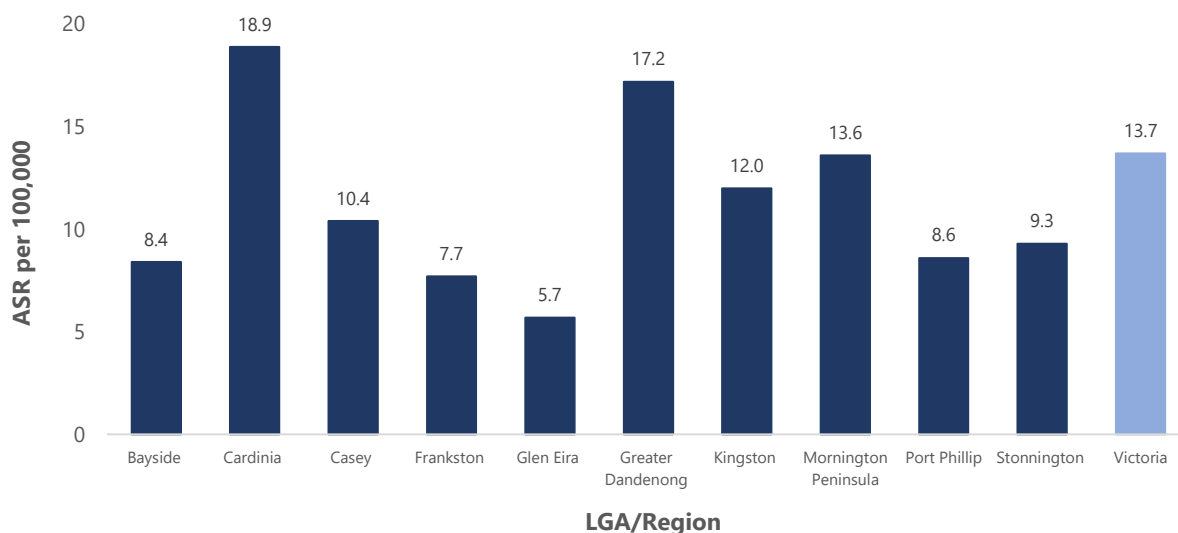
## Alcohol and drug-related harms

### Road injuries

Each year in Victoria, approximately 17% of drivers who were killed in road crashes had a Blood Alcohol Concentration (BAC) of 0.05 g/100 mL or above. In the last five years, 41% of all driver and motorcyclist fatalities had illicit drugs in their system (VicRoads, 2022).

Figure 6.4 shows highest rates of serious road injuries during alcohol hours<sup>25</sup> in 2019-2020 were in Greater Dandenong (n=29, 17.2 per 100,000), Mornington Peninsula (n=23, 13.6 per 100,000) and Cardinia (n=22, 18.9 per 100,000) (see also Appendix Table 2.4.1) (Turning Point, 2023). These are significantly higher than the rate for Victoria (13.7 per 100,000, n=1,809).

Figure 6.4 Serious road injuries during alcohol hours by LGA, 2019-20



Source: Turning Point, 2023 (AODStats) accessed via <https://aodstats.org.au/explore-data/serious-road-injuries/>.

Analysis of 2,287 road traffic fatalities between 1 July 2006 and 30 June 2016 in Victoria identified alcohol was the most detected drug (18.4% with a blood alcohol concentration > 0.05 g/100 mL), followed by opioids (17.3%), tetrahydrocannabinol (13.1%), antidepressants (9.7%), benzodiazepines (8.8%), amphetamine-type stimulants (7.1%), ketamine (3.4%), antipsychotics (0.9%) and cocaine (0.2%) (Schumann et al., 2021).

### Family violence and alcohol-related assaults

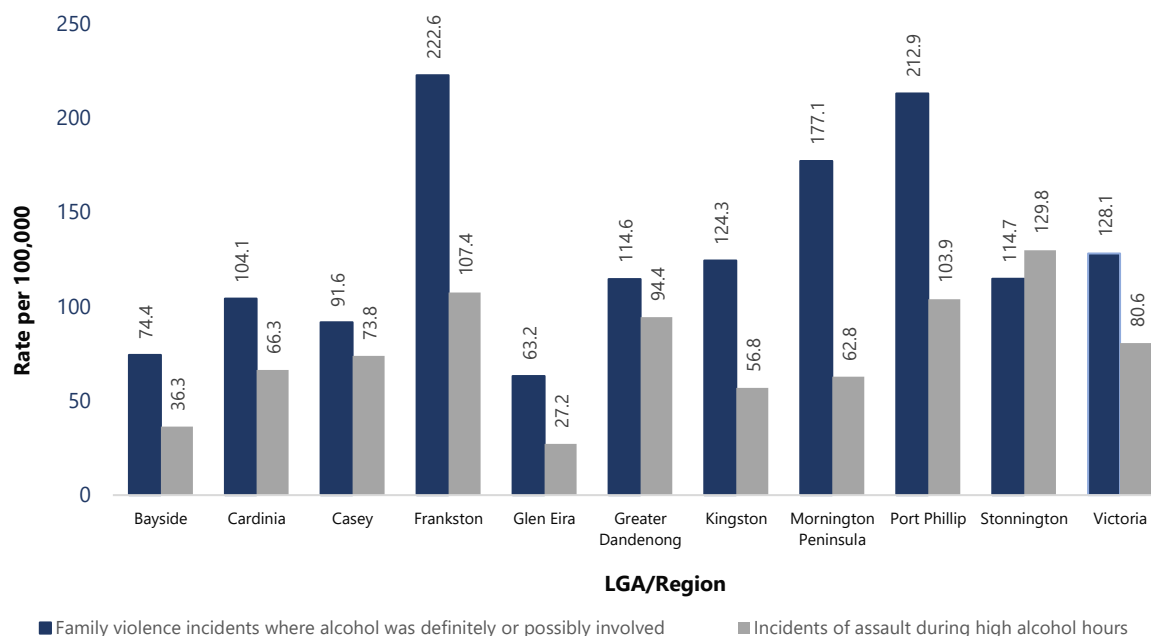
The pandemic saw an implementation of a range of public health measures to limit the spread of the virus in the community. During this time, there has been a significant number of job losses, additional caring responsibilities, home schooling, and other situational stresses, which in combination with social isolation,

<sup>25</sup> It should be noted that alcohol involvement is not directly measured for this dataset, therefore an alternative surrogate measure of applying alcohol hours is used. Alcohol hours in metro areas are Sunday 6pm – Monday 6am, Monday 8pm – Tuesday 6am, Tuesday 6pm – Wednesday 4am, Wednesday 6pm – Thursday 6am, Thursday 6pm – Friday 6am, Friday or Saturday 8pm to 6pm

increased financial stress and increased consumption of alcohol. These can be seen as underlying drivers of violence at home (Yates, 2019). One in 10 (9.6%) respondents experienced physical violence from their partner, and one in four women (26%) in Victoria who had experienced physical or sexual violence in the 12 months before the Personal Safety Survey (PSS) also said they had been unable to seek assistance on at least one occasion due to safety concerns (AIHW, 2022g).

Family violence attributed to definite or possible alcohol consumption (as determined by Victoria Police), identified several LGAs of concern across the SEMPHN catchment. Most recent family violence data for 2019-2020 in Figure 6.5 identified Frankston as having the highest rate of alcohol-related family violence incidents at 222.6 incidents per 100,000 people (see also Appendix Table 2.4.2) (Turning Point, 2023). The figure also shows the rates of assaults that occurred during high alcohol hours. The LGAs of Stonnington (129.8 per 100,000), Frankston (107.4 per 100,000), Greater Dandenong (94.4 per 100,000), and Port Phillip (103.8 per 100,000) all recorded rates higher than the Victorian average (80.6 per 100,000).

Figure 6.5 Family violence and assaults where alcohol might have been involved by LGA, 2019-20



Source: Turning Point, 2023 (AODStats) accessed via <https://aodstats.org.au/explore-data/family-violence/>

## Emergency service use

### Ambulance attendances

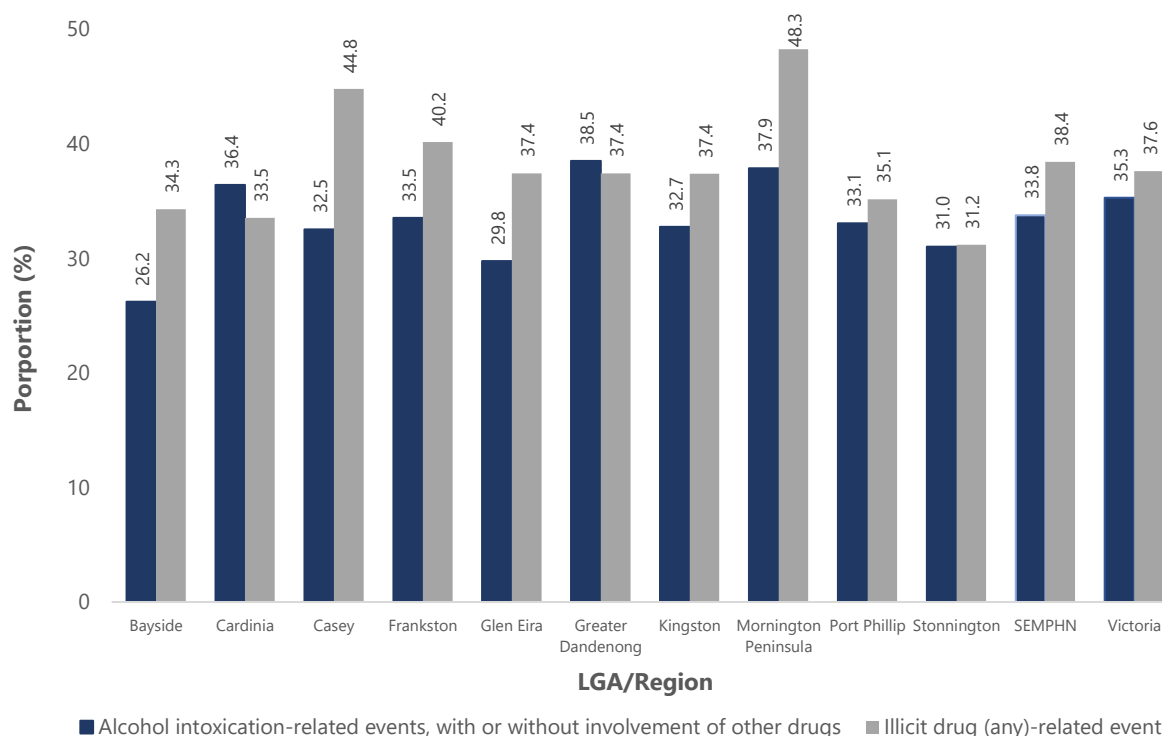
In Victoria, there were 44,442 drug-related ambulance attendances in 2021-22 (Turning Point, 2023). Alcohol accounted for the highest proportion of attendance (46.0%), followed by illicit drugs (29.2%) and pharmaceutical drugs (24.8%). The number of drug-related ambulance attendances has increased by approximately 50% in Victoria since 2012-13.

The rates of alcohol and drug-related ambulance attendances highlights the alcohol and drug care needs that are currently not being met within the community. Figure 6.6 below highlights the proportion of ambulance attendances for alcohol and illicit drug-related events with police co-attendances. The proportions of police and ambulance co-attendances for alcohol and for drug-related events are higher



than for the state for the LGAs of Mornington Peninsula and Cardinia. Casey, Frankston and Greater Dandenong also recorded proportions higher than the state for one of alcohol or illicit drugs. This demonstrates the complexity, safety concerns for health professionals and the increased burden on community and financial resources AOD issues bring about in the catchment.

Figure 6.6 Attendances co-attended by the police, as a proportion of all ambulance attendances for any alcohol and illicit drug related events, 2021-2022



Source: Turning Point, 2023 (AODStats) accessed via <https://aodstats.org.au/explore-data/ambulance-attendances/>.

## Hospitalisations

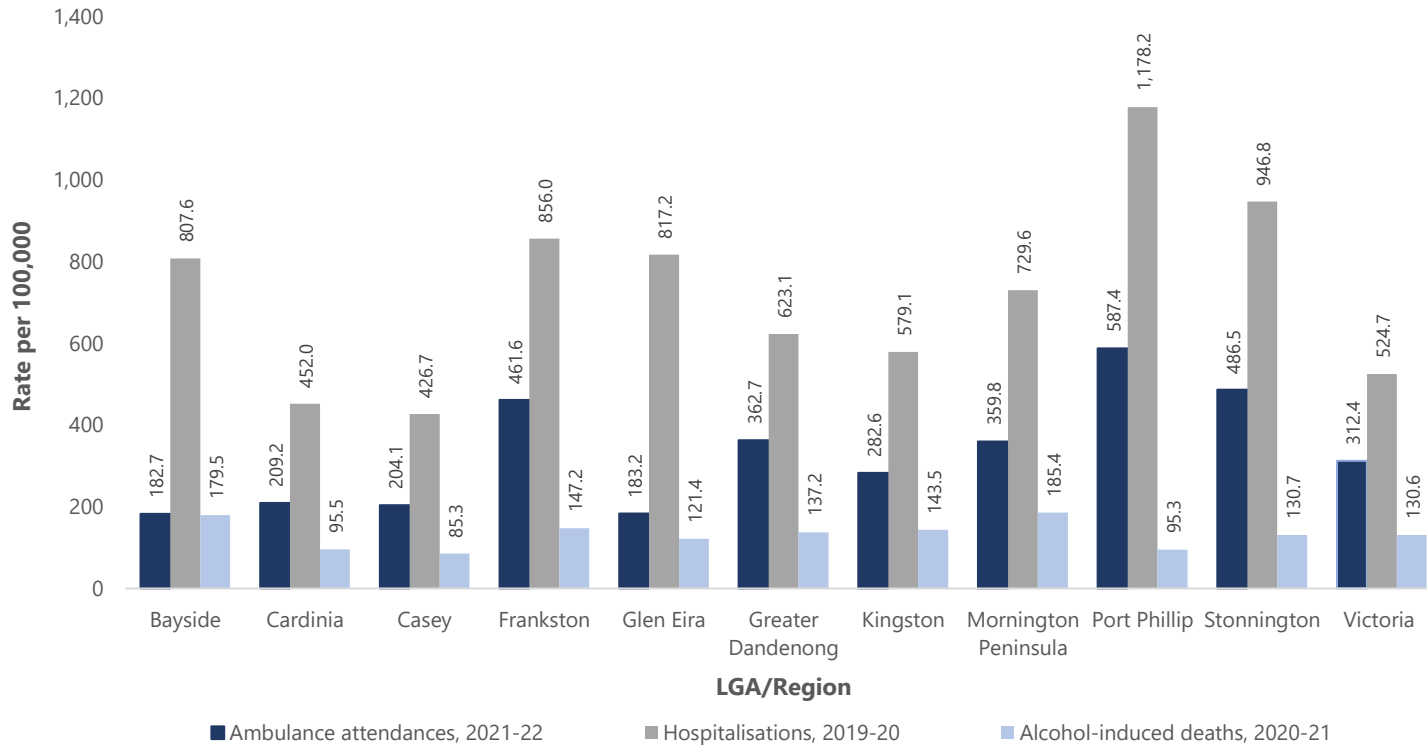
Overall, people are being transported to hospitals from ambulance attendances for alcohol and drug incidents at increasing rates between 2014-15 to 2020-21 (Turning Point, 2023). This is likely due to the severity and complexity of alcohol and drug-related attendances. The region's sharpest increase in alcohol and drug-related ambulance attendances in 2018-19 was related to cannabis, heroin, and amphetamines. The rate of alcohol and drug hospital admissions or hospitalisations provides an indication of the alcohol and drug care needs that are currently not being met within the community. Figures 6.6 and 6.7 report on the alcohol and illicit drug-related events across SEMPHN catchment.

## Alcohol and drug-induced deaths

The number of Australians who die from alcohol and drug overdoses each year continues to rise. There were 2,220 drug-induced deaths reported in Australia in 2020, of which 1,654 (74.5%) were unintentional. Within the SEMPHN catchment, the rate of alcohol and drug-related deaths in 2020-21 is mapped across LGAs as an indication of the alcohol and drug care needs that are currently not being met within the community. As illustrated in Figure 6.7, the highest rate of alcohol-induced deaths was seen in

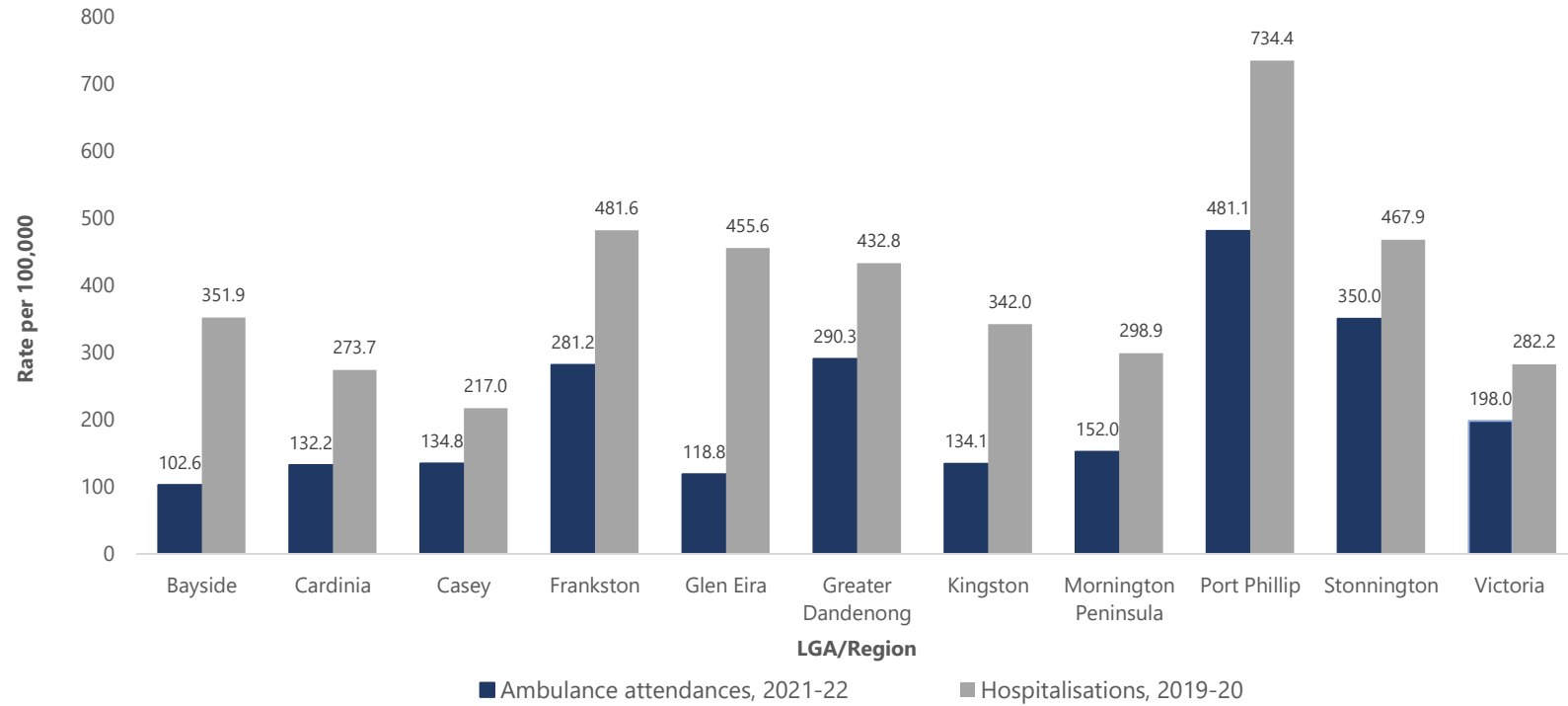
Mornington Peninsula with 185.4 deaths per 100,000 population, which was 42.1% higher than the state average (130.6 per 100,000) (see Appendix Table 2.4.3) (Turning Point, 2023). Bayside had the second highest rate, with 179.5 deaths per 100,000 population. The lowest rates were found in Casey with 86.1 alcohol-related deaths per 100,000 population. Rates of drug induced deaths in the catchment due to any illicit drugs reported are very low across the catchment (fewer than 5 or 0 in most LGAs) (see Appendix Table 2.4.4). Victoria had 78 drug-induced deaths in 2020-21, with an ASR of 1.16 per 100,000.

Figure 6.7 Alcohol-related emergency service utilisation and deaths by LGA, 2019-20 to 2021-22



Source: Turning Point, 2023 (AODStats) accessed via <https://aodstats.org.au/explore-data>

Figure 6.8 Illicit drug-related<sup>26</sup> emergency service utilisation by LGA, selected years



Source: Turning Point, 2023 (AODStats) accessed via <https://aodstats.org.au/explore-data>

<sup>26</sup> Illicit drugs (any): indicates case where any illicit drug was primarily involved in the event, including heroin, opioids, amphetamines, cannabis, stimulants, hallucinogens, inhalants, or other illicit drugs not explicitly mentioned.

## Alcohol and other drugs (AOD) services

In 2021-22, 351 AOD treatment agencies in Victoria provided 87,630 treatment episodes to 36,375 people. Victoria reported more clients using AOD services in 2021-22 than 2013-14, after adjusting for population growth (631 clients per 100,000 population compared with 580 per 100,000, respectively) (AIHW, 2022a). Alcohol was the most common drug of concern in 2021-22, accounting for 38.5% (27,900) of treatment episodes, followed by amphetamines (26.4% or 19,100). Three in five (56%) clients were aged 20-39 years (AIHW, 2022a) and one in ten clients identified as Aboriginal and Torres Strait Islander, which is lower than the national proportion (18%) (AIHW, 2022a).

### Treatment services

AOD treatment services across Australia provide a broad range of treatment services and support to people who use alcohol or drugs, and to their families and friends. Delivery of these services can be provided in a residential treatment facility, non-residential treatment facility, outreach setting or in a home setting (AIHW, 2021b). All publicly funded government and non-government agencies providing these treatment services (including community-based ambulatory services and outpatient services) are nationally mandated to collect and report via the Alcohol and other drug treatment services national minimum data set (AODTS-NMDS)<sup>27</sup>.

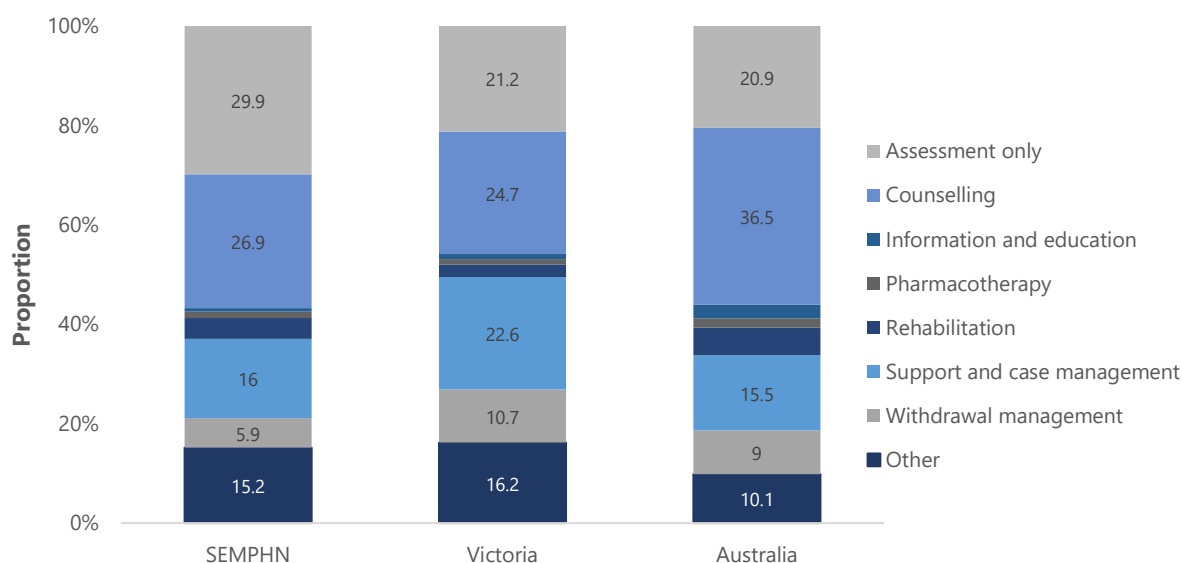
### Treatment types

Different treatment types are available to assist those experiencing problematic drug use. Most treatment types aim to reduce harm of drug use, through services such as counselling or information/education provision. The most common types of treatment include counselling, assessment, and support and case management, and in Victoria close to 47% of treatment episodes in 2021-22 involved either treatment types (Figure 6.9, Appendix Table 2.4.5). National figures show that the most common type of treatment was counselling, with 36.5% of treatment episodes reporting counselling as the main treatment type. Psychosocial counselling refers to evidence-informed talking therapies, aimed at helping the person develop skills (such as psychological skills, or practical skills) to reduce alcohol or other drug consumption or harms, in line with the person's own goals. In Victoria, the proportion of episodes recording counselling as the main treatment type was lower than the national proportion (24.7% vs 36.5%), with SEMPHN catchment (26.9%) recording similar proportions of counselling services compared the state. SEMPHN recorded assessment with the highest proportion of treatment type (29.9%) which was markedly higher than the state proportion (21.2%) and almost 50% higher than the national proportion (20.9%).

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<sup>27</sup> For details, refer to [Alcohol and other drug treatment services NMDS 2018-19 \(aihw.gov.au\)](https://aihw.gov.au)

Figure 6.9 Treatment episodes, as proportion of episodes by AOD-related treatment type and region, 2021-22



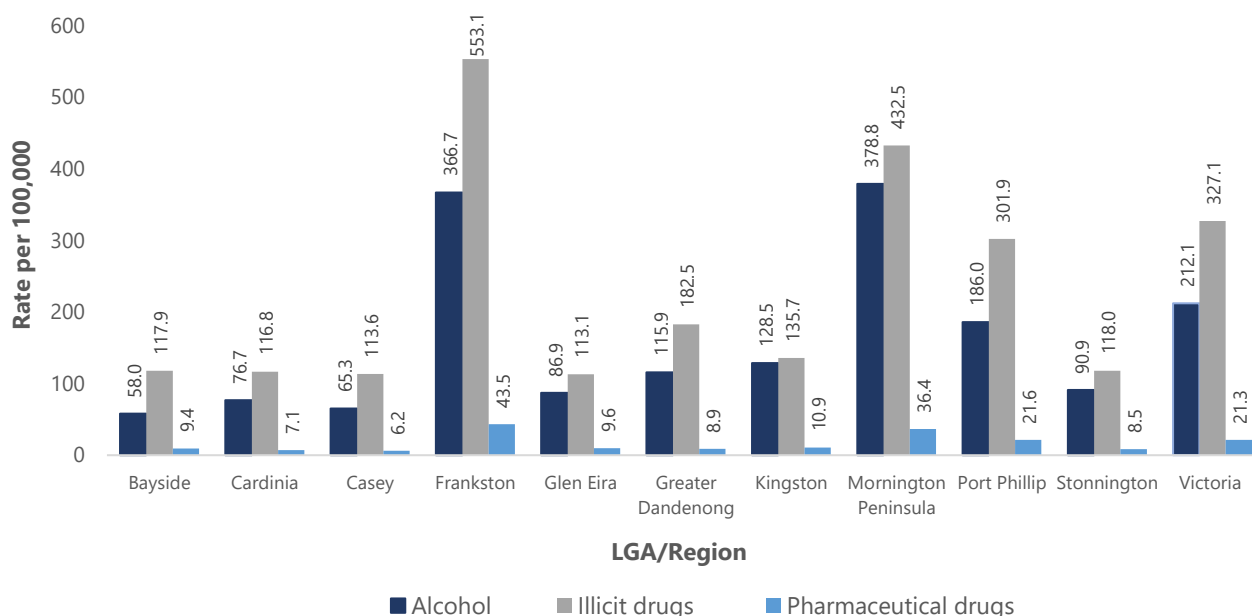
Source: AIHW, 2021-22

For treatment episodes in Victoria principally involving opioid-related drugs, pharmacotherapy was the most common treatment type, while there was no education as a treatment type recorded in 2021-22, which may highlight a gap in service delivery.

### Episodes of care

As shown in Figure 6.10, the highest rates of alcohol-related episodes of care occurred in Mornington Peninsula (378.8 per 100,000) and Frankston (366.7 per 100,000), which was higher the Victorian average rate (212.1 per 100,000 population) (see also Appendix Table 2.4.6). The highest rates of illicit drug-related episodes of care were observed in Frankston (553.1 per 100,000 population), Port Phillip (301.9 per 100,000 population), and Greater Dandenong (182.5 per 100,000).

Figure 6.10 Episodes of care for alcohol, illicit drugs<sup>28</sup>, and pharmaceutical drugs by LGA, 2019-20



Source: Turning Point, 2023 (AODStats) accessed via <https://aodstats.org.au/explore-data/treatment-services-vadc/>.

## Pharmacotherapy

Pharmacotherapy (also known as opioid replacement therapy) is the use of prescribed medication to assist in the treatment of addiction. Pharmacotherapy is one of the main treatment types used for opioid drug dependence. Depending on an individual, pharmacotherapy programs can be short, medium, or long-term in duration and focus on different outcomes (e.g. reduce cravings, prevent withdrawal, block the reinforcing effects). These treatments aim to replace the opioid drug of dependence with a legally obtained, longer-lasting opioid that is usually taken orally. Since 1 February 2018, all formerly over the counter (non-prescription) codeine-containing medicines for pain relief, cough and colds became available by prescription only (AIHW, 2021a), and therefore, could only be prescribed by approved prescribers and dispensed either through a community pharmacy or a specialist clinic (Department of Health, 2019).

### Clients, authorised prescribers, dosing sites

According to the most recent National Opioid Pharmacotherapy Statistics Annual Data (NOPSAD) collection, on a snapshot day in 2022, 55,741 clients received pharmacotherapy treatment for their opioid dependence at 2,982 dosing points across Australia (Table 6.3). Of this, Victoria accounted for over 15,000 clients who received pharmacotherapy treatment for their opioid dependence at 707 dosing points. These included public prescribers such as AOD clinics and public hospitals, private prescribers such as private GPs, and correctional facilities such as prisons or other correctional services. In Victoria, most prescribers were private (93.0%), with 7.0% being correctional facilities. There is no data for Victoria for public prescribers (AIHW, 2021g).

<sup>28</sup> Illicit Drugs (Any): indicates case where any illicit drug was primarily involved in the event, including heroin, opioids, amphetamines, cannabis, stimulants, hallucinogens, inhalants, or other illicit drugs not explicitly mentioned.

While there was a small increase in the ratio of clients to prescribers in Victoria from 2019 to 2022, the estimates are much less than what is observed nationally (18.7 clients per prescriber). The ratio of clients to dosing points has remained stable in Victoria between 2019 and 2022 but higher than the national estimate of 17.3 clients per dosing site (see Table 6.3).

Table 6.3 Frequency and ratio of clients, prescribers, and dosing points, by year and region, 2019 and 2022

| Opioid drug of dependence         | Victoria |        | Australia |
|-----------------------------------|----------|--------|-----------|
|                                   | 2022     | 2019   | 2022      |
| Total number of clients           | 15,153   | 14,085 | 55,741    |
| Total number of prescribers       | 1,100    | 1,700  | 2,982     |
| Total number of dosing points     | 707      | 689    | 3,189     |
| Ratio of clients to prescribers   | 13.8     | 8.3    | 18.7      |
| Ratio of clients to dosing points | 21.4     | 20.4   | 17.5      |

Source: National Opioid Pharmacotherapy Statistics Annual Data (NOPSAD), 2022.

### Prescribers and dispensers

Based on the most recent data available in 2020, the highest number of patients prescribed with pharmacotherapy treatments were in the suburbs of Frankston (postcode 3199, n=373), Dandenong (postcode 3175, n=353), followed by the Cranbourne (postcode 3977, n=268), St Kilda (postcode 3182, n=227) and Noble Park (postcode 3174, n=207). The highest number of authorised prescribers and dispensers were in the Frankston area (postcode 3199) with eight prescribers and seven pharmacies. The Dandenong area (postcode 3175) has eight pharmacies and five prescribers. This disparity between the number of prescribers and pharmacies continues to grow in other areas of high need such as Cranbourne area (postcode 3977) with six pharmacies and only two prescribers, and Narre Warren (postcode 3805) with one prescriber and five pharmacies. In contrast, the St Kilda area (postcode 3182) records more prescribers (n=7) than pharmacies (n=3). These imbalances in the ratio of prescribers to pharmacies in areas of high need may lead to increased burden on prescribers in neighbouring LGAs.

The data shows an imbalance in the ratio of prescribers to pharmacies, strong disparity in the proportion of residents receiving pharmacotherapy treatment and shortage of prescribers and/or dispensers. For example, a large proportion of residents in Noble Park area were receiving pharmacotherapy treatment (n=207), however, the postcode only has four pharmacies and no prescribers. This is similarly observed in the Pakenham region (postcode 3810) with about 150 patients being prescribed pharmacotherapy treatments, but only two authorised prescribers and one pharmacy. This imbalance between limited authorised dispensers and prescribers, and many patients receiving pharmacotherapy treatment, might indicate an increased burden of clients in postcodes with more authorised prescribers, and added burden on patients to move to alternate postcode areas to receive the treatment needed. This indicates an increased need to identify, explore and establish pathways to help convert MATOD trained GPs to active prescribers to help shift the balance and improve the wellbeing of the community.

### Stakeholder engagement

In July 2022, stakeholder consultations were conducted with service providers and lived experience community members to identify the key principles that underpin a 'good' service and the current challenges or pressure points that are potentially impeding this.






Consultation with AOD service providers (n=19), consumers and the AOD community (n=12) identified key risk factors for harm related to AOD use in the region including:

- family history of addiction
- mental illness
- peer pressure, especially in young people
- lack of family involvement
- using alcohol and other drugs at an early age
- using a highly addictive drug such as cocaine or opioids
- living in areas of socioeconomic disadvantage where there are increased rates of unemployment, poor support systems and low rates of school retention
- a lack of housing.

## Challenges across the consumer journey

The challenges experienced by consumers across the treatment journey were identified during the lived experience and service provider consultations. These are summarised in Table 6.4 below:

Table 6.4 Summary of findings from the workshop

|   |  |
|---|--|
| <b>Family and carers</b><br>  | <ul style="list-style-type: none"> <li>• Lack of an intentional and structured approach to intersectionality</li> <li>• Need to focus on connection and engagement</li> <li>• Limited family integration across the system</li> </ul>  |
| <b>Lived experience</b><br>  | <ul style="list-style-type: none"> <li>• Identifying appropriate services for an individual's needs.</li> <li>• Some marginalised groups lack access to technology to support identifying and accessing pathways to care or available services</li> <li>• Lack of affordable services and limitation in accessing care (e.g. transport)</li> <li>• Over-servicing (significant time spent going between AOD and MH services)</li> <li>• Lack of cultural and gender diverse representation</li> <li>• Lack of safe housing options while receiving treatment</li> <li>• Individualised assertive outreach</li> <li>• Holistic approach to after-care (e.g., social supports)</li> <li>• Long waitlists in the public system</li> <li>• Limited family integration in the treatment process</li> <li>• Disconnect between mental health and AOD services</li> <li>• Safe housing options after exiting a service</li> <li>• Lack of after-care services (e.g., the allocation of an exit support worker)</li> </ul> |
| <b>Service providers</b><br> | <ul style="list-style-type: none"> <li>• Lack of knowledge of pathways even when they do exist</li> <li>• Lack of awareness of existing pathways to support non-English speaking communities</li> <li>• Lack of understanding regarding the separate intake systems (e.g., state versus PHN)</li> <li>• Ensuring there are access pathways for transient populations</li> </ul>  |

## Chapter 7 First Nations peoples

The traditional custodians of the lands and waterways of the SEMPHN catchment are the Boon Wurrung and Wurundjeri people (AIATSIS, 2022). The lands of the Bunurong people are from the Werribee River in the north-west to Wilson's Promontory in the south-east (The Nepean Historical Society, 2022). The lands of the Wurundjeri people are the Birrarung Valley (Yarra River), covering much of Narm (Melbourne). Over the past 50 years, Aboriginal Community Controlled Health Services (ACCHS) have provided a wide range of health, social and emotional wellbeing services. There are currently two ACCHS within the SEMPHN catchment: Dandenong & District Aborigines Co-Operative Limited (DDACL) and First Peoples' Health and Wellbeing. These organisations provide support for the First Nations community in the region, aiming to improve access to affordable primary health care and support unmet needs in SEMPHN catchment.

### Population

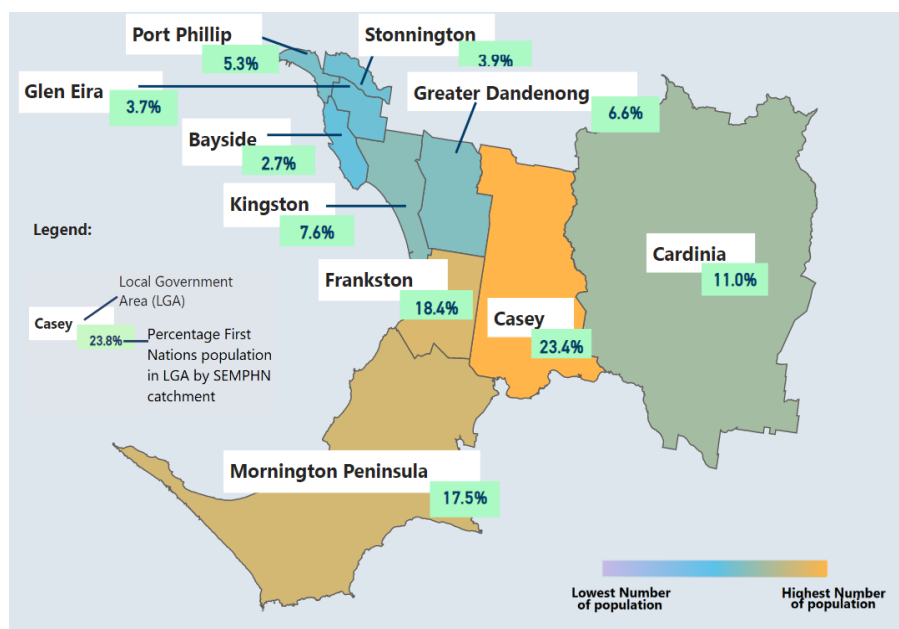
Based on ABS 2021 Census, First Nations peoples represent 0.6% (n=9,914) of the SEMPHN population. Figure 7.1 shows the population distribution by LGA. Between 2016 and 2021, there was a 36.9% increase in the First Nations population in the region, similar to the population growth rate for First Nations peoples in Victoria (37.3%). The largest population growth was observed in Glen Eira (76.5% increase), with population numbers increasing from 230 First Nations peoples in 2016, to 406 in 2021. Casey has the largest number of First Nations population in the region with a total of 2,400 First Nations residents (46.0% increase compared to 2016).

First Nations residents have a median age of 25 years, compared to 37 years for all residents in the region. Nearly one third of the population (31.0%, n=3,076) are aged under 15 years and around one in eight First Nations peoples are aged 55 years and over<sup>29</sup> (n=1,308; 13%). The largest proportion of First Nations peoples in the SEMPHN catchment are aged between 5 and 14 years of age, which is one in five (19.8%) people (n=1,959).

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<sup>29</sup> Due to restrictions in the combined age categories provided by ABS i.e., 45-55 years, 55 -65 years, etc; number of First Nations population above the age of 50 years (older First Nations peoples) cannot be accurately estimated.

Figure 7.1 Estimated proportions of residents who identify as First Nations persons by LGA, 2021

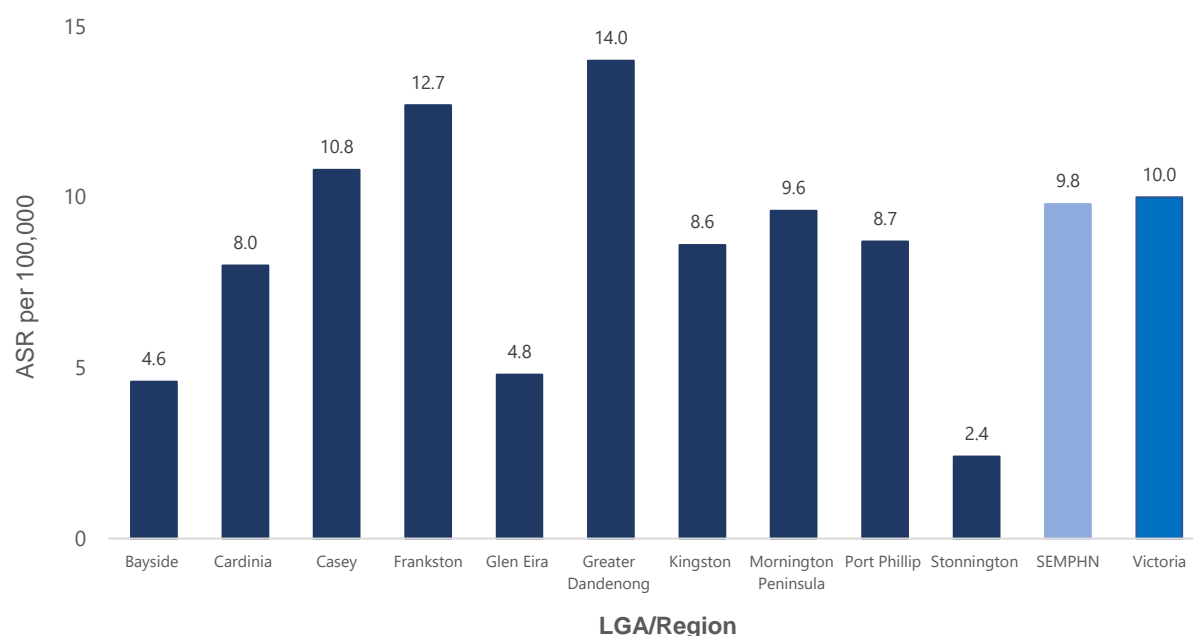


Source: Census 2021, Australian Bureau of Statistics (June 2022), I01: Selected Person Characteristics by Indigenous Status by Sex, accessed on 20 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%)

## Disability

People with a profound or severe core activity limitation are those who may need assistance in either self-care, mobility and communication because of a long-term health condition, disability or due to old age. Based on ABS 2021 Census data shown in Figure 7.2, LGAs with a higher rate of First Nations peoples who need assistance are Greater Dandenong (14.0 per 100), Frankston (12.7 per 100) and Casey (10.8 per 100), all higher than the Victoria average (10.0 per 100) (see also Appendix Table 2.5.1). This data helps service providers and governments plan what local facilities, services and support are required, such as in-home support, respite care and support to carers (ABS, 2021b).

Figure 7.2 Core activity need for assistance for First Nations population by LGA, 2021



Source: Census 2021, Australian Bureau of Statistics (June 2022), 109 Core Activity Need for Assistance by Age by Sex for Aboriginal and/or Torres Strait Islander Persons, accessed on 20 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%)

## Determinants of health

### Socioeconomic disadvantage

The Indigenous Relative Socioeconomic Outcomes Index (IRSOI) is a measure of relative advantage or disadvantage at the Indigenous Area (IARE)<sup>30</sup> level. The index ranges from 1 to 100, where a score of one represents the most advantaged area and a score of 100 represents the most disadvantaged area. Table 7.1 shows First Nations peoples living in the SEMPHN catchment are relatively more advantaged than First Nations peoples across the state (SEMPHN catchment score: 12 and Victoria score: 25)<sup>31</sup>, except for Greater Dandenong (IRSOI score of 53).

<sup>30</sup> Indigenous Areas (IARE) are geographical units to provide a balance between spatial resolution and population size.

<sup>31</sup> Indigenous Relative Socioeconomic Outcomes Index is expected to be updated in the 2023 release of census data by ABS.

Table 7.1 Indigenous Relative Socioeconomic Outcomes Index by IARE by LGA, 2016

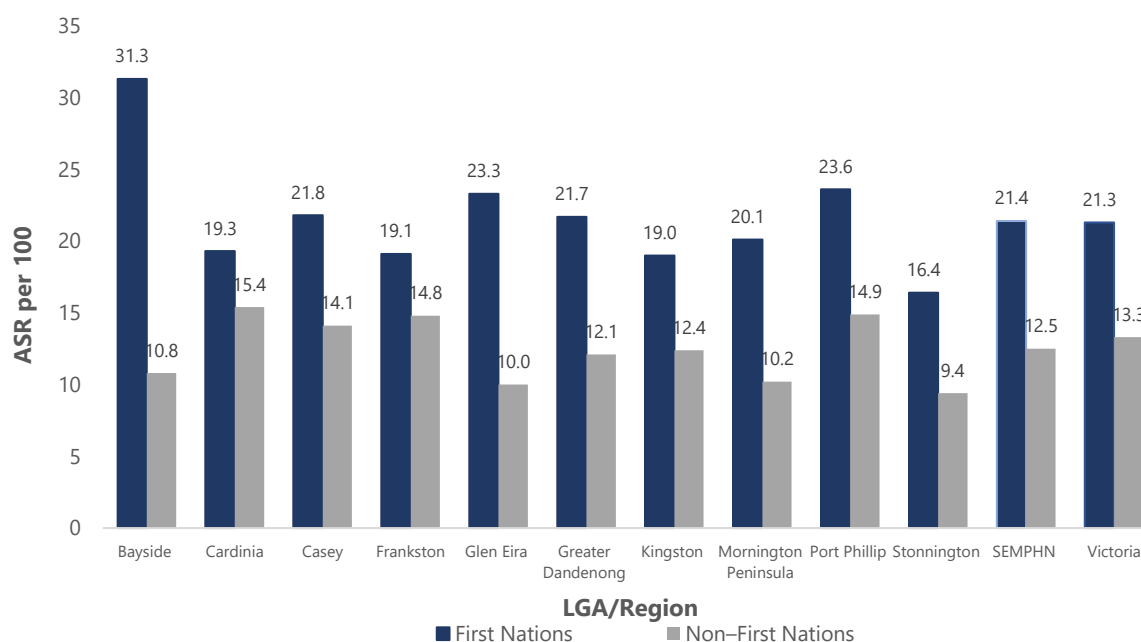
| IARE   | Indigenous Relative Socioeconomic Outcomes Index score | First Nations population (2016 URP) |
|--|--|-------------------------------------|
| Cardinia   | 8  | 780                                 |
| Cranbourne – Narre Warren  | 13   | 1,616                               |
| Frankston  | 8  | 1,922                               |
| Greater Dandenong  | 53   | 516                                 |
| Melbourne – East (part b)  | 1  | 743                                 |
| Melbourne – Port Phillip   | 2  | 351                                 |
| Mornington Peninsula   | 14   | 1,304                               |
| <b>SEMPHN catchment</b>  | <b>12</b>  | <b>7,280</b>                        |
| <b>Victoria</b>  | <b>25</b>  | <b>47,788</b>                       |
| LGAs covered in the IARE are Cardinia (Cardinia Shire), Cranbourne – Narre Warren (City of Casey), Frankston (City of Frankston, City of Kingston), Greater Dandenong (City of Greater Dandenong), Melbourne – East (part b) (city of Bayside, City of Glen Eira, City of Stonnington), Melbourne – Port Phillip (City of Port Phillip), Mornington Peninsula (Mornington Peninsula Shire) |  |                                     |

Source: PHIDU (June 2022 release), accessed on 20 August 2022, Table: Summary measure of Indigenous outcomes.  
<https://phidu.torrens.edu.au/social-health-atlases/maps/#aboriginal-torres-strait-islander-social-health-atlas-of-australia>. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%)

## Education

Higher education levels have been linked with improved health and wellbeing, health literacy, income, employment, better working conditions and a range of other social benefits (Hart et al. 2017). The national agreement on Closing the Gap, has identified early childhood education, Year 12 or equivalent, tertiary and post school educational attainment as areas of action and improvement. Figure 7.3 highlights higher participation rates in vocational education and training among First Nations peoples compared to non-First Nations peoples (see also Appendix Table 2.5.2). In 2021, these rates are higher in Glen Eira (ASR of 50.1 per 100 First Nations peoples), Bayside (ASR of 38.3 per 100 First Nations peoples), and Casey, with an ASR of 25.9 per 100 First Nations peoples who were engaged in vocational education and training compared to the corresponding rates observed for non-First Nations people. In comparison to Victoria, SEMPHN catchment has a lower rate of participation in vocational education and training for both First Nations peoples and non-First Nations peoples.

Figure 7.3 Participation rates in vocational education and training for First Nations peoples, 2021



Source: PHIDU (June 2023 release), accessed on 11 July 2023, Table: Education. <https://phidu.torrens.edu.au/social-health-atlases/maps/#aboriginal-torres-strait-islander-social-health-atlas-of-australia>. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMP HN catchment (4%)

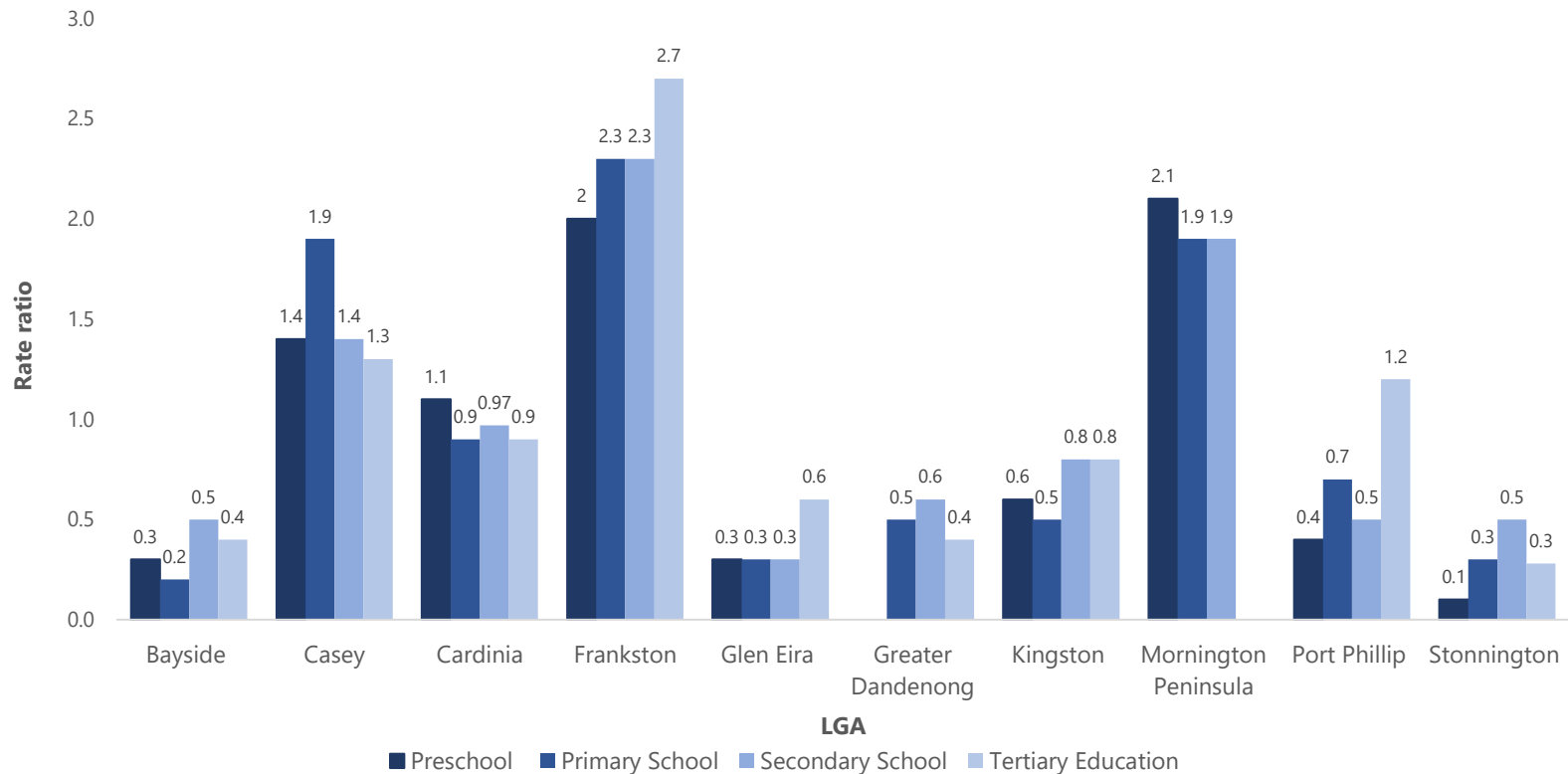
Figure 7.4 reports on the proportion of First Nations and non-First Nations populations attending various levels of educational institutions across SEMP HN catchment (see also Appendix Table 2.5.3). Due to the difference in age cut-offs to attend different educational institutions, only numbers and percentages are reported across various LGAs. In the ABS 2021 Census, there were 402 First Nations children attending preschool (children under 5 years) across all LGAs in the SEMP HN catchment with the highest proportions being in Cardinia (28.6%, n=115) followed by Frankston (19.4%, n=78). There were 1,329 First Nations children attending primary school (5 years or over) and 984 children attending secondary school (usually between 12 and 20 years of age) across the SEMP HN catchment.

Rate ratios are calculated as per ABS guidelines comparing rates of attendance across various educational levels for First Nations peoples against the non-First Nations groups in SEMP HN catchment<sup>32</sup>. Rate ratios greater than 1 was observed in Casey, Frankston and Mornington Peninsula across all educational institutions, indicating higher proportions of First Nations peoples attending educational institutions in these LGAs compared to non-First Nations peoples in these LGAs<sup>33</sup>.

<sup>32</sup> Rate ratio was calculated by dividing rate of attendance (per 10,000) for each LGA by total rate of attendance (per 10,000) for all of Victoria. If the rate ratio is 1 (or close to 1), it suggests no difference or little difference in rates (rate of attendance is the same). A rate ratio greater than 1 suggests higher rate of attendance in the LGA compared to Victoria. A rate ratio lesser than 1 suggests a lower rate in the LGA compared to Victoria.

<sup>33</sup> These are not a comparison of age-standardised rates.

Figure 7.4 Rate ratio of First Nations people attending an educational institution relative to Victorian residents by LGA, 2021

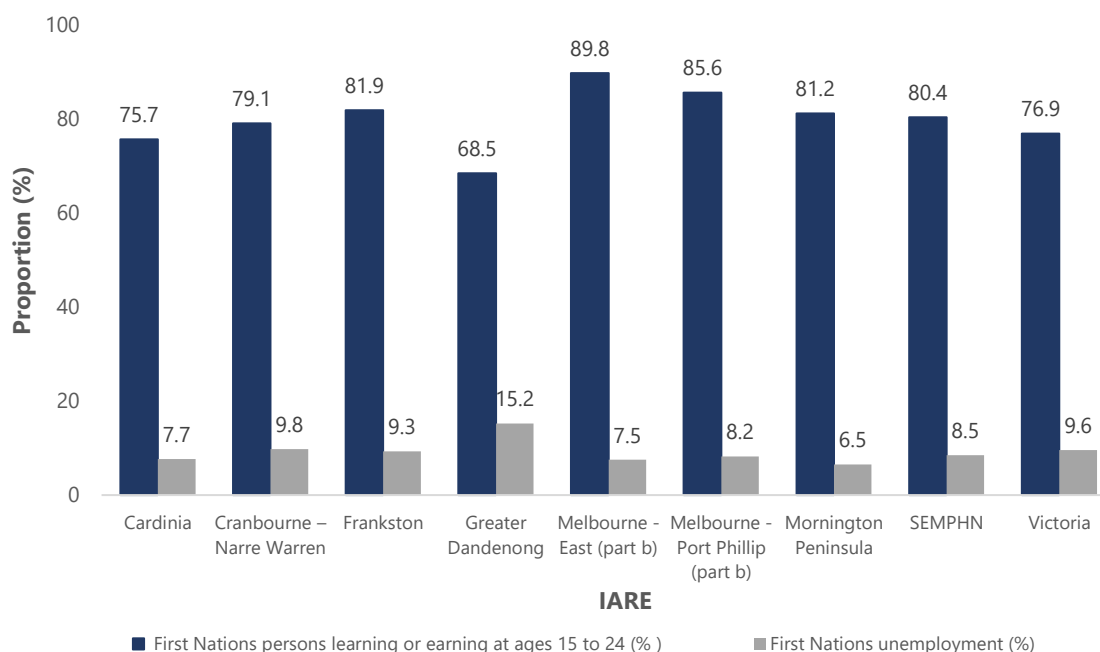


Source: Census 2021, Australian Bureau of Statistics (June 2022), I05 Highest Year of School Completed by Indigenous Status by Sex, accessed on 20 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%). Rate ratio was calculated by dividing rate of attendance (per 10,000) for each LGA by total rate of attendance (per 10,000) for all of Victoria. If the rate ratio is 1 (or close to 1), it suggests no difference or little difference in rates (rate of attendance is the same). A rate ratio greater than 1 suggests higher rate of attendance in the LGA compared to Victoria. A rate ratio lesser than 1 suggests a lower rate in the LGA compared to Victoria.

## Employment

In 2021, the proportion of First Nations peoples aged 15 to 24 years engaged in school, work or further education/training were lowest in the IARE Greater Dandenong (68.5%), Cardinia (75.5%) and Cranbourne-Narre Warren in Casey (79.1%), which are lower than the catchment average (80.4%) as shown in Figure 7.5 (see also Appendix Table 2.5.4).

Figure 7.5 Education and employment status in the labour force for First Nations peoples, 2021



Source: PHIDU (June 2023 release), accessed on 17 July 2023, Table: Education. <https://phidu.torrens.edu.au/social-health-atlases/maps/#aboriginal-torres-strait-islander-social-health-atlas-of-australia>. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%)

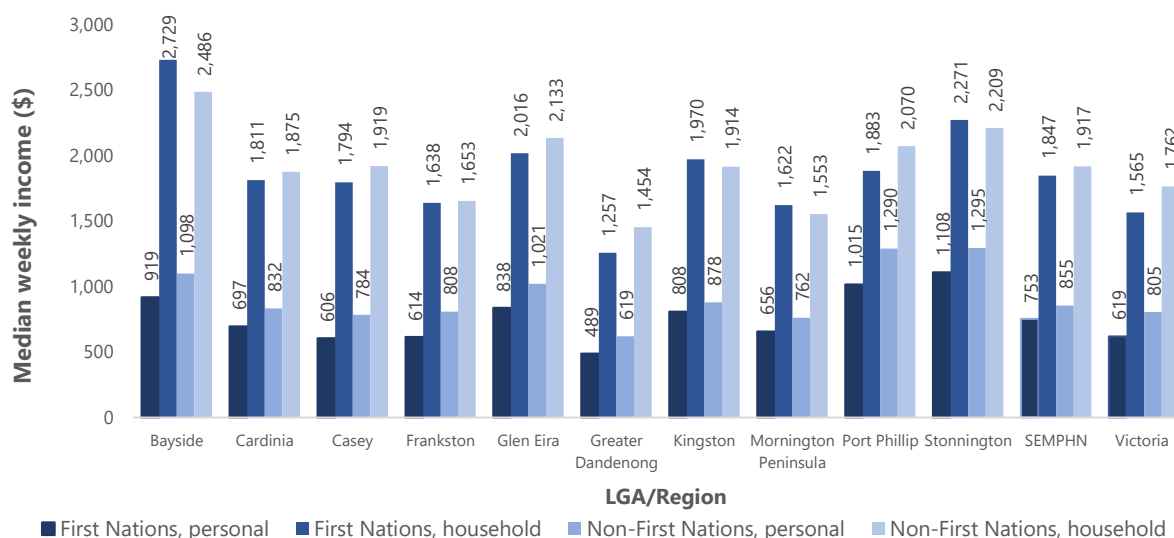
## Income

Income is associated with health outcomes on a gradient, with many studies finding a correlation between income and other social determinants of health such as educational attainment and employment. There is a significant gap in income between First Nations adults (\$570 median equivalised gross weekly household income) and non-First Nations adults (\$818) (Australian Institute of Health and Welfare, 2017). Across Australia, the median equivalised total household weekly income First Nations households was \$830.

When comparing median household income across SEMPHN catchment, First Nations households have lower median personal weekly income across all LGAs in comparison to non-First Nations households, with the exception of Bayside (First Nations household income: \$2,729 versus non-First Nations household income: \$2,486), Kingston (First Nations household income: \$1,970 versus non-First Nations household income: \$1,914) and Stonnington (First Nations household income: \$2,271 versus non-First Nations household income: \$1,917) (see Figure 7.6, Appendix Table 2.5.5).



Figure 7.6 Average weekly personal and household income of First Nations populations by LGA, 2021



Source: Census 2021, Australian Bureau of Statistics (June 2022), 104 Selected Medians and Averages, accessed on 20 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%)

## Housing

Housing status is a determinant of health and wellbeing. The concept of crowding is based upon a comparison of the number of bedrooms in a dwelling with a series of household demographics such as the number of usual residents, their relationship to one another, their age, and their sex. Data from the ABS 2021 Census shows that overcrowding (defined here as people living in households needing three extra bedrooms or more) is experienced by 0.7% of First Nations Victorians compared with 0.5% of non-First Nations Victorians. First Nations Victorians are also 4.4 times as likely to be homeless than non-First Nations.

The average size for First Nations households across SEMPHN catchment was 2.8 persons per household compared to 2.5 persons in non-First Nations households. Casey and Cardinia reported the largest average size for First Nations households, each with 3.4 persons per household, followed by Mornington Peninsula with 3.1 persons per household.

Percentage of dwellings rented by First Nations households requiring extra bedrooms, as a proportion of all private dwellings with First Nations households (based on Canadian National Occupancy Standard) (ABS, 2021c). The highest proportions were in the LGAs of:

- Greater Dandenong, 10.5%
- Cardinia, 7.9%
- Frankston, 6.8%.

## Life expectancy and burden of disease

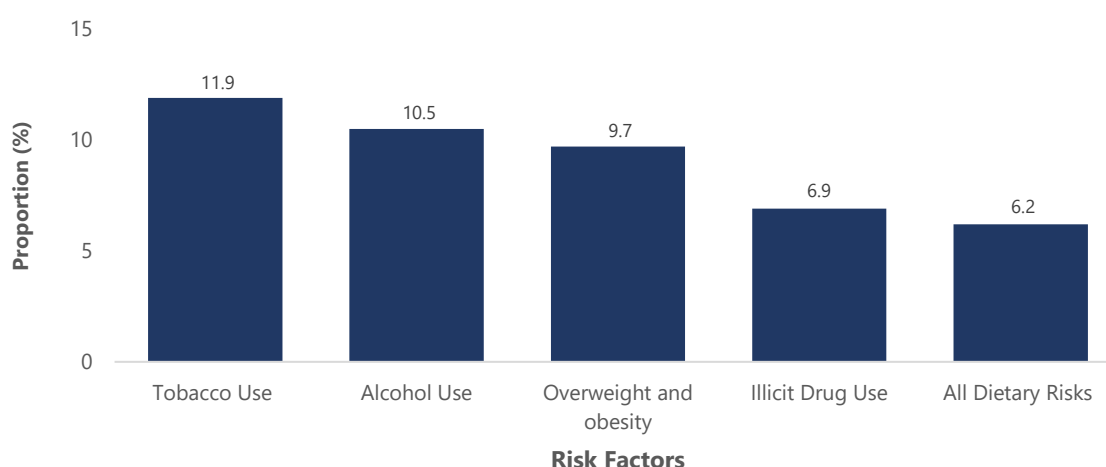
First Nations peoples in Australia have a lower life expectancy than non-First Nations peoples. Life expectancy for First Nations females is 75.6 years compared to 83.4 years for non-First Nations females. Life expectancy reported for First Nations males is 71.6 years compared to 80.2 years for non-First Nations

females. In 2018, First Nations Australians lost 113,445 years of life due to premature death (fatal burden), equivalent to 137 Years of Life Lost (YLL)<sup>34</sup> per 1,000 people. These lost years of life were the result of 3,619 deaths, 59% of which occurred in people aged less than 65 years, compared to the non-First Nations population where only 17% of deaths occurred before 65 years for the same time period (Australian Institute of Health and Welfare, 2018b). First Nations males (58%) were at higher risk of premature death compared to First Nations females (42%) Nationally, four disease groups accounted for over two-thirds of YLL that First Nations Australians experienced in 2018, are injuries, accounting for 23% of fatal burden of disease; followed by cancer (20%), heart disease (19%) and infant and congenital conditions (9%) (Australian Institute of Health and Welfare, 2018b).

## Health risk factors

In 2018, 49.0% of the burden of disease in First Nations Australians could potentially have been prevented by avoiding exposure to the modifiable risk factors examined in the Australian Burden of Disease Study. Figure 7.7 shows the contribution of various risk factors to the burden of disease among the First Nations population. Figure 7.2 shows tobacco and alcohol use account for 22.4% of the total burden of disease in the First Nations population (Australian Institute of Health and Welfare, 2018b).

Figure 7.7 Risk factors and their contribution to the total burden of disease in First Nations peoples in Australia, 2018



Source: Australian Burden of Disease Study: impact and causes of illness and death in Australia 2018.

## Tobacco use

The 45 & Up Study, identified that more than 10,000 deaths among First Nations adults over the age of 45 years, over the past decade were caused by smoking (Thurber et al., 2021). Those who never smoked were around twice as likely to survive to age 75 years, compared with current smokers (Thurber et al., 2021). Despite a steady decline in smoking prevalence among First Nations peoples over time (from 53.1% in 2002 to 41.0% in 2019), the National Aboriginal and Torres Strait Islander Health Surveys, 2018-19 estimated that across Australia, 38.0% of the First Nations peoples over the age of 15 years were daily

<sup>34</sup> Fatal burden is a measure of the years of life lost in the population due to dying from disease or injury, where 1 YLL is 1 year of life lost. The YLL associated with each death is based on 2 factors: the age at which death occurs and the life expectancy, which is the number of remaining years that a person would, on average, expect to live from that age.

smokers, with similar rates observed among both males (39.0%) and females (36.0%) (Tobacco in Australia, 2019). When comparing across age groups, First Nations males between the ages of 25-44 years showed the highest prevalence (67.0%) across all other cohorts. In contrast, older First Nations women aged over 65 years had the lowest prevalence of current smoking (22.0%) as well as the highest prevalence of never smoking (50.0%) (Tobacco in Australia, 2019). In 2018-19, 36.0% of First Nations peoples in Victoria were daily smokers (compared to 41.0% observed nationally) (Tobacco in Australia, 2019).

## Smoking during pregnancy

The proportions of First Nations women smoking during pregnancy in the SEMPHN catchment are similar to Victorian averages. As seen in Table 7.2, higher proportions are observed in two LGAs: Port Phillip and Greater Dandenong (Australian Bureau of Statistics, 2017; PHIDU, 2021c). The data shows the percentage of First Nations women who reported that they smoked during a pregnancy, out of the number of pregnancies of First Nations women (2016-18). Data are aggregated over three years and may include women who gave birth more than once during the time.

Table 7.2 Prevalence of smoking during pregnancy among First Nations mothers, 2017 to 2019

| IARE of residence  | First Nations mothers              |                       |  |
|--|------------------------------------|-----------------------|--|
|  | Number who smoked during pregnancy | Number of pregnancies | Proportion who smoked during pregnancy (%) |
| Cardinia   | 17                                 | 47                    | 36.2                                       |
| Cranbourne – Narre Warren  | 35                                 | 104                   | 33.7                                       |
| Frankston  | 36                                 | 99                    | 36.4                                       |
| Greater Dandenong  | 17                                 | 36                    | 47.2                                       |
| Melbourne – East (part b)  | 17                                 | 33                    | 36.2                                       |
| Melbourne – Port Phillip   | 32                                 | 18                    | 50.0                                       |
| Mornington Peninsula   | 15                                 | 61                    | 24.6                                       |
| <b>SEMPHN catchment</b>  | <b>145</b>                         | <b>403</b>            | <b>36.0</b>                                |
| <b>Victoria</b>  | <b>1,183</b>                       | <b>2,914</b>          | <b>40.6</b>                                |
| LGAs covered in the IARE are Cardinia (Cardinia Shire), Cranbourne – Narre Warren (City of Casey), Frankston (City of Frankston, City of Kingston), Greater Dandenong (City of Greater Dandenong), Melbourne – East (part b) (city of Bayside, City of Glen Eira, City of Stonnington), Melbourne – Port Phillip (City of Port Phillip), Mornington Peninsula (Mornington Peninsula Shire) |                                    |                       |  |

Source: PHIDU (June 2022 release), accessed on 20 August 2022, Table: Mothers and Babies. <https://phidu.torrens.edu.au/social-health-atlases/maps/#aboriginal-torres-strait-islander-social-health-atlas-of-australia>. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%)

## Alcohol

Excessive alcohol consumption is associated with health and social wellbeing issues. Long-term excessive consumption is a major risk factor for conditions including liver and heart disease, stroke, diabetes, obesity and cancer. Binge drinking contributes to injuries, suicide, transport accidents, violence, burns and falls (AHMAC 2017) (Australian Institute of Health and Welfare, 2017). First Nations people in Victoria present at emergency departments for alcohol-related causes more than four times the rate of other Victorians (Department of Health, 2020).

## Physical inactivity

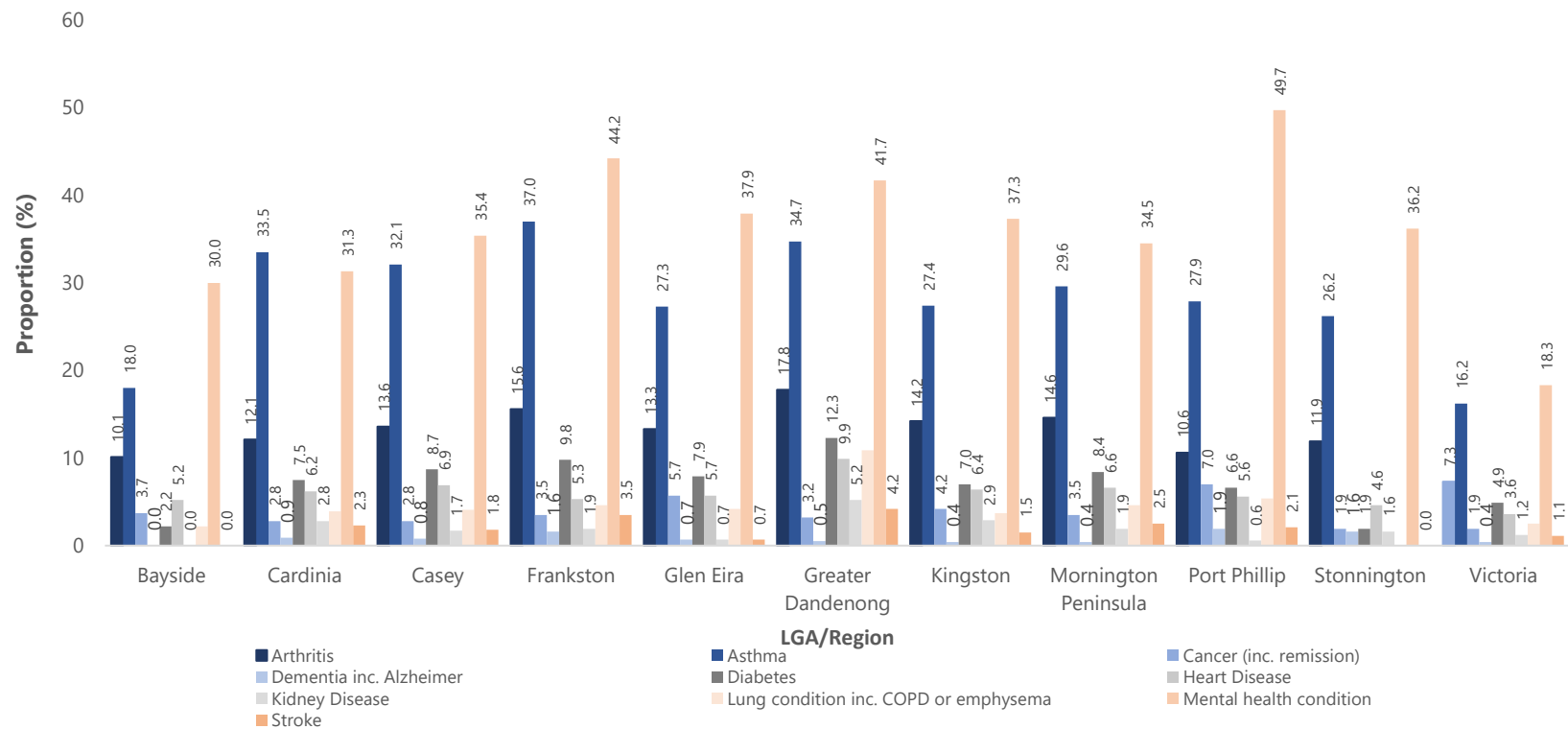
Data from the Victorian Population Health Survey 2019 shows 43.7% of First Nations peoples met physical activity guidelines compared with 51.1% of all non-First Nations adults. Only one-third (33.7%) of First Nations women met physical activity guidelines compared with almost half (48.9%) of all other adult women (Victoria Department of Health, 2021).

The rate of disease burden among First Nations peoples is more than double (2.3 times) that of non-First Nations Australians (Australian Institute of Health and Welfare - National Indigenous Australian Agency, 2020). When looking at individual causes, the top five causes with the highest burden among First Nations Australians in 2018 were coronary heart disease (contributing 5.8% of total burden), anxiety disorders (5.3%), suicide and self-inflicted injuries (4.6%), alcohol use disorders (4.4%) and depressive disorders (4.3%) (Australian Institute of Health and Welfare, 2018b).

## Chronic diseases

Data from the Victorian Population Health Survey 2019 shows 43.2% of First Nations peoples in Victoria have been diagnosed with two or more chronic diseases, compared with 27.4% of all other adults (Victoria Department of Health, 2021). Census data from 2021 also indicate that across most LGAs in the catchment, the rates of most chronic diseases in First Nations people exceed those of the Victorian rate (Figure 7.8, Appendix Table 2.5.6).

Figure 7.8 Prevalence of chronic conditions in First Nations population by LGA, 2021



Source: Census 2021, Australian Bureau of Statistics (June 2022) I12: Type of Long-Term Health Condition by Age for Aboriginal and/or Torres Strait Islander Persons, accessed on 20 August 2022. Note that Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%)

## Immunisation

Immunisation rates for First Nations children in the catchment are marginally lower for one-year and two-year cohorts compared with non-First Nations children as can be seen in Table 7.3. Childhood immunisation rates for the five-year cohort are higher in First Nations children compared with non-First Nations children both within the SEMPHN catchment and across Victoria. However, rates are marginally lower for the remaining cohorts (one-year and two-year groups).

Table 7.3 Full immunisation among First Nations children (1-5 years) by IARE, 2021

| IARE   | Fully immunised at 1 year of age |                | Fully immunised at 2 years of age |                | Fully immunised at 5 years of age |                |
|--|----------------------------------|----------------|-----------------------------------|----------------|-----------------------------------|----------------|
|  | Number                           | Proportion (%) | Number                            | Proportion (%) | Number                            | Proportion (%) |
| Cardinia   | 25                               | 96.2           | 13                                | 65.0           | 15                                | 100.0          |
| Cranbourne – Narre Warren  | 45                               | 95.7           | 44                                | 84.6           | 41                                | 97.6           |
| Frankston  | 38                               | 86.4           | 21                                | 65.6           | 38                                | 100.0          |
| Greater Dandenong  | 6                                | 75.0           | #                                 | ..             | 8                                 | 100.0          |
| Melbourne – East (part b)  | 16                               | 95.8           | #                                 | ..             | #                                 | ..             |
| Melbourne – Port Phillip (part b)  | #                                | ..             | #                                 | ..             | #                                 | ..             |
| Mornington Peninsula   | 7                                | 100.0          | 13                                | 41.9           | 22                                | 100.0          |
| <b>SEMPHN catchment</b>  | <b>139</b>                       | <b>92.1</b>    | <b>93</b>                         | <b>60.7</b>    | <b>131</b>                        | <b>99.2</b>    |
| <b>Victoria</b>  | <b>1,429</b>                     | <b>94.1</b>    | <b>1,180</b>                      | <b>77.7</b>    | <b>1,371</b>                      | <b>97.6</b>    |
| LGAs covered in the IARE are Cardinia (Cardinia Shire), Cranbourne – Narre Warren (City of Casey), Frankston (City of Frankston, City of Kingston), Greater Dandenong (City of Greater Dandenong), Melbourne – East (part b) (city of Bayside, City of Glen Eira, City of Stonnington), Melbourne – Port Phillip (City of Port Phillip), Mornington Peninsula (Mornington Peninsula Shire) |                                  |                |                                   |                |                                   |                |

Source: PHIDU (June 2023 release), accessed on 17 July 2023, Table: Immunisation. <https://phidu.torrens.edu.au/social-health-atlases/maps/#aboriginal-torres-strait-islander-social-health-atlas-of-australia>. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%)

## Antenatal health

Poor quality antenatal care can contribute to poorer pregnancy outcomes for First Nations women. The National Strategic Directions for Australian Maternity Services report (COAG Health Council (Department of Health), 2019) and Victorian Government strategic plans emphasize the need for services to provide appropriately developed, culturally safe and accessible perinatal care for First Nations women (Victorian Department of Health, 2015).

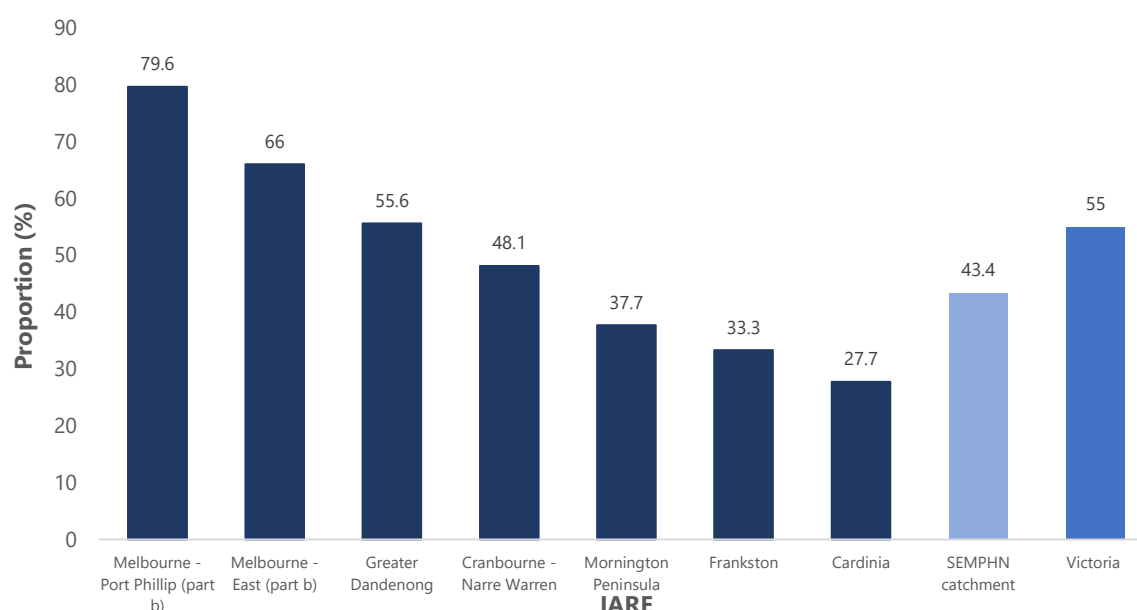
Average age of First Nations women in Australia, who gave birth in 2020, was 26.5 years compared to non-First nations women (31.2 years). Almost 60% of all First nations women who gave birth were between 20-30 years of age (n=8,518, 59.2%), and 11.2% were under 20 years of age (n=1,608).

There are significant gaps in antenatal health between First Nations and non-First Nations peoples, therefore support for First Nations women is crucial in this period. In Victoria, 1,143 First Nations women

gave birth in 2020. Research has noted that the Australian maternity system does not meet the needs of First Nations families and is not culturally safe (Kildea et al., 2019). First Nations women are 14 times more likely to live in remote locations than non-First Nations women (21% of birthing women compared to 1.5%, respectively) with approximately one-fifth of all Indigenous women living more than one hour's drive from the nearest birthing facility (Kildea et al., 2019).

Figure 7.9 shows the percentage of First Nations women who gave birth and did not have an antenatal visit in the first 10 weeks of pregnancy out of the total number of First Nations women who gave birth (2017-19) (see also Appendix Table 2.5.7). The data are aggregated over three years, and they may include women who gave birth more than once during the period. The proportion of First Nations women in the SEMPHN catchment who did not attend antenatal care within the first 10 weeks are highest in Port Phillip (79.6%), Melbourne – East (66.0%) and Greater Dandenong (55.6%).

Figure 7.9 First Nations who did not attend antenatal care, by IARE, 2017-2019



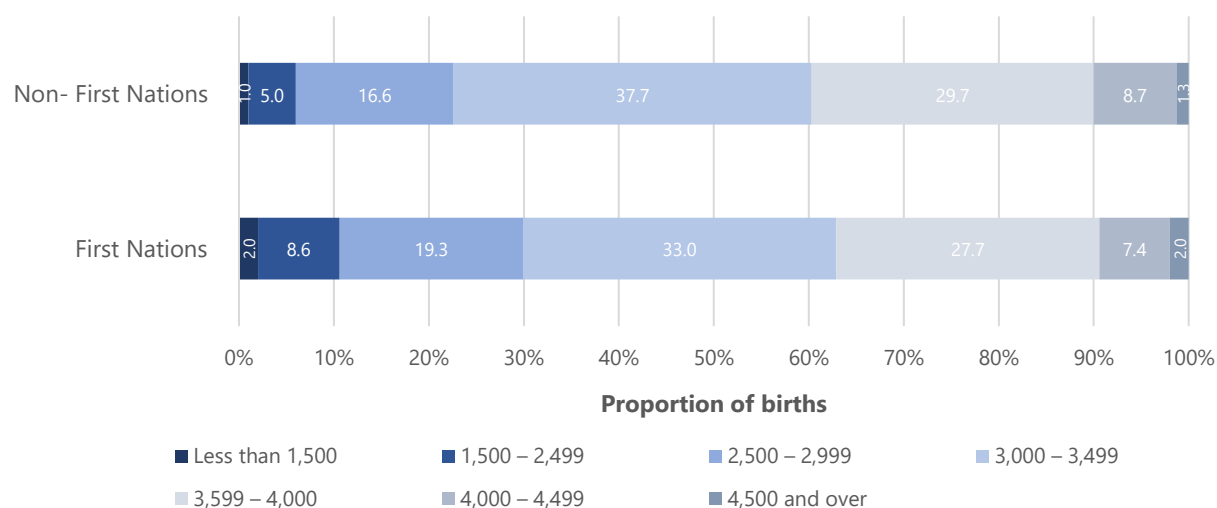
Source: PHIDU (June 2023 release), accessed on 17 July 2023, Table: Mothers and Babies. <https://phidu.torrens.edu.au/social-health-atlases/maps/#aboriginal-torres-strait-islander-social-health-atlas-of-australia>. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%)

## Birth weight

Having a healthy weight at birth provides children with a good start in life, while low birth weight infants are prone to ill-health in childhood and to chronic disease as adults (AHMAC 2017). Almost twice as many babies of Victorian First Nations mothers are born with a low birthweight compared with those of non-First Nations mothers. Figure 7.10 below shows the distribution of live births against birth weight for babies born to First Nations mothers across both Australia and Victoria.

In 2021, the proportion of babies with birthweight under 2,500 grams was higher in the First Nations population (10.6% in Victoria) compared to the non-First Nations population (6.0%) (Figure 7.10, Appendix Table 2.5.8). About 2% of babies born to First Nations mothers were of very low birthweight (under 1,500 grams).

Figure 7.10 Weights of newborns (in grams) by First Nations status across Victoria, 2021



Source: AIHW analysis of National Perinatal Data Collection, 2021. Table 3.12: Live births of Aboriginal and Torres Strait Islander mothers, by birthweight and state and territory, 2021, Table 3.9: Live births, by birthweight and state and territory, 2021

## Mental health and suicide prevention

The leading cause of disease burden for First Nations peoples is mental and substance use disorders, including depressive disorders, bipolar disorder, anxiety disorders, schizophrenia and AOD disorders (Australian Institute of Health and Welfare - National Indigenous Australian Agency, 2020). First Nations Victorians are approximately three times more likely to experience high or very high levels of psychological distress compared to other Victorians (Department of Health, 2020).

As seen in Figure 7.8 above, higher rates of self-reported mental health conditions are seen in First Nations people, compared to almost all other chronic conditions for SEMPHN catchment. Highest proportions were observed in Port Phillip (49.7%) and Frankston (44.2%), much higher than the proportion for Victoria (18.3%).

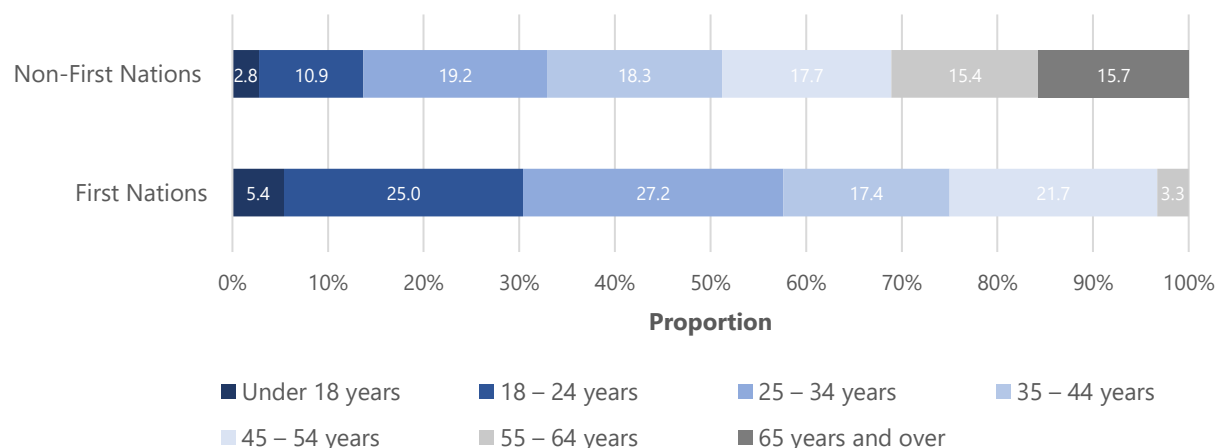
Data from the Victorian Population Health Survey 2019 (Victoria Department of Health, 2021) shows that:

- one in two (45.9%) First Nations peoples recorded high or very high levels psychological distress compared to one in six (17.8%) non-First Nations adults.
- approximately half (51.2%) of First Nations peoples have been diagnosed with anxiety or depression, compared with 29.5% in non-First Nations adults.
- one in three (32.9%) First Nations peoples were diagnosed with anxiety or depression in the last year, compared to one in seven (14.8%) in non-First Nations peoples.

There appear to be a strong association between substance misuse and the decision to suicide. Figure 7.11 shows a much higher proportion of suicides in First Nations people between 18 and 34 years of age compared to that in non-First Nations people (see also Appendix Table 2.5.9).

Figure 7.11 Prevalence of suicides among First Nations peoples by age group, Victoria, 2018-2021





Source: Coroners Court of Victoria. Victorian suicides of Aboriginal and Torres Strait Islander people (January 2022), Table 5: Overall suicide frequency and proportion by age group, among Aboriginal and Torres Strait Islander people and non-Indigenous people, Victoria 2018—2021.

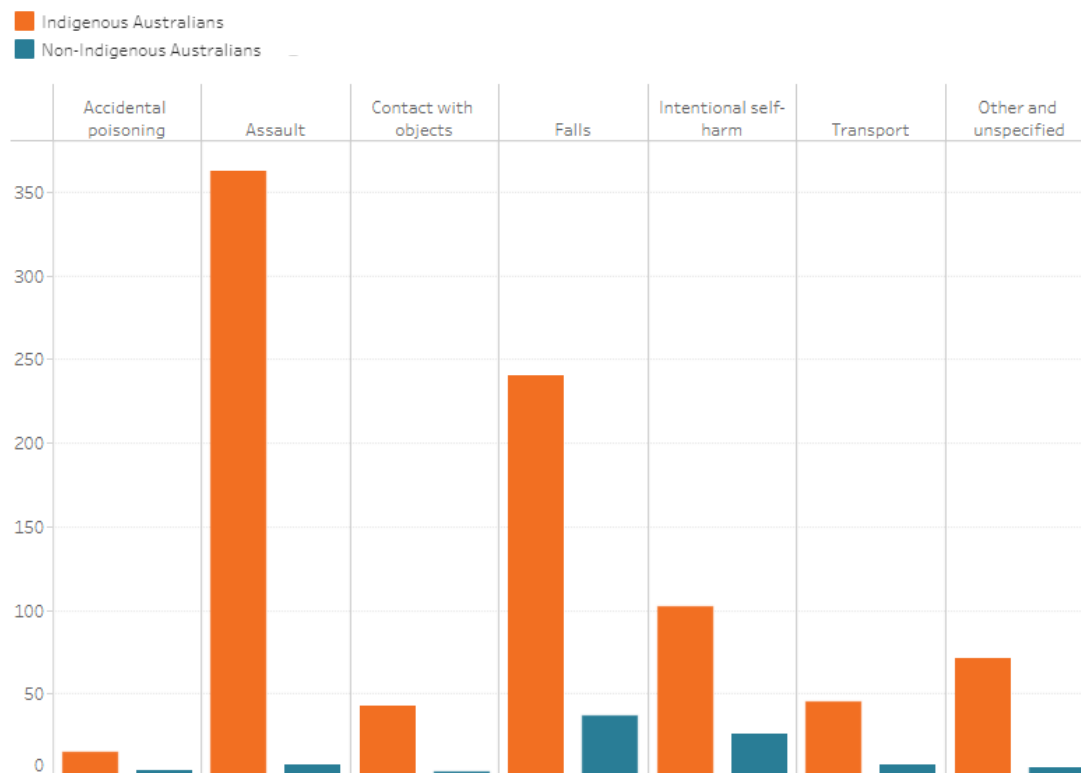
## Alcohol-related harms

In Australia, First Nations people were hospitalised due to alcohol-related injuries at a higher rate (age-standardised 879 cases per 100,000) than non-First Nations people (92 cases per 100,000) (AIHW, 2020a). The age standardised rates of First Nations and non-First Nations alcohol-related injury hospitalisations for 2019–20 shows that:

- the rate for First Nations Australians was 9.5 times that of non-Indigenous Australians.
- for every hospitalisation First Nations for non- First Nations females, there were 12 hospitalisations for Indigenous females.
- for every hospitalisation for non-First Nations males, there were 8.1 hospitalisations for First Nations males.

Figure 7.12 shows that assault and falls were the main drivers of the higher rates among First Nations Australians.

Figure 7.12 Rate of alcohol-related injury hospitalisations, by First Nations (Indigenous) status and cause of injury, 2019–20



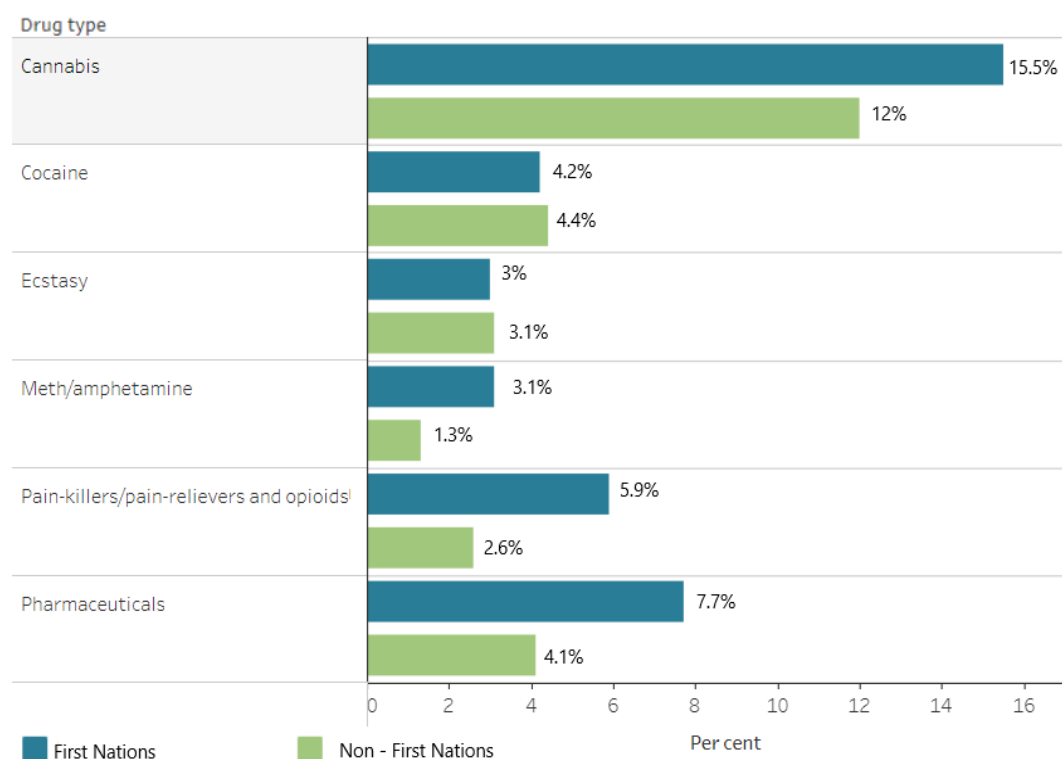
Notes:

1. Rates are age standardised per 100,000 population.
  2. Records where Indigenous status is missing or not stated are excluded.
  3. 'Other and unspecified' includes *Other unintentional causes, Drowning and submersion, Thermal causes, Choking and suffocation, Electricity and air pressure, Forces of nature, Undetermined intent, Contact with living things and Overexertion.*
- Source: AIHW National Hospital Morbidity Database.

## Illicit drug use

The 2019 NDSHS data showed that a higher proportion of First Nations Australians aged 14 years and over had recently used illicit drugs (other than Ecstasy and cocaine) compared to non-Indigenous Australians (Figure 7.13) (AIHW, 2022b). Use of illicit drugs (in the last 12 months) among First Nations Australians was 1.4 times higher compared to the non-First Nations Australians. Figure 7.13 also shows that the use of cannabis among First Nations Australians was 15.5% compared to non-First Nations Australians (12.0%). Between 2016 to 2019, there were no significant changes in illicit use of drugs among First Nations Australians, while use significantly increased for non-First Nations Australians for a range of drugs (including cannabis, ecstasy, and cocaine) (AIHW, 2022b).

Figure 7.13 Illicit drug use by Indigenous status, people aged 14 and over, 2019, Australia



Source: 2019 National Drug Strategy Household Survey.

## Unplanned service needs

### Emergency department presentations

The total emergency department (ED) presentations for mental and behavioural disorders for First Nations peoples are significantly higher in Greater Dandenong, almost twice times higher than rates for Victoria in 2019-20. Figure 7.14 (see also Appendix Table 2.5.10) shows ED presentations in 2019-20 for mental and behavioural disorders are the highest for the IAREs:

- Greater Dandenong (8,177.5 per 100,000)
- Melbourne – Port Phillip (part b) (7,085.7 per 100,000)
- Melbourne – East (part b) (4,538.0 per 100,000)

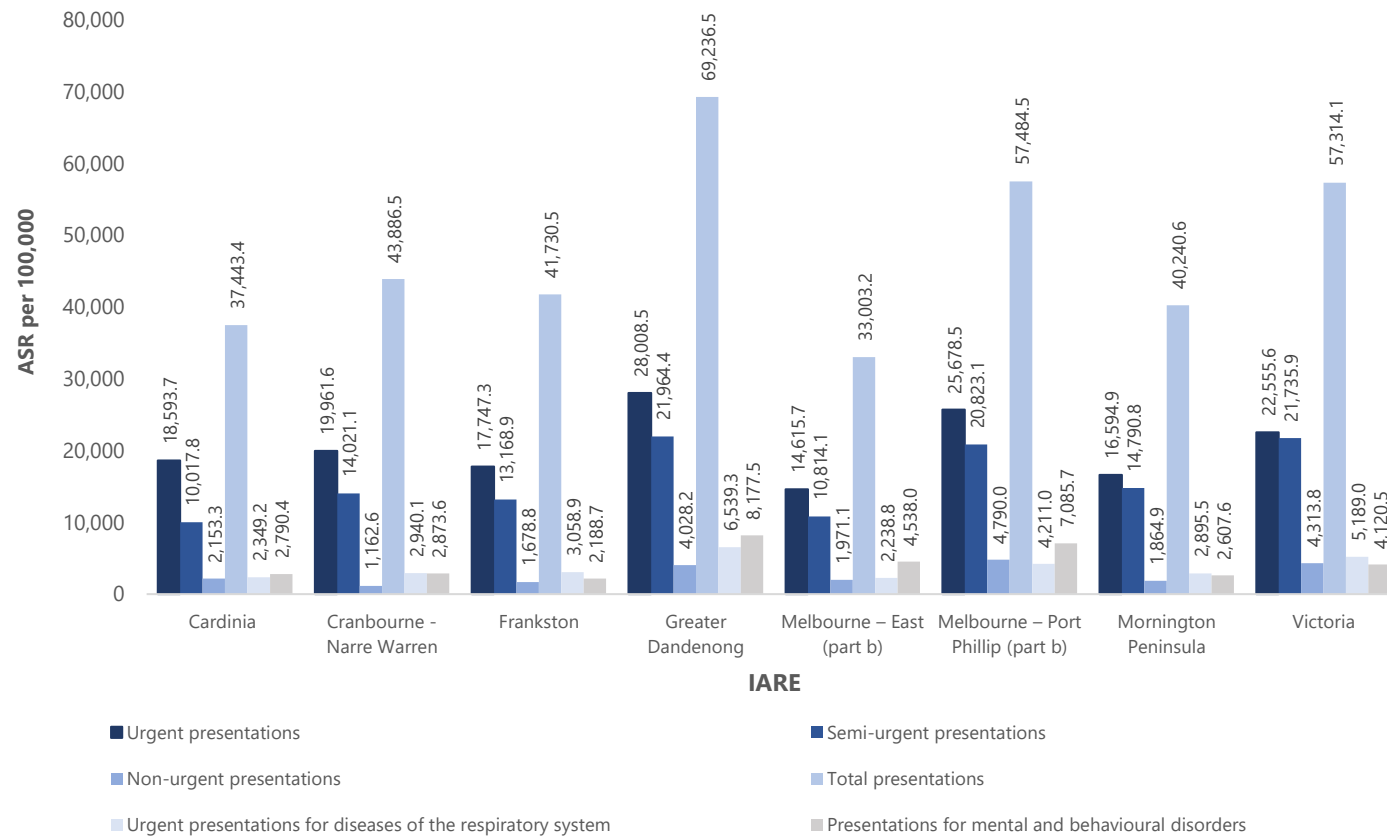
For comparison, Victoria has a rate of 4,120.5 per 100,000.

Total urgent presentations for diseases of the respiratory system for First Nations peoples in the Greater Dandenong LGA they are substantially higher than that for Victoria. IAREs of concern are:

- Greater Dandenong: 6,539.3 per 100,000
- Melbourne – Port Phillip (part b): 4,211.0 per 100,000
- Frankston: 3,058.9 per 100,000

For comparison, Victoria has a rate of 5,189.0 per 100,000.

Figure 7.14 Emergency department presentations – resuscitation, emergency and urgent, by principal diagnosis by IARE, 2019-20



Source: PHIDU (June 2023 release), accessed on 18 July 2023, Table: Emergency department presentations, by principal diagnosis. <https://phidu.torrens.edu.au/social-health-atlases/maps/#aboriginal-torres-strait-islander-social-health-atlas-of-australia>. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%)

## Hospital admissions

The average rate of admissions<sup>35</sup> for mental health-related conditions in First Nations peoples over 2017-18 to 2019-20 are substantially higher in Greater Dandenong than in Victoria (Australian Institute of Health and Welfare, 2017; PHIDU, 2021b). Figure 7.15 (see also Appendix Table 2.5.11) suggests that the most concerning IAREs are:

- Greater Dandenong: 7,807.3 per 100,000
- Melbourne – Port Phillip (part b): 4,857.2 per 100,000
- Cardinia: 4,646.4 per 100,000

For comparison, the average rate for Victoria is 2,639.5 per 100,000.

Average hospital admission rates for circulatory system diseases for First Nations peoples over 2017-18 to 2019-20 are highest in the following IAREs:

- Greater Dandenong: 2,885.5 per 100,000
- Melbourne – Port Phillip (part b): 1,849.7 per 100,000
- Cranbourne – Narre Warren: 1,445.7 per 100,000

For comparison, the average rate for Victoria is 1,652.0 per 100,000.

Average hospital admission rates for respiratory system diseases for First Nations peoples over 2017-18 to 2019-20 are highest in the following IAREs:

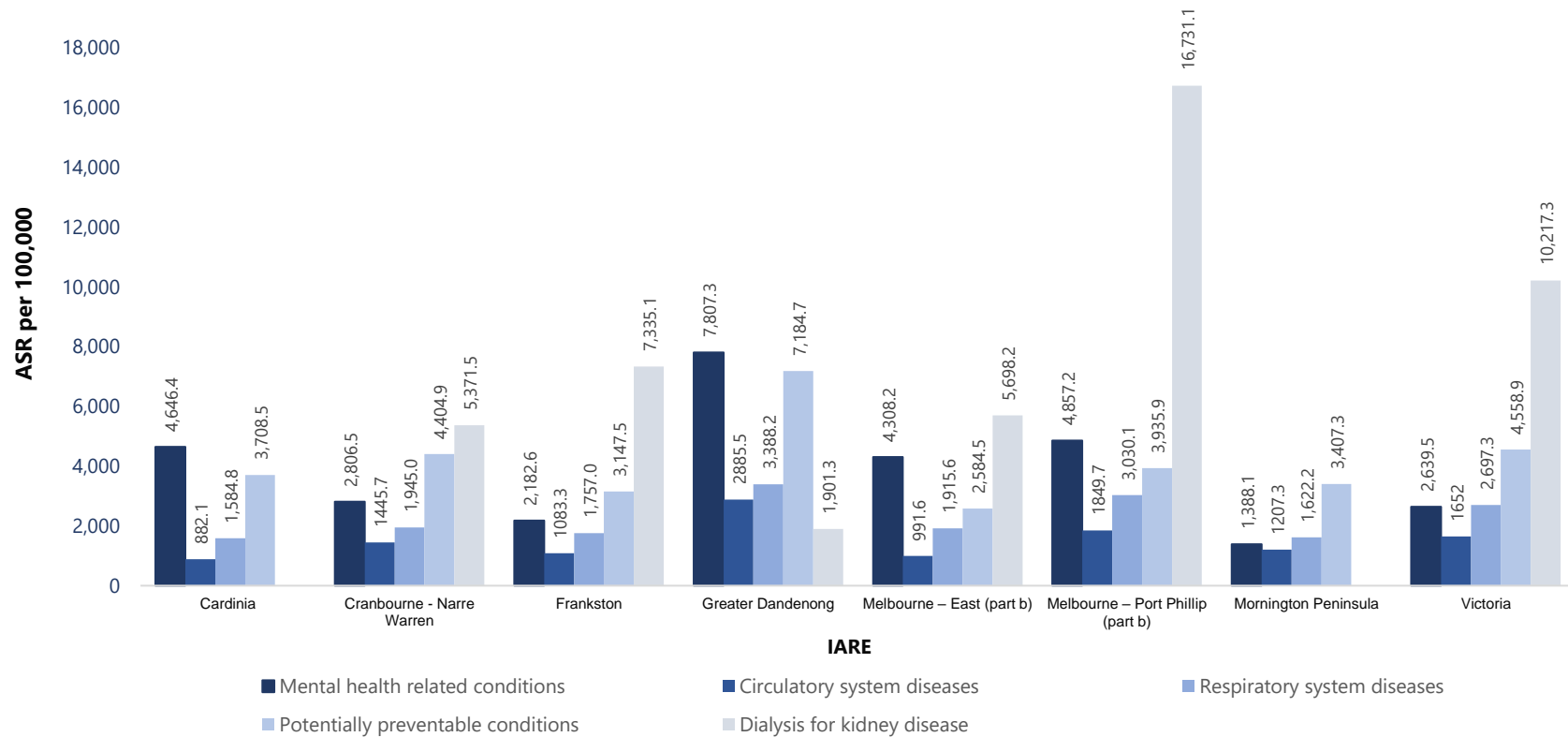
- Greater Dandenong: 3,388.2 per 100,000
- Melbourne – Port Phillip (part b): 3,030.1 per 100,000
- Cranbourne – Narre Warren: 1,945.0 per 100,000

For comparison, the average rate for Victoria is 2,697.3 per 100,000.

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<sup>35</sup> Number of separations, or completions of the episode of care of a patient in hospital, where the completion can be the discharge, death or transfer of the patient, or a change in the type of care (e.g., from acute to rehabilitation). Reported as average annual ASR per 100,000 for the period 2017-18 to 2019-20.

Figure 7.15 First Nations peoples' hospital admissions and average annual admission rates for various conditions by IARE, 2017-18 to 2019-20



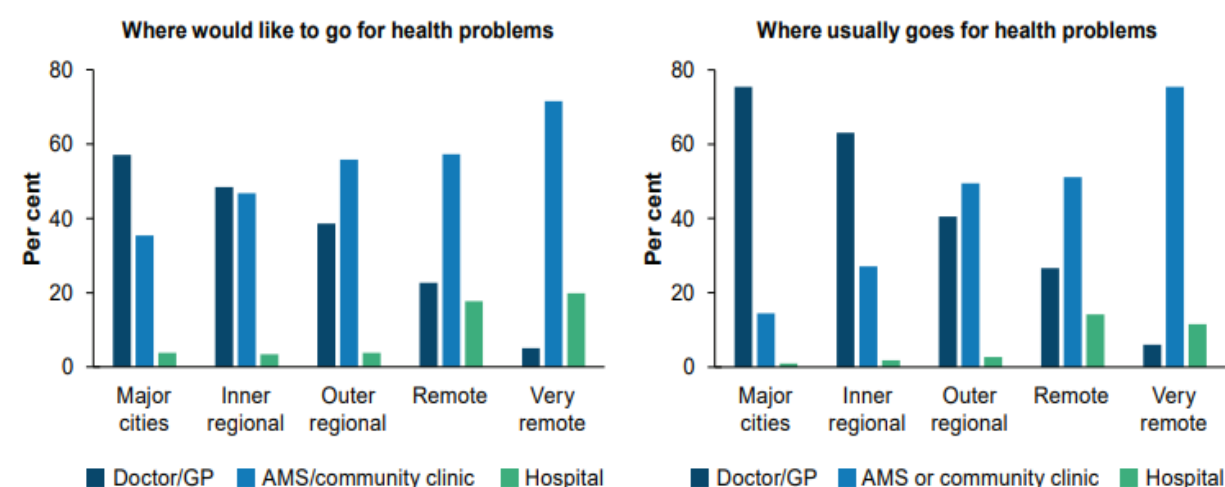
Source: PHIDU (June 2023 release), accessed on 18 July 2023, Table: Hospital admissions, by principal diagnosis. <https://phidu.torrens.edu.au/social-health-atlases/maps/#aboriginal-torres-strait-islander-social-health-atlas-of-australia>. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).

## Planned Service Access

### Access to primary healthcare services

Among First Nations peoples, there is a disconnect between want/need of health services and access, with multiple barriers at play. First Nations-specific health services are important providers of comprehensive primary health services for First Nations Australians living in various locations. AIHW and ABS analysis of the National Aboriginal and Torres Strait Islander Health Survey (2018-19) (ABS, 2019) showed that in major cities, while more than one in three (35%) First Nations Australians would like to go to an Aboriginal Medical Service (AMS) or community clinic for health problems, fewer than one in six (15%) usually went to these types of services (Figure 7.16).

Figure 7.16 First Nations peoples access to primary healthcare services, 2018-19



Source: Aboriginal and Torres Strait Islander Health Performance Framework 2020 summary report, Figure 6.2: Health service use and preferences among Indigenous Australians, 2018-19

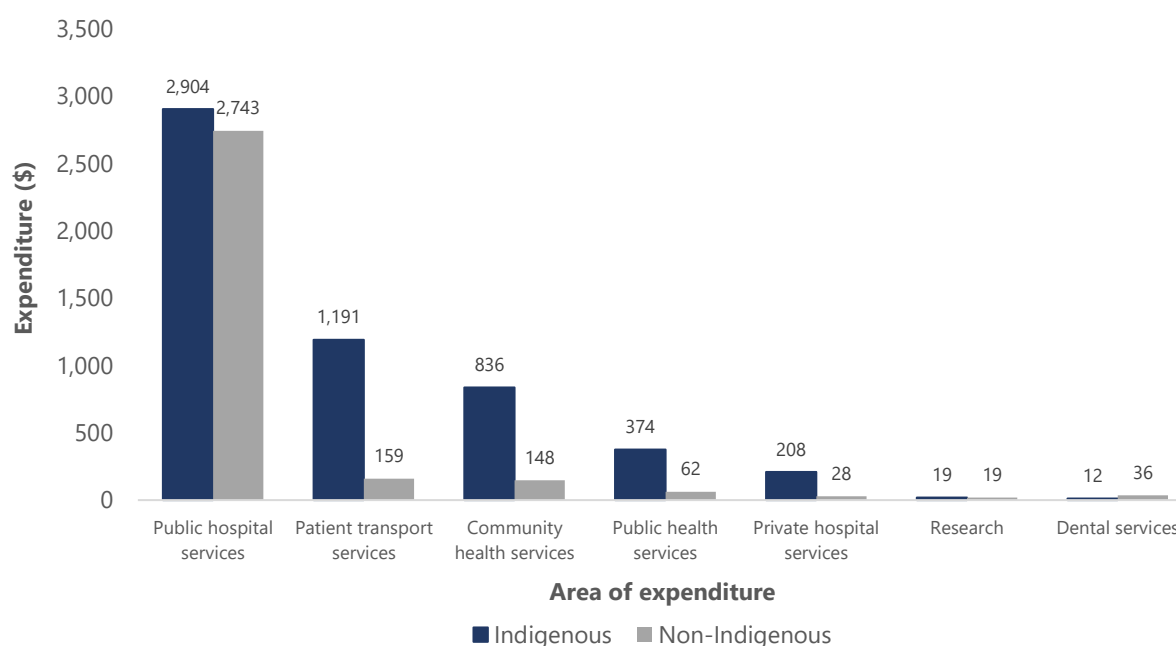
In 2018-19, 30.0% (n=243,700) of First Nations peoples reported that they needed to, but did not see a healthcare provider on at least one occasion in the previous 12 months (ABS, 2019). Among those who did not see a healthcare provider when they needed to, the following reasons were given (where more than one reason could be provided):

- more than one in three (36.0%) said they were too busy
- about one in three (34.0%) said cost was a factor – higher in non-remote areas at 36%, compared with 21.0% in remote areas
- more than one in five (23.0%) said they disliked the service or were embarrassed or afraid.

## Healthcare expenditure

Healthcare expenditure among First Nations peoples is higher than non-First Nations peoples. As evidenced through data on the health needs of First Nations peoples, their experience of high rates of acute and chronic conditions means that health services must be accessible and affordable. In 2019-20, the average amount of money per person spent on health for First Nations Australians in Victoria was \$5,545, or 1.7 times that of non-First Nations Australians (\$3,196), with the breakdown by area of expenditure shown in Figure 7.17 (Australian Institute of Health and Welfare - National Indigenous Australian Agency, 2020). The biggest disparities in expenditure are observed in patient transport services (expenditure for First Nations peoples 7.5 times that for non-First Nations peoples) and private hospital services (also 7.5 times).

Figure 7.17 Average health spending for First Nations and non-First Nations health needs, 2019-20



Source: Australian Institute of Health and Welfare's Aboriginal and Torres Strait Islander Health Performance Framework, Tier 3 0 Health system performance, 3.21 Expenditure on Aboriginal and Torres Strait Islander health compared to need. Accessed on 12 September 2023 via <https://www.indigenoushpf.gov.au/measures/3-21-expenditure-atsi-compared-need/data#DataTablesAndResources>

## Annual Health Checks

First Nations peoples can receive an annual health check, designed specifically for First Nations Australians, and funded through Medicare (Department of Health 2021). This health check was introduced in recognition that First Nations peoples experience some particular health risks, example heart disease and diabetes, and encourages early detection and treatment of chronic conditions that may increase risk of comorbidities or early death (AIHW, 2022i). As shown in Table 7.4, in SEMPHN, the proportion of First Nations people residing in SEMPHN who underwent annual health checks in 2020-21 was below the proportion for Victoria (8.7% vs 14.4%).



Table 7.4 First Nations health check rates by modality, 2020–21

| Region   | First Nations population <sup>36</sup> | Telehealth status | Number of patients | Proportion (%) |
|----------|--|-------------------|--------------------|----------------|
| SEMPHN   | 10,085                                 | Face-to-face      | 790                | 7.8            |
|          |  | Telehealth        | 98                 | 1.0            |
|          |  | Total             | 880                | 8.7            |
| Victoria | 64,501                                 | Face-to-face      | 8,287              | 12.8           |
|          |  | Telehealth        | 1,040              | 1.6            |
|          |  | Total             | 9,297              | 14.4           |

Source: Australian Institute of Health and Welfare (2022) Indigenous health checks and follow-ups, AIHW, Australian Government, accessed 07 Nov 2022.

In 2020–21, of First Nations-specific follow-up services, there were 291,000 services provided by a practice nurse or a First Nations health practitioner to 139,000 First Nations peoples across the country. Of the allied health services follow-up services, the most common were those provided by physiotherapists, podiatrists, First Nations health workers or First Nations health practitioners (AIHW, 2022i). As shown in Table 7.5, among the 9,245 First Nations peoples in Victoria, who had a health check in 2019–20, 37.6% had a follow up service in the 12 months following their health check (AIHW, 2022i).

Table 7.5 First Nations health check patients who received a follow-up service within 12 months, 2019–20

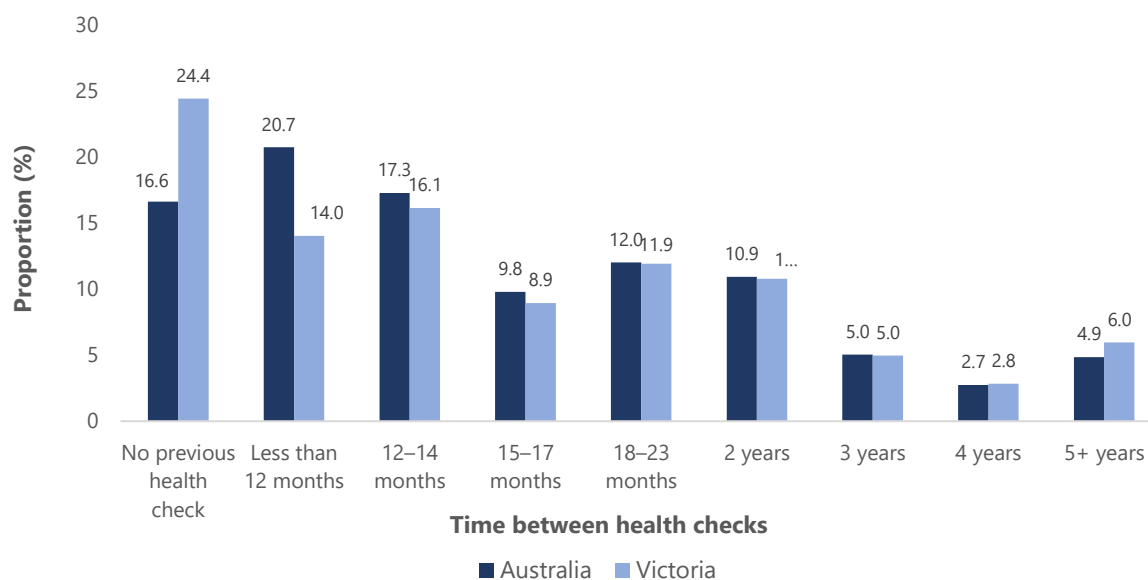
|          | Number of follow-up patients | Number of health check patients | Proportion of follow-up (%) |
|----------|------------------------------|---------------------------------|-----------------------------|
| SEMPHN   | 296                          | 826                             | 35.8                        |
| Victoria | 3,480                        | 9,245                           | 37.6                        |

Source: Australian Institute of Health and Welfare (2022) Indigenous health checks and follow-ups, AIHW, Australian Government, accessed 07 Nov 2022.

Among the 239,000 First Nations peoples who had a First Nations-specific health check in 2019–20: 20% (or 48,000 people) had a follow-up within 12 months of the health check; 10% (or 23,000 people) had 2 follow-ups. 5% (or 13,000 people) had 3 follow-ups; 3% (or 8,000 people) had 4 follow-ups and 8% (or 19,000 people) had 5 or more follow-ups. Figure 7.18 below compares the national rates against Victorian estimates.

<sup>36</sup> Total Number of First Nations peoples reported here is based on AIHW data and may not reflect the numbers reported as per ABS Census 2021.

Figure 7.18 Time between most recent health checks for First Nations peoples, Victoria, November 1999 to June 2021



Source: Australian Institute of Health and Welfare (2022) Indigenous health checks and follow-ups, AIHW, Australian Government, accessed 07 Nov 2022.

## Chapter 8 Aged care

Globally, the population of persons aged over 65 years is increasing faster than all other age groups (Abud et al., 2022). In Victoria, 1 in 6 residents are aged 65 years and older<sup>37</sup> (n=1,092,833) which accounts for 16.8% of the state's population as at 30 June 2021. This was an increase of 18.4% since 2016. As Australians age, they become increasingly exposed to a range of vulnerabilities, including increasing frailty, poorer mental health including loneliness (Victorian Department of Health, 2021), and multiple chronic conditions (AIHW, 2022c). This makes them more likely to use the health care system as a population group. Older persons who are Culturally and Linguistic Diverse (CALD) (AIHW, 2021h) First Nations, LGBTIQ+ or living with disability, may face additional challenges of social and cultural isolation and structural barriers to accessing care (Department of Health, 2019).

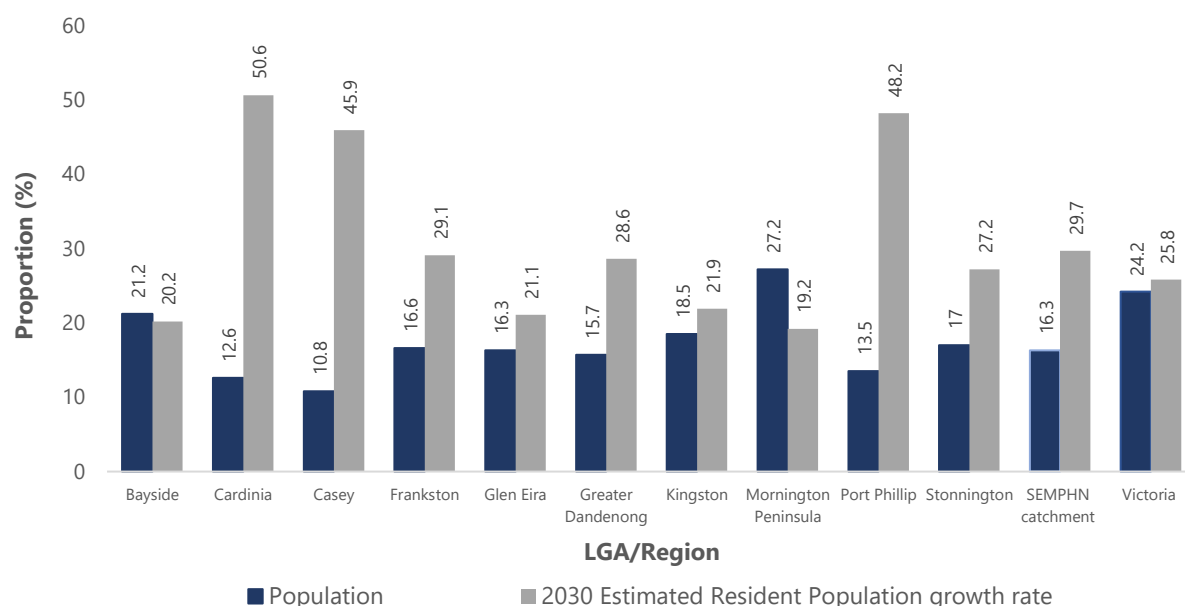
### Older population

In the ABS 2021 Census, one in six (16.2%, n=255,020) residents in the SEMPHN catchment were aged 65 years and older, and 2.1% (n=34,166) were aged 85 years and older. Mornington Peninsula had the largest population of people aged 65 years or over (27.2%), followed by Bayside (21.2%) and Kingston (18.5%). Cardinia had the smallest older population (12.5%); however, this was still more than one in 10 people in the LGA. Mornington Peninsula (n=6,029), Kingston (n=4,401) and Casey (n=4,207), and Glen Eira (n=3,979) had the largest population of persons aged 85 years and older. Population projections shown in Figure 8.1 indicate that the older population in the SEMPHN catchment is expected to grow by 29.7% (n=330,719) by 2030 (see also Appendix Table 2.6.1). The largest growth is expected in Cardinia (50.6% growth, n=22,350), followed by Port Phillip (48.2% increase, n=20,448) and Casey (45.9% increase, n=57,762).

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<sup>37</sup> First Nations older people are aged 50 years and older

Figure 8.1 Population aged 65 and over by LGA, 2021

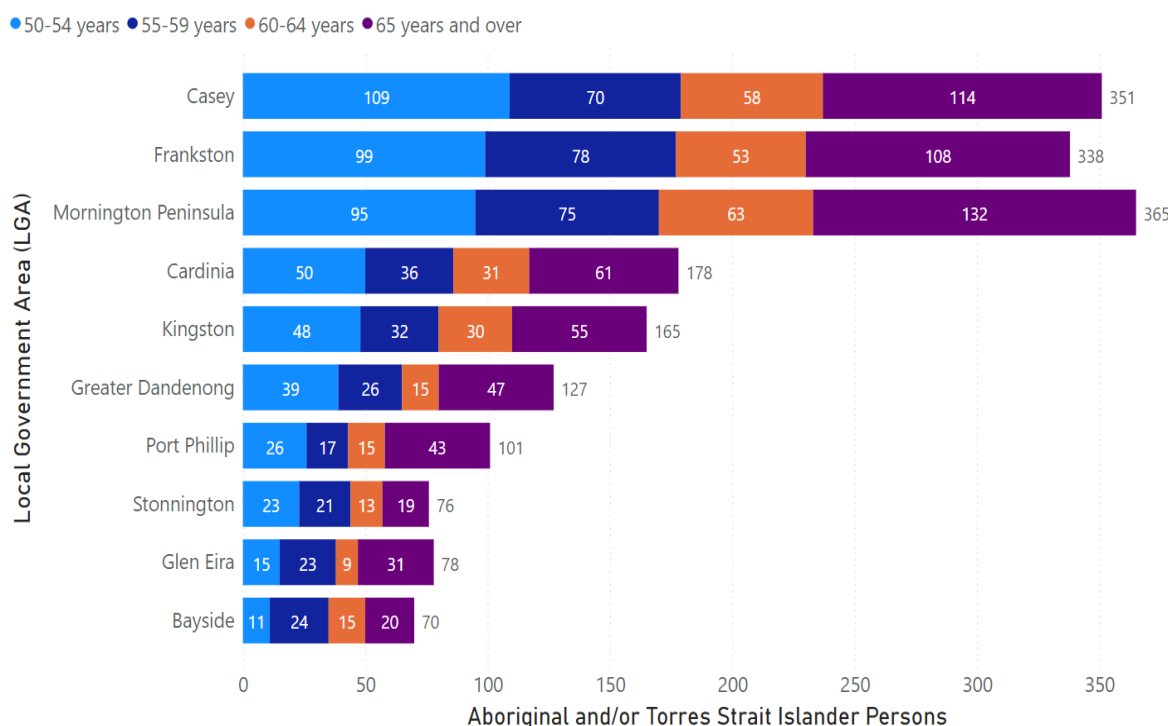


Source: Census 2021, Australian Bureau of Statistics (June 2022)

## First Nations

At the ABS 2021 Census, 9,970 persons within the SEMPHN catchment identified as Aboriginal and/or Torres Strait Islander. Approximately one in five Aboriginal and/or Torres Strait Islander persons were 50 years or older (n=1,849). Mornington Peninsula has the largest population of older Aboriginal and/or Torres Strait Islander persons (n=365), followed by Casey (n=351) and Frankston (n=338) (Figure 8.2).

Figure 8.2 First Nations older population by age and LGA, 2021



Source: Australian Bureau of Statistics, 2021 Data. Please note Monash LGA is excluded as it was not possible to distinguish which proportion of the Monash LGA was within the SEMPHN catchment.

### Culturally and Linguistically Diverse (CALD)

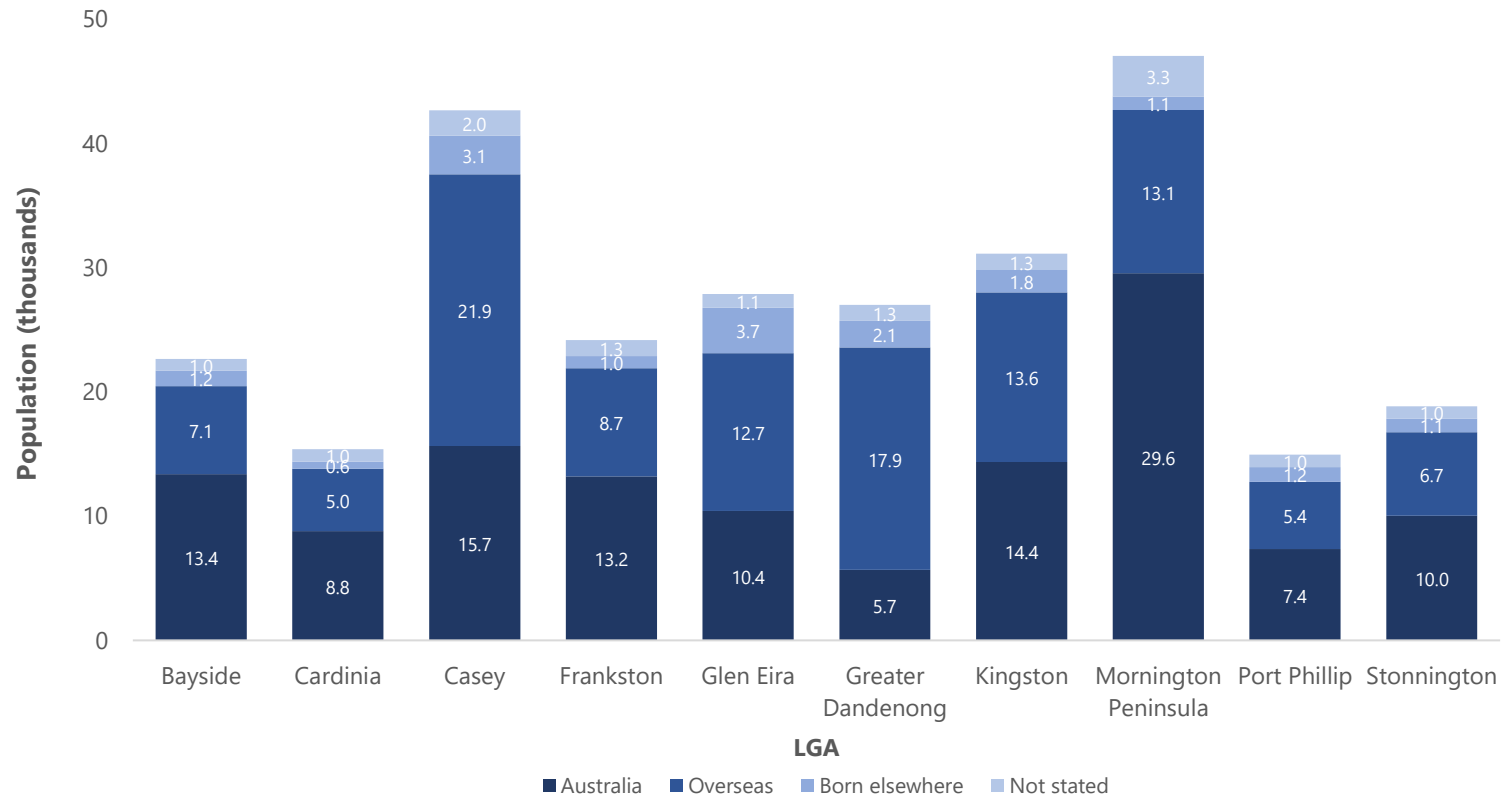
In the ABS 2021 Census, almost as many people aged 65 years and over living in the SEMPHN catchment were born overseas (46.6%, n=112,230) as were born in Australia (53.4%, n=128,429) (Figure 8.3, Appendix Table 2.6.2). Of those born overseas, approximately 27% were born in primarily English-speaking countries (e.g., England, New Zealand, Canada) (Figure 8.4, Appendix Table 2.6.2). Approximately 21% were born in other European countries (e.g., Greece, Italy, and Netherlands), spread evenly across LGAs (varying between 15% in Casey and 29% in Stonnington). Notably, there were large Greek-born populations in Kingston (n=2,078), Glen Eira (n=1,572), Stonnington (n=1,253), and Greater Dandenong (n=1,222), which also had a large Italian-born population (n=1,210).

The largest populations of older people born overseas in other countries (e.g., India, Sri Lanka and China) resided in Casey (n=14,011), Greater Dandenong (n=13,310), Glen Eira (n=7,906) and Kingston (n=6,896). Greater Dandenong, Casey, and Glen Eira might be considered especially diverse by this metric, with other countries making up 74%, 64%, and 62% of their overseas-born populations respectively. There were large Vietnamese-born (n=2,561), Sri Lankan-born (n=1,231) and Cambodian-born populations (n=1,225) in Greater Dandenong, as well as large Indian- and Sri Lankan-born populations in Casey (n=1,878 and n=1,668 respectively). All LGAs show large numbers of people 'Born elsewhere', counted in the Census data as 'Countries not identified individually', 'Inadequately described', and 'At sea'.

LGAs with higher numbers of older persons 'born elsewhere' were Glen Eira (n=3,657), Casey (n=3,119) and Greater Dandenong (n=2,134). In Glen Eira, those 'born elsewhere' made up a substantial 46% of the

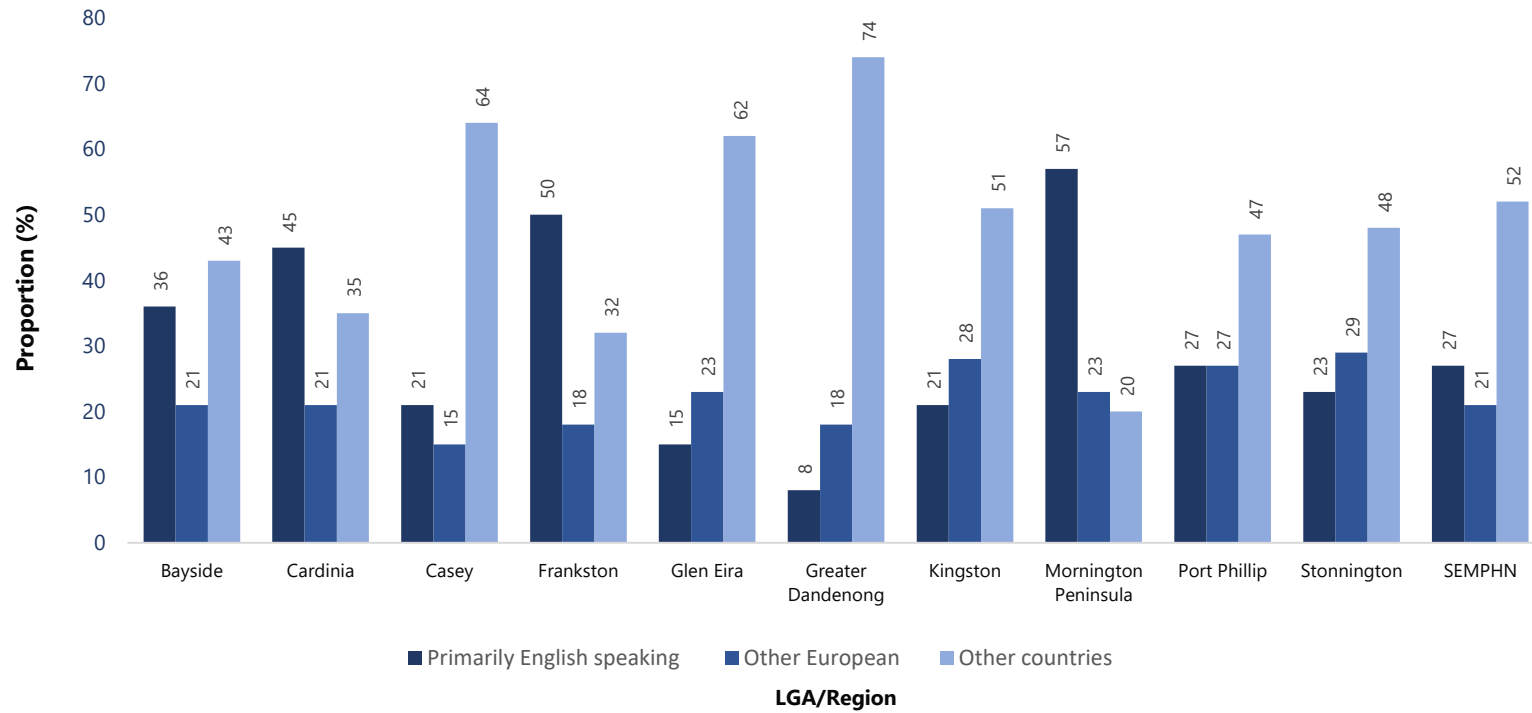
local overseas-born population. This could suggest barrier to access to health care in LGAs such as Glen Eira even if there cannot be a definitive determination on the country of birth of this sub-population. Low proficiency in English is defined as when a person either does not understand English or does not understand English very well. Most older persons with low proficiency in English resided in Greater Dandenong (n=7,190), Casey (n=4,799), Kingston (n=2,908), and Glen Eira (n=2,338).

Figure 8.3 Older persons by country of birth and LGA, 2021



Source: ABS Census 2021, Australian Bureau of Statistics (June 2022 release) Table G09: Country of birth of person by age by sex, Victoria, accessed on 20 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).

Figure 8.4 Older persons born overseas by language spoken in country of birth and LGA, 2021

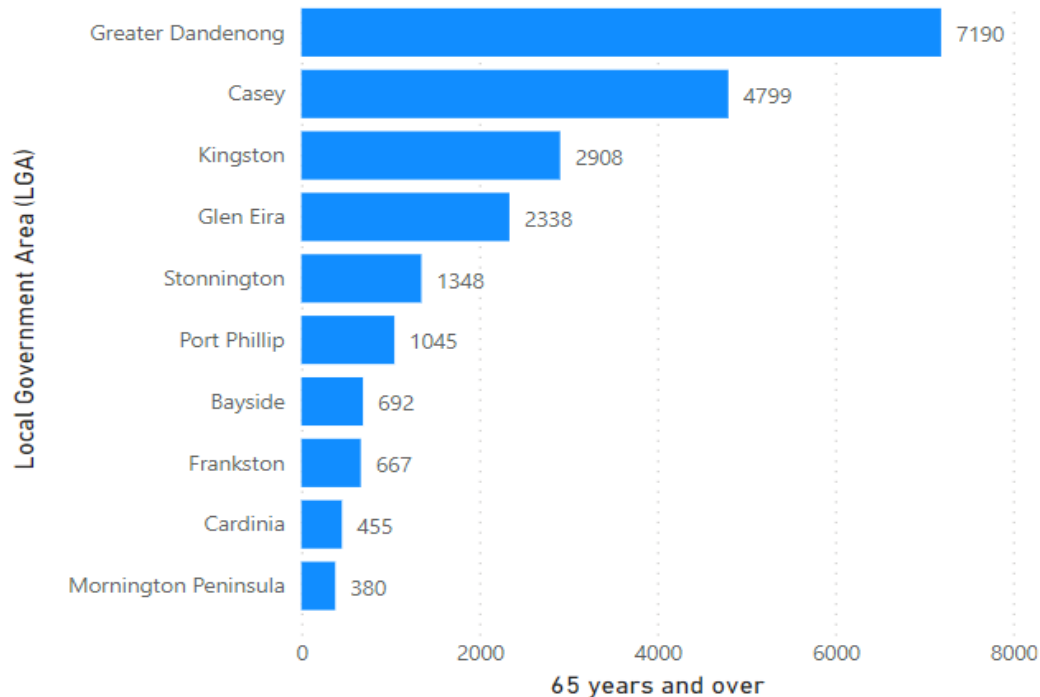


Source: ABS Census 2021, Australian Bureau of Statistics (June 2022 release) Table G09: Country of birth of person by age by sex, Victoria, accessed on 20 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).



Focus group consultations held in July and August 2022 highlighted the need for service planning to include the needs of older CALD people. The focus groups reported that the CALD community bring strengths to the catchment, but often services are inaccessible due to cultural and language barriers. This is reflected in the ABS 2021 Census data on older persons with low proficiency in English displayed in Figure 8.5.

Figure 8.5 Older persons with low proficiency in English by LGA, 2021

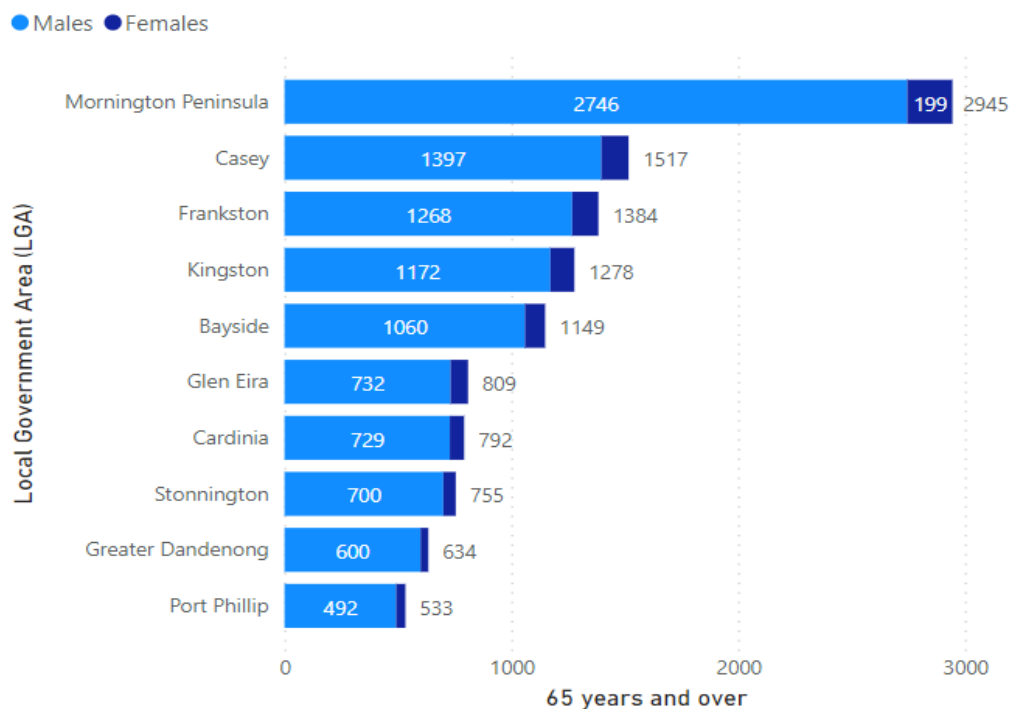


Source: ABS Census 2021, Australian Bureau of Statistics (June 2022 release) Table G11: Proficiency in spoken English by year of arrival in Australia by age, Victoria, accessed on 20 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).

## Veterans

The largest group of veterans in Australia are now aged 65-74 years. In Victoria, there are approximately 54,000 DVA Pensioners and Treatment Card Holders (Department of Veterans' Affairs, 2022). Figure 8.6 suggests that the largest number of older veterans live in Mornington Peninsula (25.0%, n=2,945).

Figure 8.6 Older Veterans by LGA, 2021



Source: Social Health Atlas of Older People in Australia Data by Primary Health Network (Published June 2021). Note: Number outside the bar refers to a total number of older veterans, both males and females combined.

## Mortality and causes of death

The median age at death in south eastern Melbourne in 2021 was 80.6 years for males (Victoria: 79.8 years) and 85.7 years for females (Victoria: 85.3 years) (AIHW, 2023a). Table 8.1 presents the median age at death across the SEMPHN catchment. Bayside reported the highest median age of death (87.5 years), and Casey reported the lowest median age of death (79.4 years).

Table 8.1 Median age at death by LGA, 2021

| LGA                     | Median age at death (years) |
|-------------------------|-----------------------------|
| Bayside                 | 87.4                        |
| Cardinia                | 79.6                        |
| Casey                   | 79.3                        |
| Frankston               | 79.9                        |
| Glen Eira               | 86.6                        |
| Greater Dandenong       | 82.3                        |
| Kingston                | 84.1                        |
| Mornington Peninsula    | 84.1                        |
| Port Phillip            | 81.1                        |
| Stonnington             | 85.0                        |
| <b>SEMPHN catchment</b> | <b>82.9</b>                 |
| <b>Victoria</b>         | <b>82.0</b>                 |

Source: Mortality Over Regions and Time (MORT) books (2017-2021), AIHW (accessed on 18 July 2023). Note that Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).

When comparing leading causes of death across both genders in the south eastern Melbourne region, dementia including Alzheimer's disease was the leading cause of death among females accounting for 12.4% of all causes, and coronary heart disease was the leading cause for death among males in the region, accounting for 12.7% of all causes. While age-standardised death rates in the region (448 per 100,000) were lower than Victorian estimates (479.2 per 100,000), certain LGAs within the region reported higher rates than the state average (Greater Dandenong: 501.7 per 100,000; Frankston: 483.2 per 100,000; Cardinia: 481.6 per 100,000) (AIHW, 2023a).

Chronic and progressive illnesses are the leading contributor to death among older Australians. Between 2019 and 2021, older individuals were most often subject to lung cancer, coronary heart disease (CHD), dementia, COPD, cerebrovascular disease, colorectal cancer, heart failure, in addition to influenza and pneumonia. As Table 8.2 shows, these diseases impact a range of older people across the age profile (AIHW, 2023a).

Table 8.2 Leading causes of death, based on age-standardised rates, in Australians aged 65 years and above, by age group, 2019-2021

| Age group (years) | Rank | Cause of death  | ASR per 100,000 |
|-------------------|------|---|-----------------|
| <b>65–74</b>      | 1    | Lung cancer   | 111.6           |
|                   | 2    | Coronary heart disease  | 106.6           |
|                   | 3    | COPD  | 64.3            |
|                   | 4    | Colorectal cancer   | 49.7            |
|                   | 5    | Cerebrovascular disease                                       | 43.8            |
| <b>75–84</b>      | 1    | Coronary heart disease  | 320.6           |
|                   | 2    | Dementia including Alzheimer's disease                        | 284.2           |
|                   | 3    | Lung cancer   | 213.4           |
|                   | 4    | Cerebrovascular disease                                       | 199.0           |
|                   | 5    | COPD  | 187.5           |
| <b>85–94</b>      | 1    | Dementia including Alzheimer's disease                        | 1,729.6         |
|                   | 2    | Coronary heart disease  | 1,331.1         |
|                   | 3    | Cerebrovascular disease                                       | 871.3           |
|                   | 4    | COPD  | 417.2           |
|                   | 5    | Diabetes  | 358.7           |
| <b>95+</b>        | 1    | Dementia including Alzheimer's disease                        | 5,390.8         |
|                   | 2    | Coronary heart disease  | 4,093.1         |
|                   | 3    | Cerebrovascular disease                                       | 2,522.8         |
|                   | 4    | Heart failure and complications and ill-defined heart disease | 1,321.9         |
|                   | 5    | Influenza and pneumonia                                       | 1,164.6         |

\*Numbers reported are age-standardised rate (per 100,000) Source: AIHW National Mortality Database; Table S3.2 (2017–2021), AIHW (accessed on 18 July 2023).

Falls are Australia's largest contributor to hospitalised injuries and a leading cause of injury deaths in the older population. In 2019–20, 42% of hospitalised injuries and 40% of injury deaths were due to falls in the older population. The south east Melbourne region ranked fourth across all PHNs in Australia for deaths due to accidental falls among men (ASR 15.6 per 100,000) and sixth for deaths due to accidental falls among women (ASR 10.9 per 100,000).

When comparing age-standardised rates (ASR) across age groups, in 2019–20, 132,933 (59.4%) hospitalisations due to falls occurred in people aged 65 years and over regardless of gender. This equates to an ASR of 2,518.7 per 100,000 hospitalisations due to falls among males aged 65 years and over and 3,852.5 per 100,000 hospitalisations due to falls among females aged 65 years and over (AIHW, 2022j). When comparing top underlying causes of death by age group, ischemic heart diseases, and cancers in the digestive and respiratory organs are the top three causes of death in the 65+ years age groups.

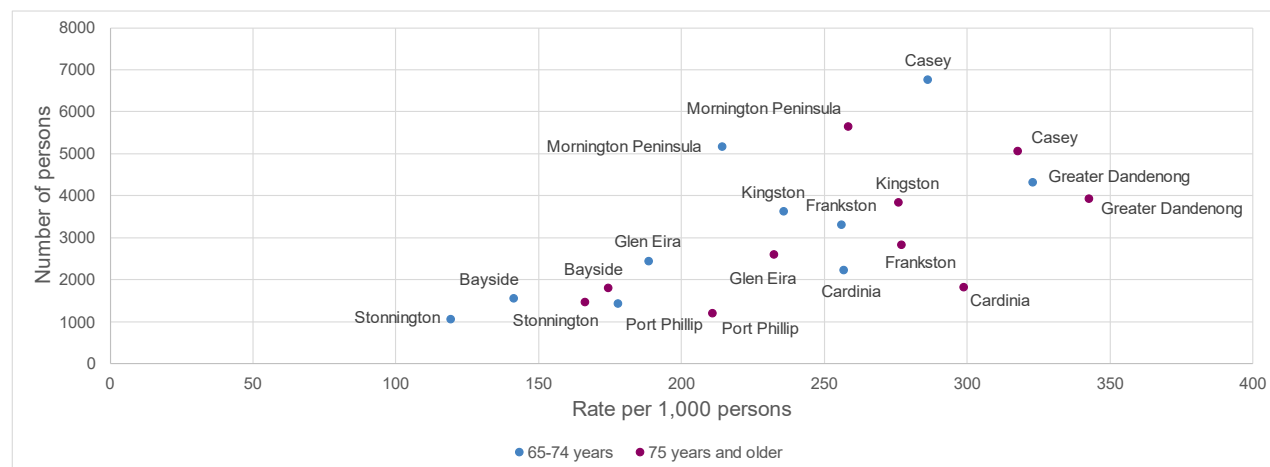
Organic, including symptomatic, mental disorders<sup>38</sup> are ranked as the second leading cause of death in the 85 years and over cohort.

## Low income

The Australian Tax Office (ATO) provides the maximum low-income tax offset to persons deemed to have earned less than \$37,500 year, equating to \$721.15 per week (Thurber et al., 2021). Based on ABS Census 2021, low income persons have been identified using a threshold of \$650 per week (i.e., under the low-income tax offset). The LGAs of Casey, Mornington Peninsula, Greater Dandenong, and Kingston reported the largest number of persons 65 years and above that earned less than \$650 per week.

Figure 8.7 presents data for older persons on incomes less than \$650 per week. The data indicates there will be a significant wave of need from low-income persons, particularly in the LGAs where the blue dot is close to, or higher on the horizontal axis than the purple dot, indicating the 65–74 years age bracket is as large as or larger than the 75 years and older brackets. Using Casey as an example, there are significantly more low-income persons in the 65–74 years age bracket than among the population aged 75 years and older. In the majority of the other LGAs, the dots are almost level, indicating this 65–74-year-old cohort may bring a wave of needs associated with the impact of low incomes, larger than the previous cohorts.

Figure 8.7 Rate per 1,000 and number of older persons earning less than \$650 per week, by LGA, 2021



Source: Census 2021, Australian Bureau of Statistics (June 2022 release) Table G17: Total personal income (weekly) by age by sex, Victoria, accessed on 20 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).

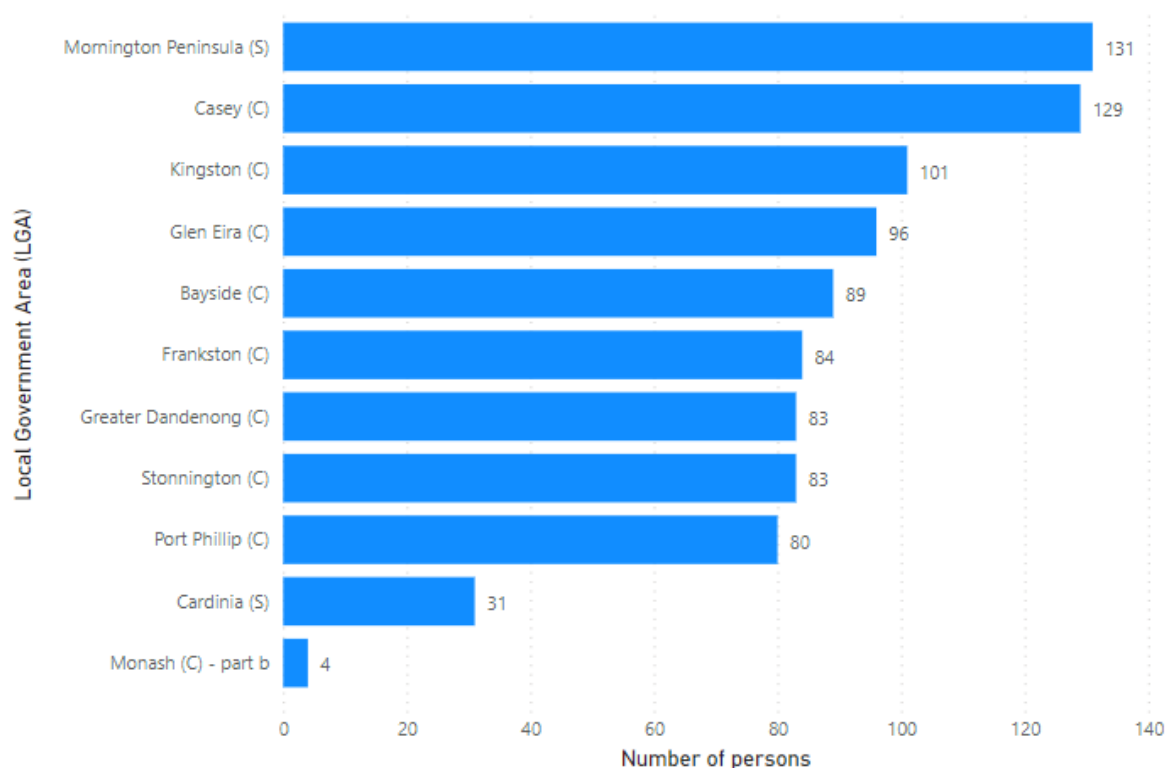
## Unemployment

In 2016, Mornington Peninsula had the highest number of persons 65 years and older who were unemployed and looking for work (14.6%), and who were on a low income (17.4%) (Figure 8.8). Although

<sup>38</sup> Definition of Organic, including symptomatic, mental disorders: this classification comprises of a range of mental disorders grouped together on the basis of their having in common a demonstrable aetiology in cerebral disease, brain injury, leading to cerebral dysfunction.

the total numbers are low, they do not include those who were unemployed and were not looking for work.

Figure 8.8 Older persons unemployed and looking for work by LGA, 2016

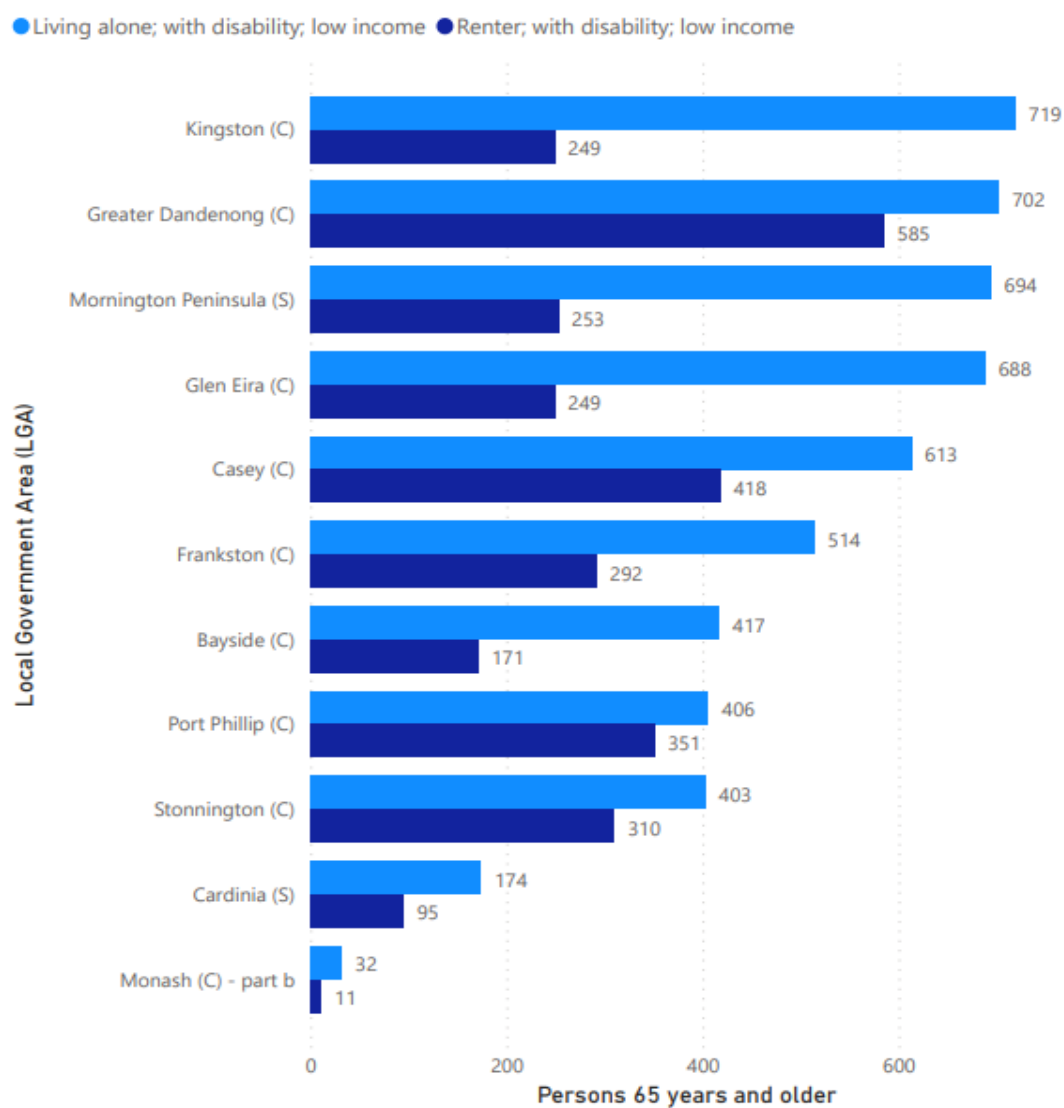


Source: Social Health Atlas of Older People in Australia Data by Primary Health Network (Published June 2021), 2016 Data.

### Vulnerable older population

Data presented in Figure 8.9 suggests that the highest proportions of older persons on low income, living alone and renting, and having disability, live in the Greater Dandenong, Casey, Mornington Peninsula, Kingston, and Glen Eira LGAs. This group of persons could experience elevated levels of risk to health due to their socioeconomic and physical circumstances.

Figure 8.9 Older persons aged 65 years and older on low income and living alone, and renting and living with disability by LGA, 2016



Source: Social Health Atlas of Older People in Australia Data by Primary Health Network (Published June 2021).

## Homelessness

People experiencing homelessness may have to manage a varied range of complex issues related to not having physical shelter, that when not dealt with, can further exacerbate this experience. Approximately 28.9% of the homeless persons in Victoria (n=30,660) in 2021 were sleeping in improvised dwellings, tents or sleeping outdoors (n=8,854) based on ABS Census. Larger proportions of the homeless population include people staying in boarding houses, staying temporarily with other households but having no usual address, commonly called 'couch surfing' (Decisions, 2018).

Obtaining accurate estimates of homelessness is challenging, especially due to limitations around age and geographic specificity. Therefore, this section is intended only to be a guide. Data from ABS 2016 Census has been reported in Table 8.3.

Table 8.3 Older people experiencing homelessness and rates by LGA, 2016

| LGA                  | Number        | ERP 2016            | ASR per 10,000 |
|----------------------|---------------|---------------------|----------------|
| Bayside              | 212           | 108,612             | 1.9            |
| Cardinia             | 144           | 117,469             | 1.2            |
| Casey                | 931           | 363,512             | 2.5            |
| Frankston            | 465           | 146,305             | 3.2            |
| Glen Eira            | 382           | 160,300             | 2.4            |
| Greater Dandenong    | 1,515         | 174,770             | 8.7            |
| Kingston             | 352           | 169,278             | 2.1            |
| Mornington Peninsula | 272           | 171,714             | 1.6            |
| Port Phillip         | 1,461         | 117,920             | 12.4           |
| Stonnington          | 523           | 121,956             | 4.3            |
| <b>Victoria</b>      | <b>24,817</b> | <b>5.93 million</b> | <b>41.9</b>    |

Source: Social Health Atlas of Older People in Australia Data by Primary Health Network (Published June 2021).

## Social support

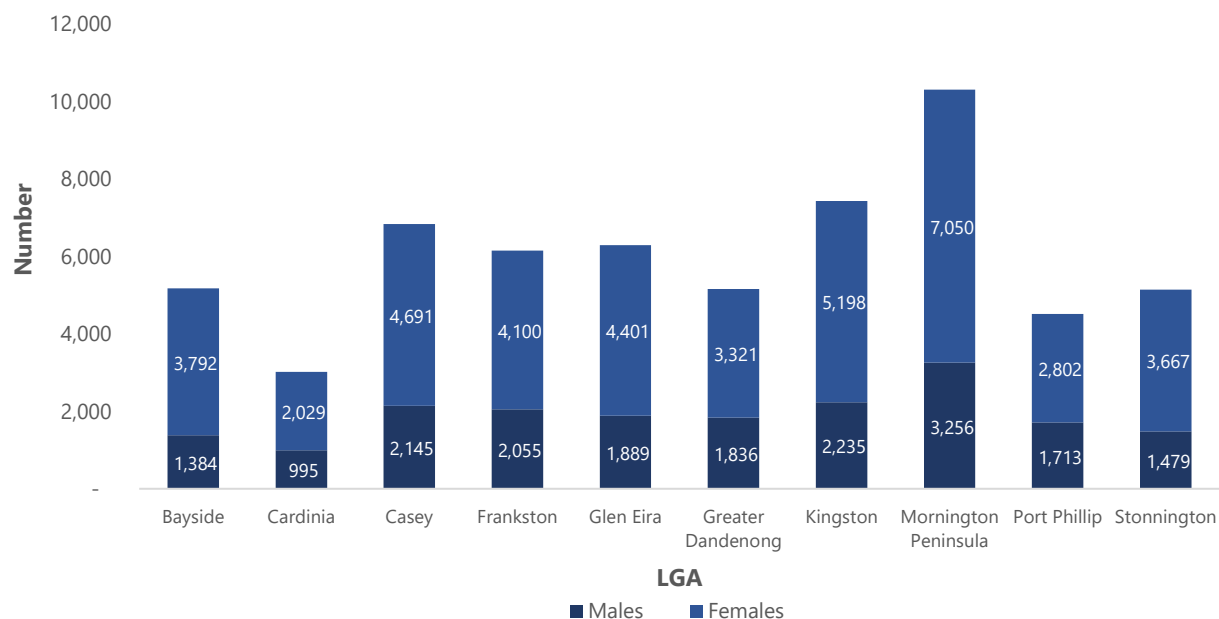
Living alone can be a determinant of social isolation and loneliness, especially for the older population. Figure 8.10 shows that based on ABS 2021 Census, Mornington Peninsula (n=10,306), Kingston (n=7,433) and Casey (n=6,836) had the largest number of persons 65 years and older who lived alone. Across all LGAs, homelessness in persons aged 65 years and above affects more females than males. Proportionally, Port Phillip had the highest number of older people living alone (32.7%) followed by Stonnington (28.9%) and Frankston (26.6%).

Studies suggest that multiple factors (social, financial, health and sociodemographic) had significantly affected the psychological condition of older people during the COVID-19 pandemic, through social isolation and fear of infection during lockdowns as per public health orders (Richter & Heidinger, 2021). However, a Sydney study (Strutt et al., 2022) also shows that older adults were adaptable and resilient during the lockdowns. The study examined the impact of lockdowns on health and lifestyle factors based on self-reported outcomes in 201 community-dwelling older adults (60-87 years), who demonstrated



great adoption of new technologies to remain connected to others. It further attributed negative emotional health outcomes to loneliness and unhelpful emotion regulation (Strutt et al., 2022).

Figure 8.10 Older persons aged 65 years or above who live alone by LGA and sex, 2021



Source: ABS Census 2021, Australian Bureau of Statistics (ABS Explorer). Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).

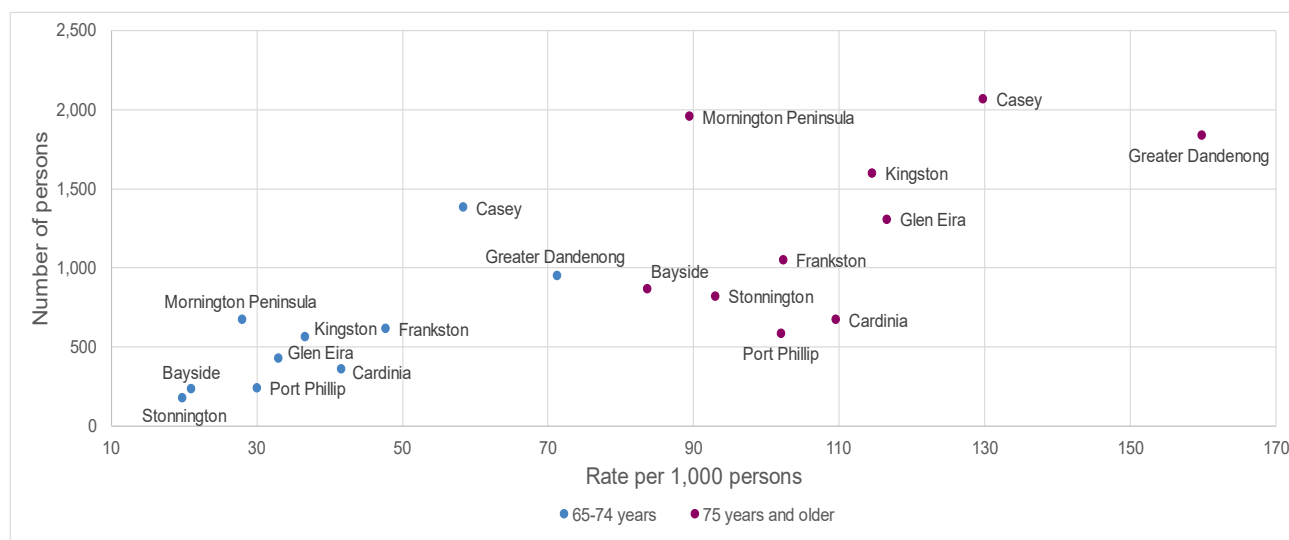
## Physical health

Physical health status of an individual can be estimated based on self-reported chronic conditions, self-rated health, and if one needs assistance for the activities of daily living.

### People requiring assistance

Based on self-reported data, most persons 65 years and older within the SEMPHN area who reported needing assistance with daily activities were from the Casey, Greater Dandenong, Mornington Peninsula and Kingston LGAs. When considering the older cohort, those 75 years and older, most persons that need assistance live in Casey and the Mornington Peninsula (Figure 8.11).

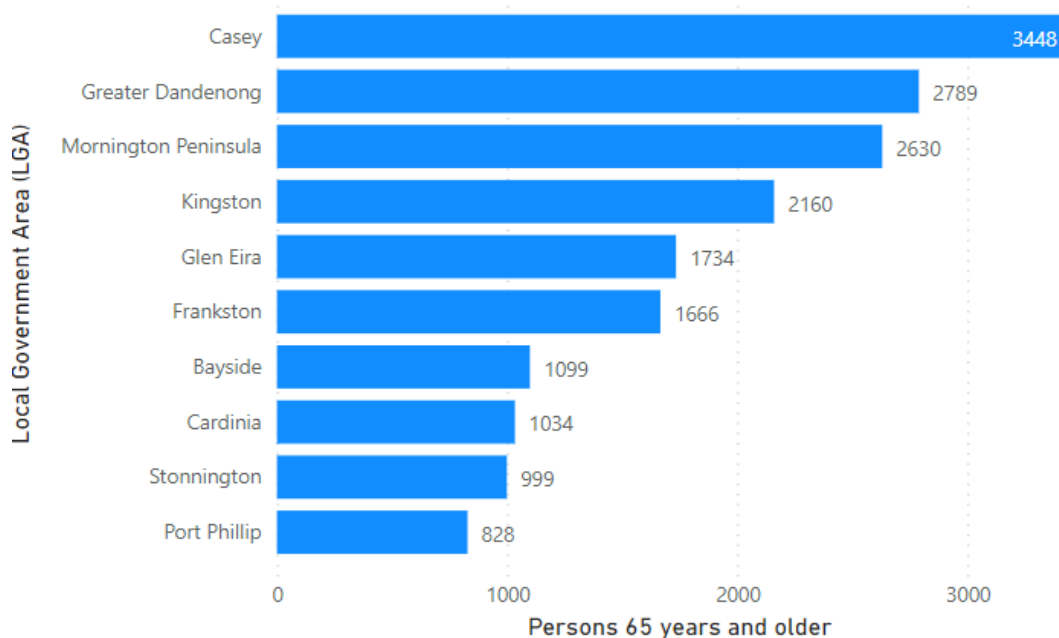
Figure 8.11 Older persons who need assistance by LGA, 2021



Source: Census 2021, Australian Bureau of Statistics (June 2022 release) Table G18: Core activity need for assistance by age by sex, Victoria, accessed on 20 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).

Additionally, Figure 8.12 highlights the high level of need for physical assistance in the 65–74-year-old cohort in the Casey and Greater Dandenong LGAs. There were almost 1,500 people in Casey in this age bracket requiring assistance, making up almost half of the total 65 years and older population and the largest number across all LGAs.

Figure 8.12 Persons 65 years or above requiring physical assistance by LGA, 2021



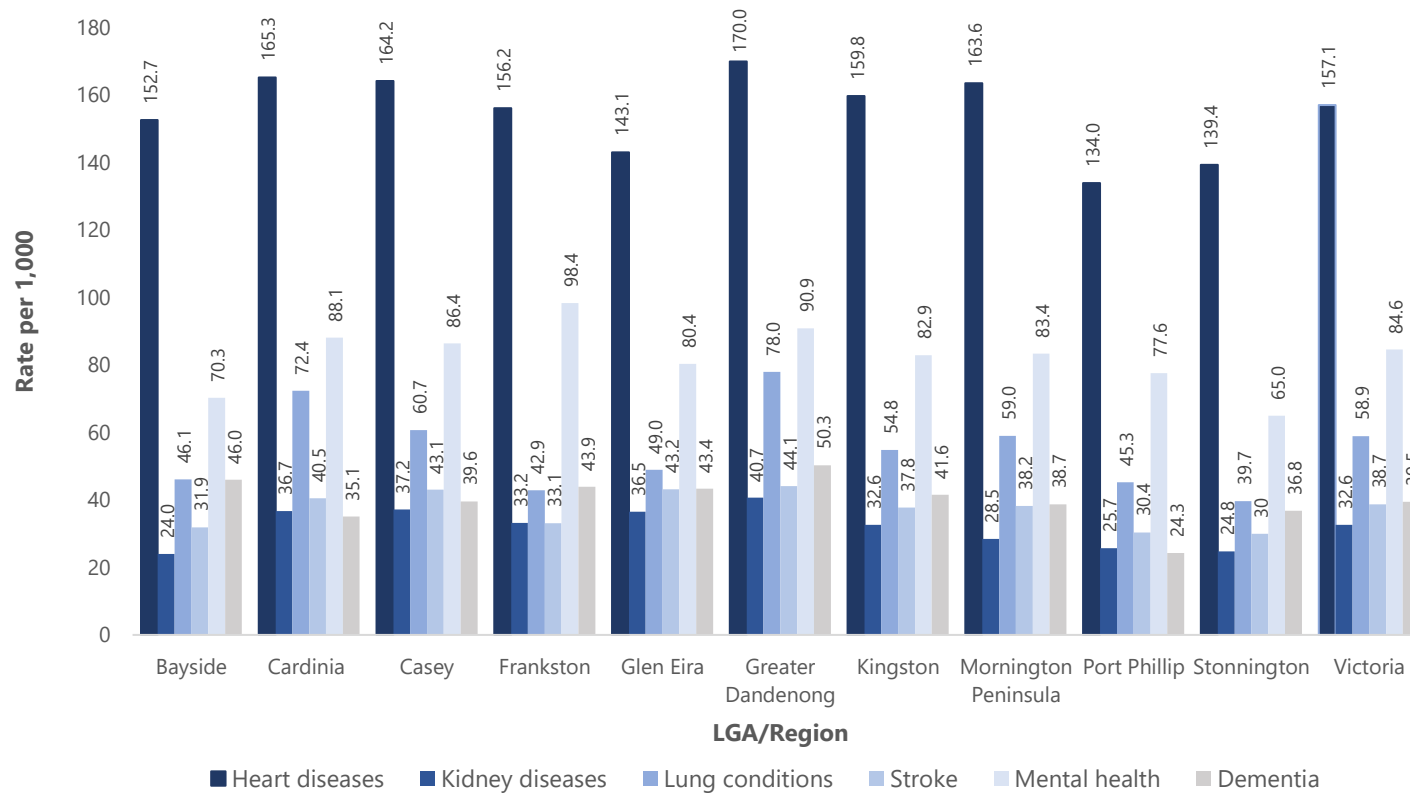
Source: ABS Census 2021, Australian Bureau of Statistics (June 2022 release) Table G27: Family composition, Victoria, accessed on 20 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).

## Chronic conditions

Chronic conditions impact on quality of life and are a main cause of mortality in Australians. They contribute significantly to the nation's burden of disease, including death, disability and diminished quality of life, as well as accounting for a significant proportion of healthcare costs (Department of Health and Human Services, 2019). While Chronic conditions can occur across any age group, they are more prevalent with older age and are broad ranging in their development, progress, and effects (Department of Health and Human Services, 2019). The number of chronic conditions that a person may have also increases with age. For many older people, coping with multiple chronic conditions is a real challenge. Learning to manage a variety of treatments while maintaining quality of life can be problematic.

Figure 8.13 shows the rate of chronic conditions among the older population 65 years and older, across all LGAs in SEMPHN catchment (see also Appendix Table 2.6.3) based on ABS 2021 Census. Rates of heart disease are highest across the catchment. Mental health conditions (including anxiety and depression) are high across the catchment, followed by chronic lung conditions (including chronic obstructive pulmonary disease (COPD) and emphysema). Casey, Mornington Peninsula, Greater Dandenong, Kingston and Frankston appear as LGAs with the greatest unmet needs.

Figure 8.13 Older persons with chronic conditions by LGA, 2021



Source: Australian Bureau of Statistics, 2021 Data. Please note Monash LGA is excluded as it was not possible to distinguish which proportion of the Monash LGA was within the SEMPHN catchment. Data for Mental Health and Dementia was sourced from Victorian Government, health Information Surveillance System. Accessed 10 July 2022.

## Mental health

Dementia, depression, and anxiety are contributors to the decline in mental wellbeing as people age. In addition, physical health challenges including chronic pain and frailty, also can contribute to poorer psychological wellbeing (WHO, 2017). Based on the ABS 2021 Census, Mornington Peninsula and Casey have the highest numbers of persons aged 65 years and over with self-reported mental health conditions (including anxiety and depression), with Kingston and Greater Dandenong also figuring more prominently when considering those aged 75 years and over (this may be due to delayed access by CALD communities in Kingston and Greater Dandenong given the diversity of the LGA's population).

In focus group consultations, mental health and dementia were the most often cited health conditions. Both health conditions were identified as a main health concern in the older cohort across the region, and a contributor to vulnerability. However, the focus groups did not provide specific insight to where relative need was across the LGAs.

In 2019-20, depression was the most prevalent diagnosis for people aged 65 years and over in SEMPHN's commissioned primary mental health services (21.9%) (South Eastern Melbourne PHN, 2023b). This prevalence was significantly higher compared with younger people (6.8%) and adults (6.9%) (South Eastern Melbourne PHN, 2023b).

Mixed anxiety and depression (16.0%) and anxiety (12.1%) were the second and third most prevalent diagnoses for this age group (South Eastern Melbourne PHN, 2023b)<sup>39</sup>. There was a significant increase in anxiety diagnoses for people aged 65 years and over between 2019-20 (8.8%) and 2020-21 (12.1%). Physical distancing due to the COVID-19 pandemic is expected to have drastic negative effects on the mental health of older people. COVID-19 presented clinical risks to over 65s due to their weaker immune systems and underlying health conditions, leading to health recommendations that they physically isolate from others. This physical isolation can cause anxiety, distress and induce a traumatic situation (Javed, 2020 ).

According to the ABS 2021 Census, there were 21,212 persons 65 years and older who were reported as having a mental health condition (including anxiety and depression). Mornington Peninsula (8.3%) and Casey (8.6%) show the largest number of older persons with a mental health condition (including anxiety and depression).

## Dementia

Dementia is a progressive disease without a cure, impacting close to half a million Australians; and almost 1.6 million Australians are involved in the care of people with Dementia. The number of people living with Dementia is estimated to double in the next 25 years (Dementia Australia, 2022). While people with Dementia do not always die of Dementia, it is the second leading cause of death in Australia since 2018 (Dementia Australia, 2022).

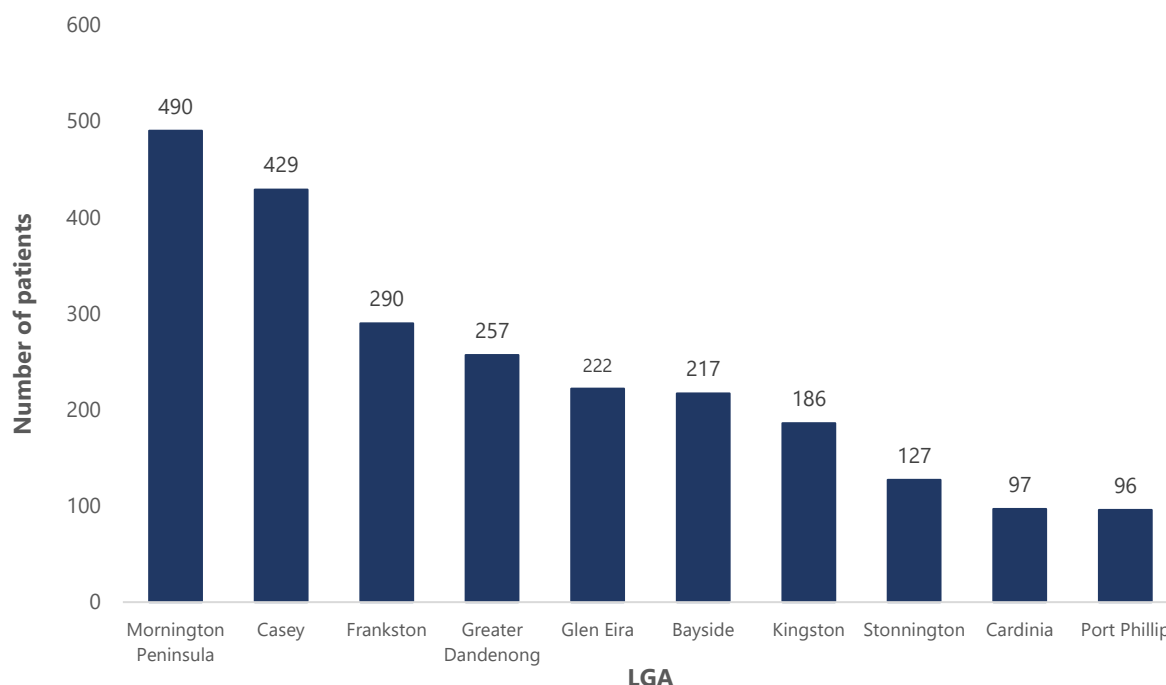
In the ABS 2021 Census, there were 10,388 persons 65 years and older in the SEMPHN catchment who reported living with Dementia. Mornington Peninsula (3.9%) and Casey (4%) LGAs had the largest number of persons with Dementia. As at 30 June 2023 according to GP data accessed via POLAR, there were 2,411

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<sup>39</sup> (Note: 5.9% and 8.4% of diagnosis data were missing from the PMHC-MDS for people aged 65 years and over for 2019-20 and 2020-21, respectively.) South Eastern Melbourne PHN. (2023b). *Primary Mental Health Care Minimum Data Set FY23-23*.

persons with Dementia who accessed primary care within the SEMPLHN catchment, where the majority were female (n=1,460, 61%) (see Figure 8.14).

Figure 8.14 Older patients with Dementia accessing primary care by LGA, 2023



Source: SEMPLHN POLAR GP data, accessed on 3 August 2023,

## Palliative care

Palliative care services in Australia are considered among the best in the world. The Economist Intelligence Unit's Quality of Death Index assessed 80 countries using 20 quantitative and qualitative indicators across five categories: the palliative and healthcare environment, human resources, the affordability of care, the quality of care and the level of community engagement (The Economist, 2015). The 2015 Quality of Death Index ranked Australia second across the world with respect to quality of death and ranked first in the Asia Pacific region (The Economist, 2015).

The most common places of death in Australia are hospitals and residential aged care. In 2019, half of all deaths in Victoria occurred as an admitted patient in a hospital/medical service area (50.0%, n=21,916); nearly one third occurred in residential aged care (29.9%, n=13,137); nearly one in five occurred in home care (18.2%, n=7,990); while the remaining 1.6% (n=794) occurred in other settings or were not specified in the current data collections (794) (AIHW, 2021c).

While most Australians understand the importance of talking about their end-of-life wishes and planning, only half have taken the steps to have conversations or put plans in place (Palliative Care Australia, 2021). Studies suggest addressing community attitude and perceptions of end-of-life care and dying is not just the responsibility of health services and must also be addressed from a social perspective for improved awareness (Grindrod, 2019). Literature suggests Advanced Care Planning discussions are beneficial to have when a patient is medically stable, in a comfortable environment with a familiar health professional that the patient has an existing relationship with (Franklin et al., 2020).

Research is ongoing to better understand the amount of palliative care being undertaken by GPs, and experiences and challenges faced by GP's providing palliative care in Australia (Australian Institute of Health and Welfare (AIHW), 2022; Hermann et al., 2019). Palliative care is complex and involves communication and interactions between GPs and patients and their families, and other service providers both in the community and acute setting (Hermann et al., 2019).

It is worth noting that while not all terminally ill patients require support through a specialist palliative care service, most terminally ill patients are engaged with their GP. The need for better health service integration is acknowledged across the health system, and there is a growing sense of shared responsibility for this by many different practitioners and services (Coulton & Boekel, 2016).

Service need for palliative care support, as assessed by Palliative Care Southeast, has identified high demand in service utilisation by clients who lived in Pakenham (n=121) and Berwick (n=104). Other suburbs identified by the organisation in terms of high volume of clients were Springvale, Noble Park, Dandenong North, Endeavour Hills, Narre Warren, and Cranbourne, with 51-100 clients across each suburb requiring support<sup>40</sup>.

Table 8.4 Palliative care providers in the SEMPHN catchment by LGA as of September 2023

| LGA                          | Community Palliative Care (CPC)  | Local Hospital Network/ Specialist Palliative Care (LHN/SPC)          |
|------------------------------|--|---|
| Bayside                      | Cavalry Healthcare Bethlehem Cabrini (Private CPC)   | The Alfred Cabrini (Private SPC)                                      |
| Casey                        | Palliative Care South East   | Monash Health   |
| Cardinia                     | Palliative Care South East   | Monash Health   |
| Frankston                    | Peninsula Home Hospice   | Peninsula Health  |
| Glen Eira                    | Cavalry Healthcare Bethlehem Cabrini (Private CPC)   | The Alfred Cabrini (Private SPC)                                      |
| Greater Dandenong            | Palliative Care South East   | Monash Health   |
| Kingston (Parts of Kingston) | Peninsula Home Hospice<br>Palliative Care South East<br>Cavalry Healthcare Bethlehem Cabrini (Private CPC) | Peninsula Health<br>Monash Health<br>The Alfred Cabrini (Private SPC) |
| Mornington Peninsula         | Peninsula Home Hospice   | Peninsula Health  |
| Port Phillip                 | Cavalry Healthcare Bethlehem Cabrini (Private CPC)   | The Alfred Cabrini (Private SPC)                                      |
| Stonnington                  | Cavalry Healthcare Bethlehem Cabrini (Private CPC)   | The Alfred Cabrini (Private SPC)                                      |

<sup>40</sup> It should be noted that the organisation does not cover all SEMPHN LGA's, with no coverage in Mornington Peninsula or Bayside.

To understand the perspective of local GPs for palliative care delivery and collaboration with palliative care services in the SEMPLHN catchment, a short survey was conducted on GP Practices (n=29) in the SEMPLHN catchment (SEMPHN, 2022b). Twenty one of the 29 GPs (72.4%) conducted home and/or RACF visits for palliative care patients, and one conducted telehealth consultations via video. Twenty-eight (96.6%) felt confident in assessing needs for palliative care patients. When asked about their views on referring patients to community palliative care services, 96.4% of all GPs in the survey felt either confident (n=16) or somewhat confident (n=11) to do so.

On an average, most GPs refer about five patients per year to Community Palliative care services, with responses ranging from 1 to 15, and with greater numbers reported by GPs who work with patients in the Residential Aged Care Facilities (RACFs). Challenges experienced with local community palliative care services included challenges in delay or lack of discharge summaries made available to GPs, communications about referrals and/or patient deaths, long wait times and the lack of hospital beds. When asked about improvement opportunities, GPs identified few initial ways of improvement of the local palliative care services, which included, better triage and timely discharge summaries and results, better support for patients with mental illness and the access of mental health workers in general practice and streamlined anticipatory medications.

## Residential aged care

As at 30 June 2023, there were 154 residential care services, 129 home care services and 121 home support services in the SEMPLHN catchment. On 30 June 2022, the occupancy rate for residents in Residential Aged Care Facilities across the catchment was 84.3%, similar to what was observed in 2021. Of the residents using the Commonwealth Home Support Programme (CHSP) in the SEMPLHN catchment in 2021–22, around 1 in 2 people (47.9%) were born outside of Australia, and almost 2 in 5 people (36.1%) had disability status.

### Utilisation of residential aged care facilities

As at 30 June 2022, the rate of people in permanent residential care aged 70 years and above in the SEMPLHN catchment was 59.9 per 1,000 people. This is comparable to the rates for Victoria (59.5 per 1,000) and for Australia (58.2 per 1,000). In 2021–22, the most used home support service in the catchment was domestic assistance. A higher proportion of men than women were entering permanent residential aged care in the aged group 60–79 years. However, in persons 85 years and older, higher proportions of women than men were entering aged care. The most common age group for men and women to enter residential aged care was 85–89 years and of those using permanent residential aged care services, 51.1% had a diagnosis of dementia.

Table 8.5 describes length of stay and movement of residents in residential aged care facilities in 2021–22. The median length of stay for residents in permanent residential aged care facilities until death was about 2 years (24.2 months).



Table 8.5 Length of stay (days) and number of people exiting from permanent residential care in SEMPHN catchment, by discharge reason, 2021-22

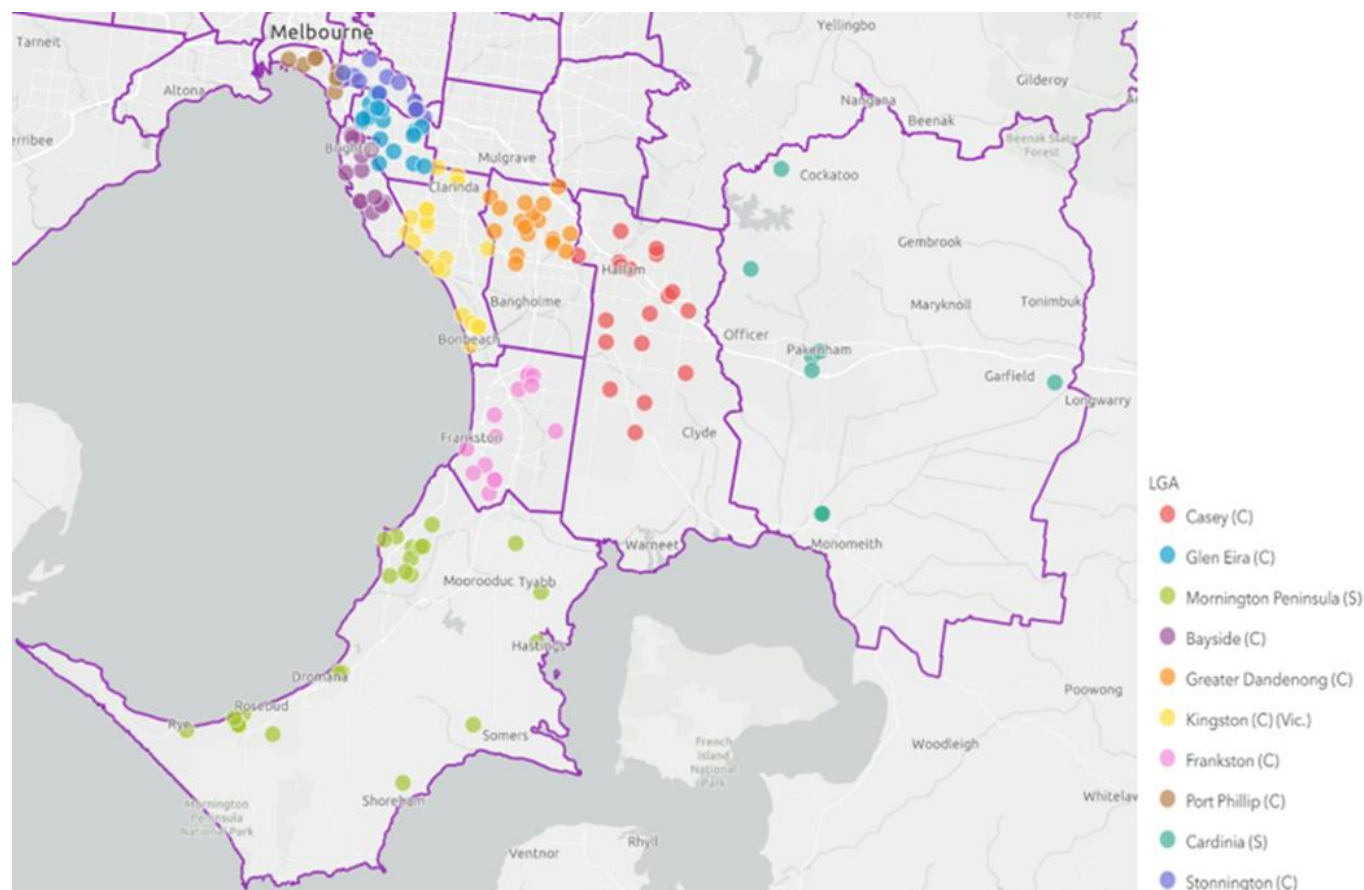
|                                | Death     | Return to community | To hospital | Other     | To other residential care |
|--------------------------------|-----------|---------------------|-------------|-----------|---------------------------|
| Mean length of stay (days)     | 34.0      | 13.6                | 15.3        | 21.8      | 32.5                      |
| Median length of stay (days)   | 24.2      | 4.1                 | 4.9         | 14.7      | 21.0                      |
| Range of length of stay (days) | 0.0-315.6 | 0.1-108.9           | 0.1-122.7   | 0.0-120.4 | 0.1-228.1                 |
| Total exits (n)                | 3,840     | 166                 | 31          | 48        | 501                       |

Source: GEN Aged Care Data, AIHW 2021, Dashboard: My aged care region (PHN), Table: Length of stay and exits from permanent residential care, by discharge reason, 2021-22. Accessed 4 September 2023.

Whilst data on unmet nursing and community care needs is limited, focus groups<sup>41</sup> with key stakeholders including service providers (SEMPHN, 2022) reported strongly on issues around workforce and access to home and carer support, stemming from a lack of resources, especially for home care or residential aged care. According to focus group participants, home care, carer support and care coordination are the most significant health needs of the aged population. Figure 8.15 provides a map of the Residential Aged Care Facilities (RACFs) across the SEMPHN catchment as of 31 July 2022.

<sup>41</sup> Qualitative input was taken from three focus groups (n=29) conducted with aged care service providers from across the SEMPHN catchment in August 2022.

Figure 8.15 Residential Aged Care Facilities in the south eastern Melbourne region, September 2023



## Aged care services

In 2022, a survey (SEMPHN, 2022b) was conducted of aged care-related organisations in the SEMPHN catchment to assess the locations, nature, and extent of services provided. When asked to describe the barriers to meeting the service demand, the most common responses were related to:

- workforce (lack of skilled workforce available)
- shortage of funding or funding packages
- staff retention issues
- complexity of clients

The survey respondents universally acknowledged a shortage of workforce in personal care and nursing, and many believed there was an undersupply of the workforce in health and specialised support service line. Organisations were surveyed about service types (as defined by services regularly provided/funded under the Commonwealth Home Support Programme (CHSP)) and their availability within each of the SEMPHN LGAs to identify gaps by service type.

## Integrating primary care and residential aged care services

SEMPHN plays a critical role in facilitating and supporting connections between primary care providers and RACFs. The current model of integration relies predominantly on current grassroots connections between GPs and RACFs in the SEMPHN catchment. SEMPHN supports engagement between RACFs and residents' GPs using their own communication channels. Recently, SEMPHN has commissioned several initiatives to increase and improve integration between primary care providers and GPs, which include the mental health services delivered through the RACFs, the COVID response across RACFs, alongside the COVID vaccination programs conducted through partnerships between practice managers and GPs.

The Vulnerable Vaccination Program is an example of a SEMPHN-commissioned initiative which targets vulnerable groups who may be homebound and unable to visit a healthcare clinic to receive their COVID-19 vaccination. These groups may include older persons, people living with a disability or a mental health condition which prevents them from leaving their home.

SEMPHN is also currently a member of the *Better at Home Initiative* which is a collaboration with the Health Service Partnership. Other SEMPHN initiatives include the Allied Health Services in Residential Aged Care Facilities program to enhance mobility in older persons and reduce the effects of social isolation during the COVID-19 pandemic. These initiatives provide a launching pad to improve integration of primary care and residential aged care services.

## Chapter 9 Health workforce

Australia's Primary Health Care 10 Year Plan 2020-2023 has identified the need for a highly skilled primary care workforce (Department of Health, 2022a). Primary care is delivered in general practices, community health services and allied health practice by general practitioners (GPs), nurses, nurse practitioners, allied health professionals<sup>42</sup>, midwives, pharmacists, dentists, and Aboriginal health practitioners (AIHW, 2016). The number of primary health care professionals is increasing; however, this does not reflect demand. In 2020, there were more than 642,000 health professionals working in registered medical professions across Australia. From 2015 to 2020, the number of registered practitioners has increased by 20.8% and 11.3 FTE per 100,000 population. In this time period, the number of medical practitioners has increased by 19.7% (7.0 FTE per 100,000), nurses and midwives increased by 14.1% (13.1 FTE per 100,000) and allied health practitioners increased by 40.2% (32.9 FTE per 100,000) (AIHW, 2022h).

### General practices

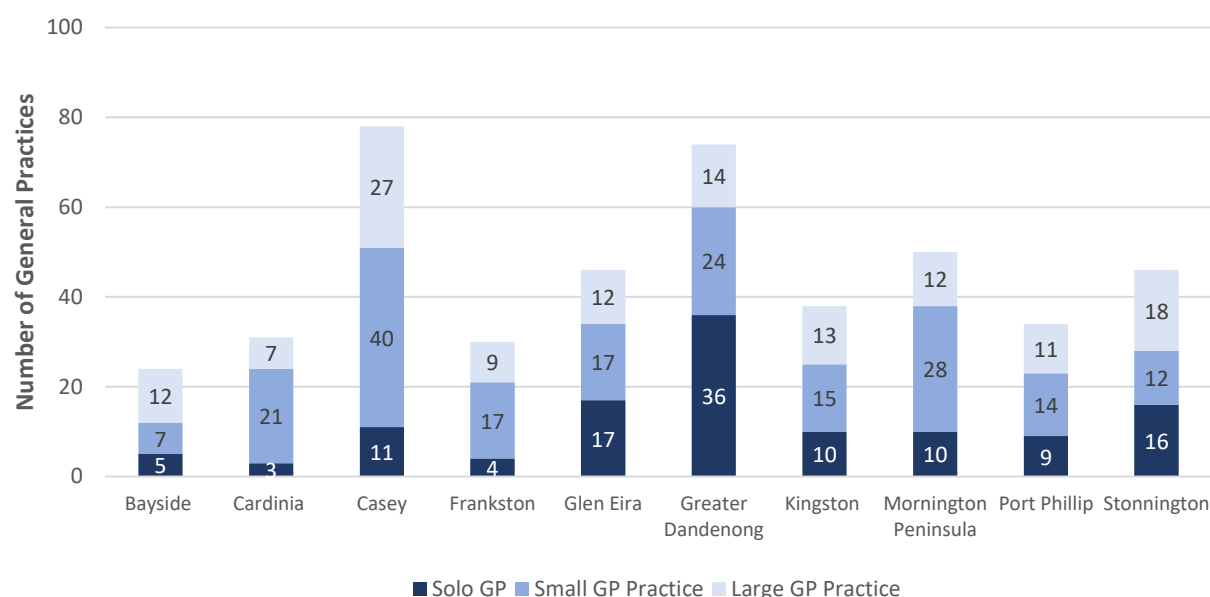
As at 31 December 2022, there were 485<sup>43</sup> general practices in the SEMPLHN catchment. General practices vary in size according to the number of general practitioners (GPs) employed at the practice, which indicates the practice's existing capacity to service surrounding areas. Figure 9.1 shows that Casey had the highest number of general practices (n=78). Bayside (n=24) and Frankston (n=30) have the lowest number of GP practices. Casey had the highest number of small practices (defined as two to five GPs) (n=40) and large practices (defined as six or more GPs) (n=27). Greater Dandenong had the highest number of solo practices (n=36) in the region.

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<sup>42</sup> Allied health professions include Aboriginal and Torres Strait Islander health practitioners, chiropractors, Chinese medicine practitioners, medical radiation practitioners, occupational therapists, optometrists, osteopaths, pharmacists, physiotherapists, podiatrists, psychologists, and paramedicine practitioners. In 2019, paramedicine practitioners emerged as a new career path of registered health professionals in Australia.

<sup>43</sup> This includes three GP practices located in the 4% City of Monash region.

Figure 9.1 Number and size of general practices by LGA, 2023



Source: CRM Data, SEMPHN 2023, Table: Account Advanced Find View, Date of Extraction: 14 August 2023.

## RACGP accreditation

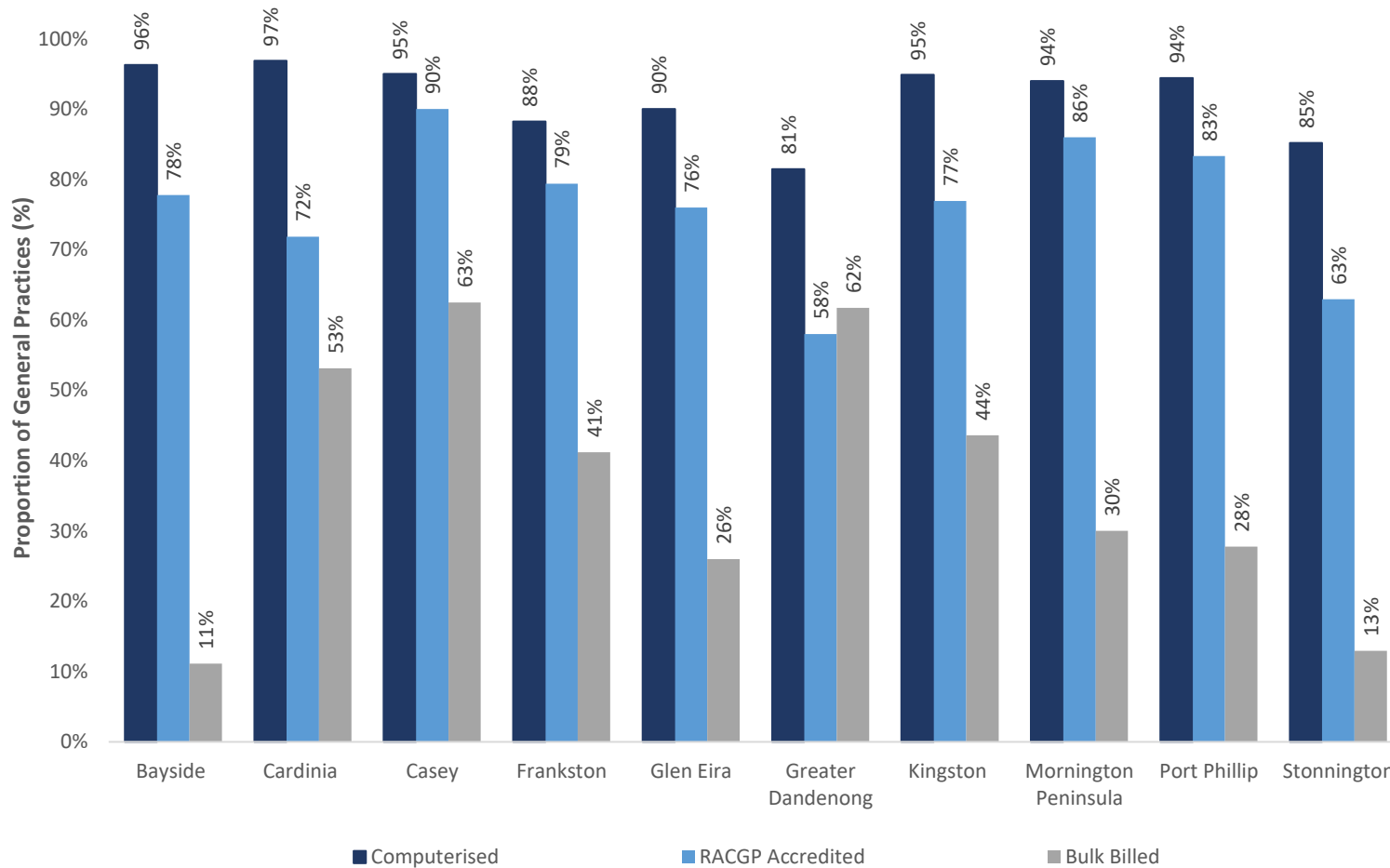
General practices can undertake assessment to gain accreditation to ensure safety, quality and continuous improvement standards. If a general practice is accredited, they meet the standards set by the Royal Australian College of General Practitioners (RACGP). Greater Dandenong (58%) and Stonnington (63%) had the lowest proportion of accredited practices (58%) whilst Casey had the highest proportion of accredited practices (90%) (Figure 9.2).

## Bulk billing practices

Bulk billing is a payment option so that the consumer does not incur the cost of the service delivered by the health professional (Services Australia, 2022a). When a service is bulk billed, the medical professional accepts the Medicare benefit as payment for the service by the government. If there is a lack of bulk billing options available, this creates a cost barrier to consumers accessing health care. Community consultations have identified a lack of bulk billing options across the catchment as one of the leading barriers to health care for residents in the region.

In 2020-21, 68.3% of patients in Victoria were bulk-billed for all their GP services and did not incur any out-of-pocket costs (Productivity Commission, 2022). Across the SEMPHN catchment, although more practices offer bulk billing for patients (no out-of-pocket expense) in areas of higher socioeconomic disadvantage (e.g. Casey (62.5%), Greater Dandenong (61.7%) and Cardinia (53.1%)), one-third or more of practices across the SEMPHN catchment did not offer bulk billing.

Figure 9.2 Proportion of general practices which are computerised, have RACGP accreditation and provide bulk billing services, 2023



Source: CRM Data, SEMPHN 2023, Table: Account Advanced Find View, Date of Extraction: 14 August 2023.

## General practitioners

In 2022, 2,786 GPs provided primary health care services in the SEMP HN catchment (Table 9.1). Casey and Mornington Peninsula had the highest number of GPs (n=602 and n=336, respectively). Half of the LGAs in our catchment had a higher ratio of GPs FTE per 100,000 population compared to Victoria (120.5 FTE per 100,000), with Stonnington having the highest GP FTE by population (149.1 GP FTE per 100,000). Conversely, Glen Eira had the lowest ratio at 106.1 GP FTE per 100,00 residents, followed by Bayside (111.2 FTE per 100,00).

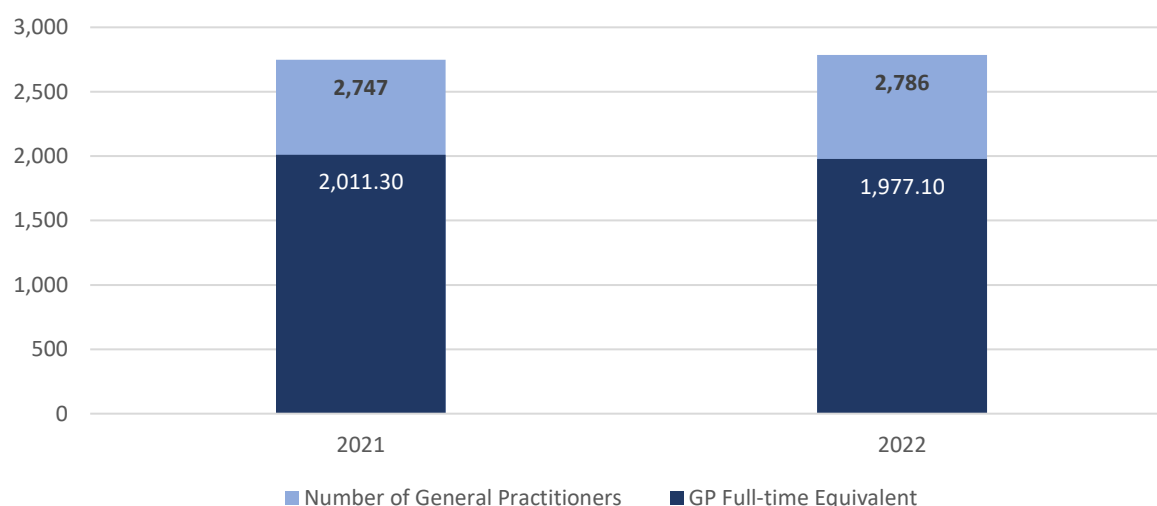
Table 9.1 General practitioners by LGA, 2022

| LGA                      | Number of General Practitioners (n) | GP Full-time Equivalent (FTE) | GP FTE per 100,000 residents |
|--------------------------|-------------------------------------|-------------------------------|------------------------------|
| Bayside                  | 275                                 | 113.8                         | 111.2                        |
| Cardinia                 | 182                                 | 144.6                         | 120.9                        |
| Casey                    | 602                                 | 467.9                         | 126.6                        |
| Frankston                | 264                                 | 171.1                         | 121.5                        |
| Glen Eira                | 326                                 | 159.9                         | 106.1                        |
| Greater Dandenong        | 337                                 | 234.4                         | 146.4                        |
| Kingston                 | 354                                 | 190.6                         | 119.5                        |
| Mornington Peninsula     | 346                                 | 214.2                         | 125.7                        |
| Port Phillip             | 290                                 | 115.9                         | 112.0                        |
| Stonnington              | 388                                 | 158.5                         | 149.1                        |
| <b>SEMP HN catchment</b> | <b>2,786</b>                        | <b>1,977.1</b>                | <b>124.3</b>                 |
| <b>Victoria</b>          | <b>9,886</b>                        | <b>7,887.7</b>                | <b>120.5</b>                 |

OFFICIAL: Commonwealth Department of Health and Aged Care, HeaDS UPP Tool, Needs Assessment Workforce Planning Product, extracted 20/07/2023" for the purpose of Needs Assessments. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMP HN catchment (4%).

Since 2021, a small year-on-year increase (1.4%) was observed in the number of GPs providing services in the SEMP HN catchment. However, this increase fell below the expected population growth of the SEMP HN catchment population (2.4%) during this period. Despite the total number of GPs having risen during this period, the proportional GP Full-Time Equivalents (FTEs) decreased by 1.7%. This decrease indicates a reduction in the average weekly hours worked by GPs in the SEMP HN catchment, reinforced by a GP FTE to general practitioner ratio of 0.7-to-1 across SEMP HN (see Figure 9.3).

Figure 9.3 Number of general practitioners and GP FTE for the SEMPHN catchment, 2021-2022



OFFICIAL: Commonwealth Department of Health and Aged Care, HeaDS UPP Tool, Needs Assessment Workforce Planning Product, extracted 20/07/2023" for the purpose of Needs Assessments. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).

### Services provision and utilisation

In 2022, GPs within the SEMPHN catchment delivered over 12,000,000 services to approximately 1,616,000 patients. Notably, the number of patients provided services in SEMPHN exceeded the 2022 estimated resident population of the SEMPHN catchment by 30,000 patients, representing the temporary visitors accessing SEMPHN primary care services whilst visiting from out-of-catchment or state. Variation was observed in the number of GP services provided per capita across SEMPHN LGAs. Greater Dandenong had the highest rate at 9.0 services per capita, followed by Stonnington with 8.7 services per capita, and Casey with 7.9 services per capita, this is potentially indicative of higher primary health care need for the population within these LGAs when compared to Glen Eira and Port Phillip which reported the lowest number of services per capita in the catchment at 6.4 services (DoH – HeaDS UPP Tool, 2022c).

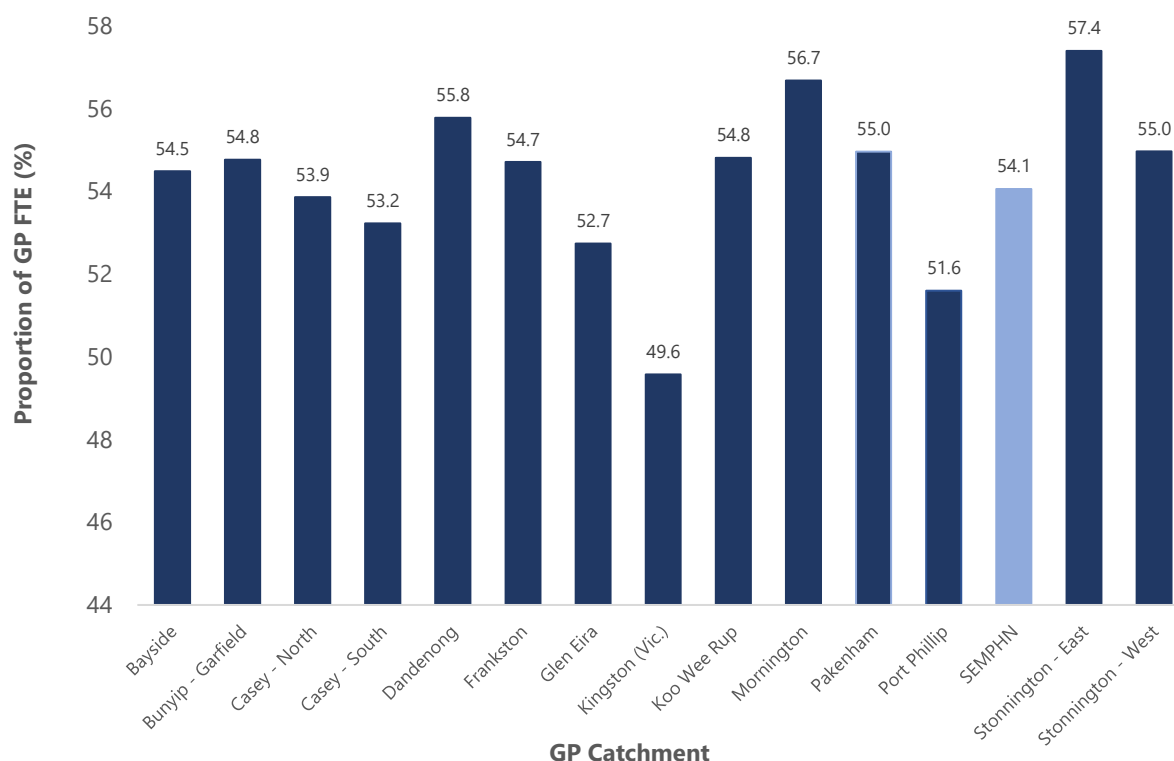
To accurately determine GP service needs across the south east of Melbourne, 14 general practitioner (GP) catchments have been identified. An explanation and geographic correspondence for local government area to general practitioner catchment is provided in Appendix 1. In 2022, GPs across all 14 SEMPHN GP catchments offered and provided a diverse range of primary care services, reflected by varying proportions of their respective GP Full-Time Equivalents (FTEs) across 15 high-level reporting groups. These reporting groups encompassed a wide range of service types including standard & long consultations, after-hours care, mental health-related care, and chronic disease/complex care management.

### Non-specific GP consultations

Overall GPs in each SEMPHN GP catchment recorded approximately the same proportion of their respective FTE being utilised for non-specific GP consultations of varying lengths (e.g., brief, standard, long, and prolonged appointments). Stonnington – East provided the highest proportion (57.4%) of their FTE towards this type of service, whilst Kingston provided the lowest (49.6%), both comparable to the SEMPHN catchment overall at 54.1% (see Figure 9.4).



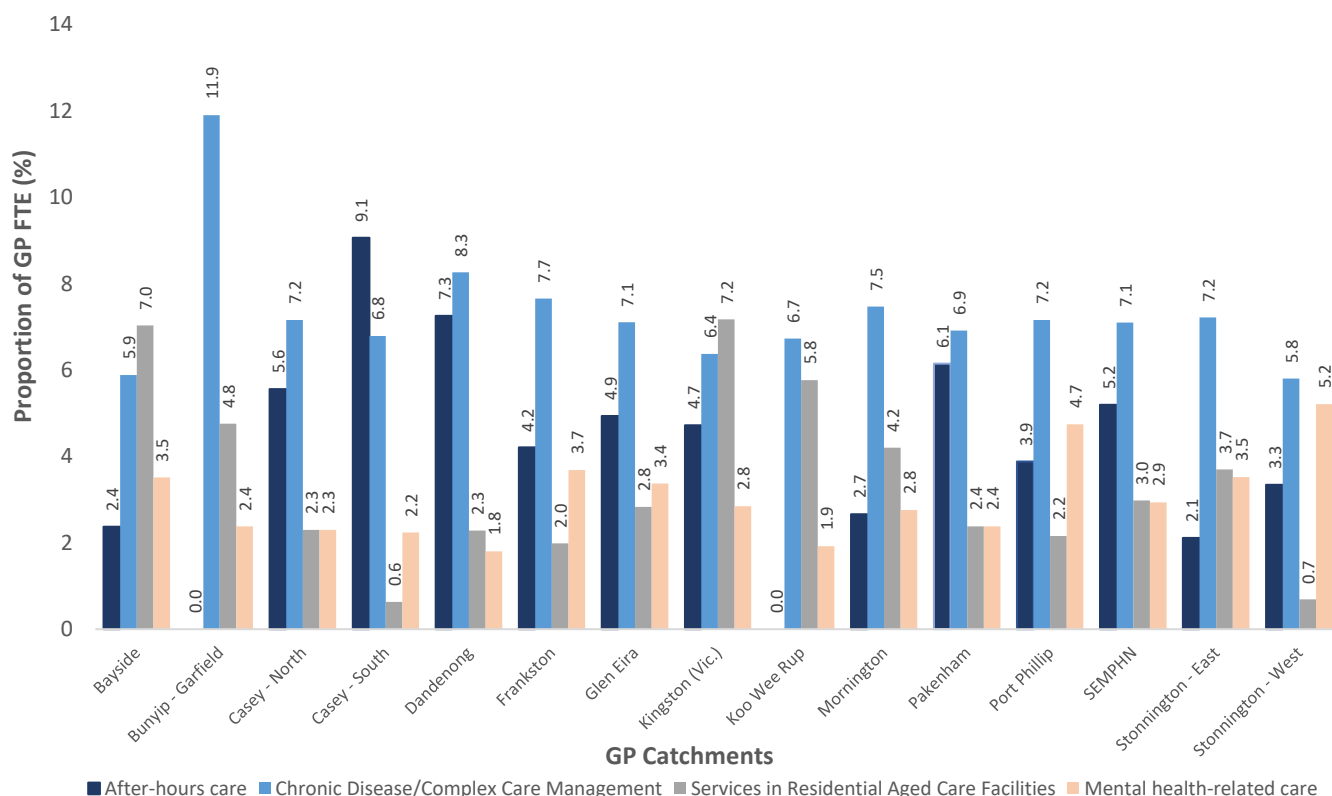
Figure 9.4 Proportion of GP FTE provided on brief, standard, long, and prolonged GP consultations by GP catchment



OFFICIAL: Commonwealth Department of Health and Aged Care, HeaDS UPP Tool, Needs Assessment Workforce Planning Product, extracted 20/07/2023" for the purpose of Needs Assessments. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).

Noticeable differences were observed in the proportion of FTE utilised towards four specific primary care service reporting groups: after-hours care, mental health-related care, chronic disease/complex care management, and services provided in residential aged care facilities (RACFs) between GP catchments, potentially reflecting the health needs and service provision capabilities of their respective communities (see Figure 9.5).

Figure 9.5 Proportion of GP FTE provided on after-hours care, mental health-related care, chronic disease/complex care management, and services provided in RACFs



OFFICIAL: Commonwealth Department of Health and Aged Care, HeaDS UPP Tool, Needs Assessment Workforce Planning Product, extracted 20/07/2023<sup>1</sup> for the purpose of Needs Assessments. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).

#### After-hours services

Casey – South recorded the highest proportion of GP FTE utilised for after-hours care (9.1%), followed by Dandenong at 7.3%, and Pakenham at 6.1%, highlighting population demand and utilisation of primary healthcare outside of regular practice hours, and potentially the lack of after-hours service capacity in regions with low after-hours service provision/utilisation such as Stonnington – East (2.1%), Bunyip – Garfield (0%), and Koo Wee Rup (0%).

#### Chronic disease/ complex care management

Bunyip-Garfield had the highest proportion of GP FTE utilised on chronic disease/complex care management services (11.9%), followed by Dandenong (8.3%), and Frankston (7.7%).

#### Services in RACFs

Kingston had the highest proportion of GP FTE providing services in RACFs (7.2%), followed by Bayside (7.0%), and Koo Wee Rup (5.8%), increasing the accessibility of primary health care services for those residing in RACFs.

### Mental health-related care

Stonnington – West reported the highest proportion of GP FTE dedicated to mental health-related care services at 5.2%, followed by Port Phillip at 4.7%, and Frankston at 3.7%. This highlights the growing population health concern surrounding mental well-being within the SEMPHN catchment, emphasising the need for accessible mental health services and support, whilst acknowledging the frequent position of GPs as the first point of contact for mental health-related concerns.

### Nurses and midwives

There are around 450,000 nurses and midwives in Australia, accounting for the largest segment in the health workforce (Department of Health and Aged Care, 2020b). The Australian Primary Health Care Nurses Association (APNA) describes general practice nursing as the fastest growing area within the healthcare sector (Australian Primary Healthcare Nurses Association (APNA), 2021).

In the SEMPHN catchment, 69.7% of practices (n = 338) have at least one nurse employed in their care team (South Eastern Melbourne PHN, 2023a) compared to 63.5% nationally (APNA, 2021). Table 9.2 depicts the distribution of the nursing and midwifery workforces across varying health care settings by LGA. Average hours worked by SEMPHN catchment nurses and midwives was consistent with the overall Victorian average. Additionally, nurse and midwife FTE employed in hospital settings varied widely across SEMPHN, reflective of where most medium-to-large hospitals are located within the SEMPHN catchment (e.g. Stonnington, Frankston, and Greater Dandenong).

Table 9.2 Distribution of nurses and midwives across primary and community settings, hospitals, and aged care, by LGA, PHN and State, 2021

| LGA                  | In Primary and Community settings |                                |                      | In Hospitals     |                                |                      | In Aged Care     |                                |                      | Midwifery          |                                  |                      |
|----------------------|-----------------------------------|--------------------------------|----------------------|------------------|--------------------------------|----------------------|------------------|--------------------------------|----------------------|--------------------|----------------------------------|----------------------|
|                      | Number of nurses                  | Full-time Equivalent of nurses | Average weekly hours | Number of nurses | Full-time Equivalent of nurses | Average weekly hours | Number of nurses | Full-time Equivalent of nurses | Average weekly hours | Number of midwives | Full-time Equivalent of midwives | Average weekly hours |
| Bayside              | 208                               | 146.3                          | 26                   | 579              | 460.8                          | 30                   | 282              | 237.3                          | 31                   | 23                 | 12.2                             | 20                   |
| Cardinia             | 167                               | 130.1                          | 29                   | 107              | 93.7                           | 33                   | 189              | 154.3                          | 31                   | 22                 | 12.6                             | 21                   |
| Casey                | 568                               | 454.7                          | 30                   | 1,569            | 1,322.2                        | 32                   | 539              | 465.6                          | 32                   | 75                 | 36.4                             | 18                   |
| Frankston            | 539                               | 429.3                          | 30                   | 2,348            | 1,954.5                        | 31                   | 305              | 260.9                          | 32                   | 33                 | 20                               | 23                   |
| Glen Eira            | 418                               | 345.1                          | 31                   | 737              | 662.7                          | 34                   | 388              | 352.2                          | 34                   | 19                 | 8.3                              | 16                   |
| Greater Dandenong    | 413                               | 342.9                          | 31                   | 1,650            | 1,417.8                        | 32                   | 409              | 356.7                          | 33                   | 34                 | 18.5                             | 20                   |
| Kingston             | 357                               | 281                            | 29                   | 795              | 693.2                          | 33                   | 375              | 326                            | 33                   | 26                 | 10.8                             | 15                   |
| Mornington Peninsula | 445                               | 339.4                          | 28                   | 734              | 577.7                          | 29                   | 516              | 424.4                          | 31                   | 29                 | 13.3                             | 17                   |
| Port Phillip         | 196                               | 163.4                          | 31                   | 118              | 101                            | 32                   | 90               | 78.7                           | 33                   | 9                  | 4.2                              | 17                   |
| Stonnington          | 448                               | 361                            | 30                   | 2,141            | 1,848.8                        | 32                   | 280              | 247.9                          | 33                   | 26                 | 13.1                             | 19                   |
| <b>SEMPHN</b>        | 3,766                             | 2,997.9                        | 30                   | 10,783           | 9,136.3                        | 32                   | 3,380            | 2,911.2                        | 32                   | 296                | 149.5                            | 19                   |
| <b>Victoria</b>      | 18,389                            | 14,596.7                       | 30                   | 59,657           | 50,441.3                       | 32                   | 17,250           | 14,738.4                       | 32                   | 1,556              | 772.2                            | 18                   |

OFFICIAL: Commonwealth Department of Health and Aged Care, HeaDS UPP Tool, Needs Assessment Workforce Planning Product, extracted 21/07/2023, for the purpose of Needs Assessments. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).

## Allied health practitioners

### Mental health workforce

Mental health trained professionals are critical to access and quality delivery of mental health care for our community (Samartzis & Talias, 2020). In Australia, the mental health workforce includes GPs providing mental health related services, psychiatrists, mental health nurses, psychologists, and mental health occupational therapists. Table 9.3 depicts that there was a lower rate of mental health professionals in SEMPHN when compared to Victoria as a whole. In particular, the number mental health nurses per 100,000 population was substantially lower in the SEMPHN catchment.

Table 9.3 Mental health workforce in Australia, 2021

| Region           | Psychiatrists |                  | Mental Health Nurses |                  | Psychologists |                  | Mental health occupational therapists |                  |
|------------------|---------------|------------------|----------------------|------------------|---------------|------------------|---------------------------------------|------------------|
|                  | n             | Rate per 100,000 | n                    | Rate per 100,000 | n             | Rate per 100,000 | n                                     | Rate per 100,000 |
| SEMPHN catchment | 237           | 13.0             | 1,248                | 78.5             | 2,055         | 129.2            | 163                                   | 10.3             |
| Victoria         | 1,116         | 15.5             | 6,965                | 106.4            | 8,941         | 136.5            | 817                                   | 12.5             |

Source: AIHW Data, 2023, Table WK.2: Psychiatrists, average hours worked per week, FTE and FTE per 100,000 population, geographical distribution, 2021; WK.5: Mental health nurses, average hours worked per week, FTE and FTE per 100,000 population, geographical distribution, 2021, WK.8: Psychologists, average hours worked per week, FTE and FTE per 100,000 population, geographical distribution, 2021; Table WK.11: Occupational therapists, average hours worked per week, FTE and FTE per 100,000 population, geographical distribution, 2020; accessed on 11 August 2023.

Consultations with mental health service providers in south east Melbourne raised concerns about recruitment and retention of mental health professionals. Concerns included:

- a lack of clarity and regulation around staff types in the mental health sector with significant variation in position titles and staff qualifications.
- a lack of targeted and appropriate funding, where funding structures focused on short-term funding contracts, were noted as posing a challenge to appropriate service delivery by impeding recruitment and retention of skilled staff.

### First Nations workforce

First Nations people are still underrepresented in the Australian Health workforce despite being employed in healthcare more than any other industry (Department of Health, 2022b). In 2021, First Nations people represented 1.7% (n=16,659) of the total health workforce in Australia, despite representing 3.2% of the working population in Australia in 2021 (Department of Health, 2022b). In 2022, 5,037 nurses and midwives identified as Aboriginal or Torres Strait Islander, which represents approximately 1.5% of all enrolled and registered nurses and midwives (Australian Institute of Health and Welfare - National Indigenous Australian Agency, 2020). An estimated 0.5% of all employed medical practitioners identified as Aboriginal or Torres Strait Islander.

While there is an increase in the number of First Nations people in the health workforce, the overall proportion of the First Nations workforce remains low. Increasing the representation of First Nations

people in the health workforce can improve access to culturally appropriate health services for First Nations Australians (Australian Institute of Health and Welfare - National Indigenous Australian Agency, 2020).

### Aboriginal Community Controlled Health Services (ACCHS)

Aboriginal Community Controlled Health Services (ACCHS) have been providing a wide range of health, social and emotional wellbeing services for the last 50 years. There are currently two ACCHS within the SEMPHN catchment:

Dandenong & District Aborigines Co-Operative Limited (DDACL) was established by families in the local area who saw the need to provide support for the growing First Nations community in the region (DDACL, 2022). The DDACL Aged and Disability team services Greater Dandenong, Casey, Knox, Cardinia, Frankston and the Mornington Peninsula local government areas. Some of the support services provided include Domestic Assistance, Personal Care, 1:1 Support and Social Support Group support to Elders, carer, and Disability Clients (DDACL, 2022).

Ngwala Willumbong Aboriginal Cooperation delivers services to meet the needs of Aboriginal and Torres Strait Islander People, their families and communities. Services include alcohol and drug treatment, family violence, housing, and homelessness.

First Peoples' Health and Wellbeing is a dynamic organisation aiming to improve access to affordable primary health care in urban Melbourne. The service was expanded to support unmet primary care need in Frankston and Thomastown.<sup>44</sup> The First Peoples' Health and Wellbeing ACCHS deliver trauma informed primary health care to First Nations communities in the SEMPHN catchment (FPHW, 2020).

### Cultural appropriateness training

Cultural awareness training aims to build a culturally responsive workforce. Literature has shown healthcare providers found cultural awareness training to be an invaluable entry point. Cultural education which elevates the consumer's experience and provides health professionals and service providers with an opportunity to improve their delivery of providing culturally safe care during common cross-cultural encounters (Kerrigan et al., 2020). In 2021-22, 3,654 practitioners in the SEMPHN database had had First Nations Cultural training<sup>45</sup>.

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<sup>44</sup> Thomastown is a suburb of Melbourne, located within the City of Whittlesea local government area which is outside the SEMPHN catchment boundaries.

<sup>45</sup> This data reflects data captured for AOD and Mental Health service contacts only.

## Chapter 10 Digital health

Digital health technologies are designed to improve the availability and accessibility of healthcare services (AIHW, 2022f). In Australia, digital health refers to technologies to improve the healthcare system, including telehealth, electronic health records and electronic prescriptions (Department of Health and Aged Care, 2022). Globally, the COVID-19 pandemic has accelerated the innovation and uptake of digital health products, creating a stronger market for future solutions to improve health for all, if they are able to support equitable and universal access to quality health services (WHO, 2021).

Since the start of the pandemic, 118.2 million telehealth services have been delivered to 18 million patients nationally. Over 95,000 practitioners across Australia now use telehealth services (Australian Digital Health Agency, 2022). While the provision of healthcare using digital health platforms has increased, factors such as knowledge, readiness and capacity of uptake are vital considerations for access and equity in the SEMPHN catchment (Snoswell, 2020; Thomas, 2020). An evidence review conducted in 2021 suggests that telehealth was critical to the Australian digital health response in primary care during COVID-19 (Jonagaddala et al., 2021), however, there is still limited evidence around the effectiveness of different digital health technologies.

### Digital divide

Exclusion from the use of the internet and technology has created a digital divide geographically across Australia, especially between different population groups due to socio-economic status (Barraket, 2021). The impact of digital exclusion during lockdowns was augmented in the delivery of healthcare. At the 2016 Census, around four in five (83.2%) households had access to the internet (ABS, 2018) and 88% of people aged 18-75 owned or had access to a smartphone in 2017 (Deloitte, 2017). Approximately three in four adults (78%) use the internet to find health-related information (Research Australia, 2017). Just over one in ten dwellings (11.4%, n=52,761) in the region did not have access to the internet in 2016 (Table 10.1). Greater Dandenong (16.8%, n=8,137) and Mornington Peninsula (13.9%, n=8,105) had the highest proportion of private dwellings without internet access, and which were above the Victorian average (13.6%).

Table 10.1 Private dwellings where the internet is not accessed, by LGA, 2016

| LGA                     | Private dwellings where the internet is not accessed.<br>n | Proportion (%) |
|-------------------------|--|----------------|
| Bayside                 | 3,181  | 9.1            |
| Cardinia                | 3,405  | 11.0           |
| Casey                   | 9,053  | 9.6            |
| Glen Eira               | 5,423  | 10.4           |
| Greater Dandenong       | 8,137  | 16.8           |
| Kingston                | 7,206  | 12.9           |
| Mornington Peninsula    | 8,015  | 13.9           |
| Port Phillip            | 4,467  | 9.9            |
| Stonnington             | 3,874  | 8.9            |
| <b>SEMPHN catchment</b> | <b>52,761</b>  | <b>11.4</b>    |
| <b>Victoria</b>         | <b>287,506</b>   | <b>13.6</b>    |

Source: PHIDU, 2016

## Digital health in general practice

There is variability across LGAs in the use of digital health technologies by general practices<sup>46</sup>. Table 10.2 shows that Stonnington, Greater Dandenong and Glen Eira have low rates of uptake across multiple platforms; while Frankston, Mornington Peninsula, Casey, and Cardinia are higher performers.

Within the SEMPHN catchment, 75.3% of all general practices were accredited by the Royal Australian College of General Practitioners (RACGP), i.e. 365 out of a total 485 practices. Accredited practices are incentivised under the Services Australia Practice Incentives Program for certain digital health activities, including having secure messaging capability and uploading shared health summaries to My Health Record. The pattern of overall digital health uptake at the LGA level appears to mirror the proportion of accredited general practices. In general, a higher proportion of non-accredited general practices have a lower overall rate of digital health uptake.

Analysis of the rate of digital health utilisation within accredited practices indicates Greater Dandenong has the lowest overall rate of digital health capability by LGA across accredited practices. Contributing to this is their low uptake of Nellie and POLAR technologies, which are used widely across SEMPHN. POLAR uptake in Greater Dandenong is particularly low when observing the range of use in other LGAs (ranging from 49.4% in Greater Dandenong to 82.5% in Casey).

The pattern of digital health uptake for non-accredited practices is overall much lower across LGAs compared with accredited practices. Despite Bayside having the highest overall utilisation of digital health technologies across its primary health sector, non-accredited general practices have the lowest

<sup>46</sup> Results should be interpreted with the following consideration:

- HealthLink SmartForms: Alfred Health and many of the inner-city public hospitals do not use this particular technology for e-referrals and therefore this might result in lower rates in the inner city LGAs.
- The rates of VideoCall do not represent rates of telehealth services in those LGAs as other general practices could be using different platforms or technology.
- Analysis by patient numbers instead of practice numbers may yield different results.



utilisation rates in region. This is similar to utilisation rates in Stonnington, which are very high across accredited practices but are one of the lowest in non-accredited practices.

The rate of utilisation for technologies such as Nellie is also worth noting. Non-accredited practices in only two of 10 LGAs use this technology. The rate of POLAR use is also notably lower, with one LGA recording no use and a substantial number of LGAs non-accredited practices having utilisation rates below 20%.

Table 10.2 Use of digital health technologies in GP practices by LGA, 2023

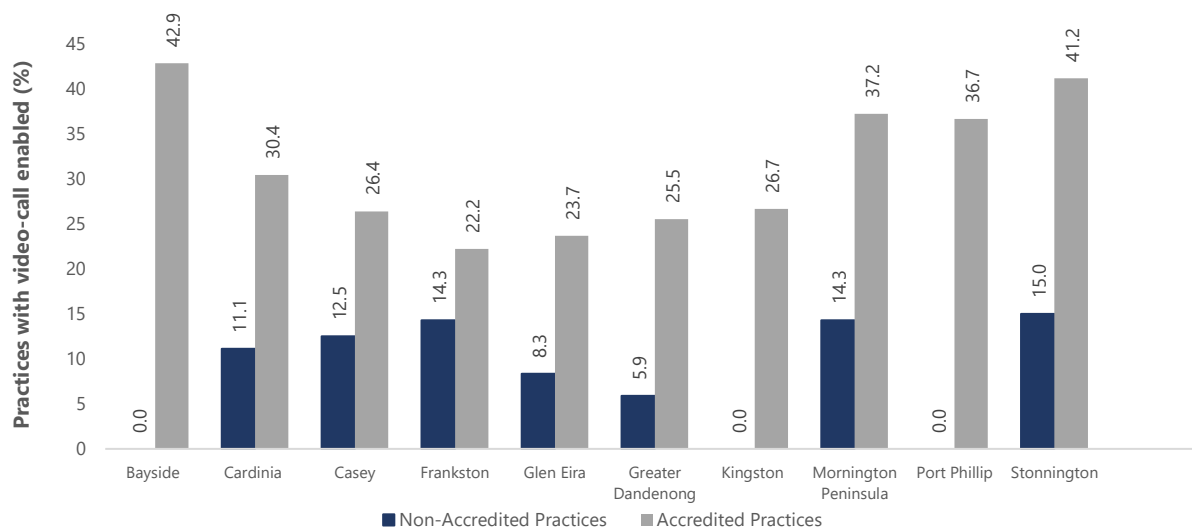
| LGA   | Types of Digital Health Technologies used in GP Practices across SEMPHN catchment |   |                           |                          |                                |                   |                      |                                |                   |
|---|---|---|---------------------------|--------------------------|--------------------------------|-------------------|----------------------|--------------------------------|-------------------|
|   | SmartForms use in GP (%)  | Compliant Clinical software use in GP (%) | HealthLink Capability (%) | GP MyHR Registration (%) | Pharmacy MyHR Registration (%) | GP Nellie Use (%) | POLAR Capability (%) | Video Call in GP practices (%) | DH capability (%) |
| Bayside   | 29.6  | 96.3                                      | 88.9                      | 88.9                     | 82.8                           | 11.1              | 70.4                 | 33.3                           | 62.7              |
| Cardinia  | 40  | 96.9                                      | 90.6                      | 84.4                     | 94.4                           | 15.6              | 78.1                 | 25.0                           | 65.6              |
| Casey   | 49.4  | 95.0                                      | 92.5                      | 86.3                     | 79.3                           | 22.5              | 82.5                 | 25.0                           | 66.6              |
| Frankston   | 44.1  | 88.2                                      | 85.3                      | 88.2                     | 84.8                           | 14.7              | 76.5                 | 20.6                           | 62.8              |
| Glen Eira   | 21.6  | 94.0                                      | 80.0                      | 80.0                     | 76.7                           | 12.0              | 60.0                 | 20.0                           | 55.5              |
| Greater Dandenong   | 30.3  | 81.5                                      | 74.1                      | 65.4                     | 85.7                           | 9.9               | 49.4                 | 17.3                           | 51.7              |
| Kingston  | 36.6  | 94.9                                      | 89.7                      | 87.2                     | 82.9                           | 17.9              | 69.2                 | 20.5                           | 62.4              |
| Mornington Peninsula  | 29.3  | 94.0                                      | 88.0                      | 92.0                     | 93.5                           | 26.0              | 78.0                 | 34.0                           | 66.9              |
| Port Phillip  | 23.3  | 94.4                                      | 91.7                      | 86.1                     | 67.5                           | 16.7              | 69.4                 | 30.6                           | 60.0              |
| Stonnington   | 20.8  | 87.0                                      | 66.7                      | 63.0                     | 78.0                           | 9.3               | 64.8                 | 31.5                           | 57.2              |
| Percentages are reported by calculating the proportion of GP practices identified as using digital health technologies within each LGA. Analysis by patient numbers instead of practice numbers may yield different results |   |   |                           |                          |                                |                   |                      |                                |                   |

Source: SEMPHN CRM, 2023

## Digital health platform utilisation

**Video call** utilisation is higher in accredited practices. All 10 LGAs within the SEMPHN catchment had higher video call use in accredited general practices when compared with non-accredited practices (Figure 10.1). SEMPHN enquiries into Healthdirect Video Call usage in 2021-22 identified that SEMPHN ranked fourth among all 31 PHNs in Australia, with 27,661 total calls for the catchment in that financial year. Two of the Sydney PHNs had the highest numbers (total calls for Sydney PHNs were not stated).

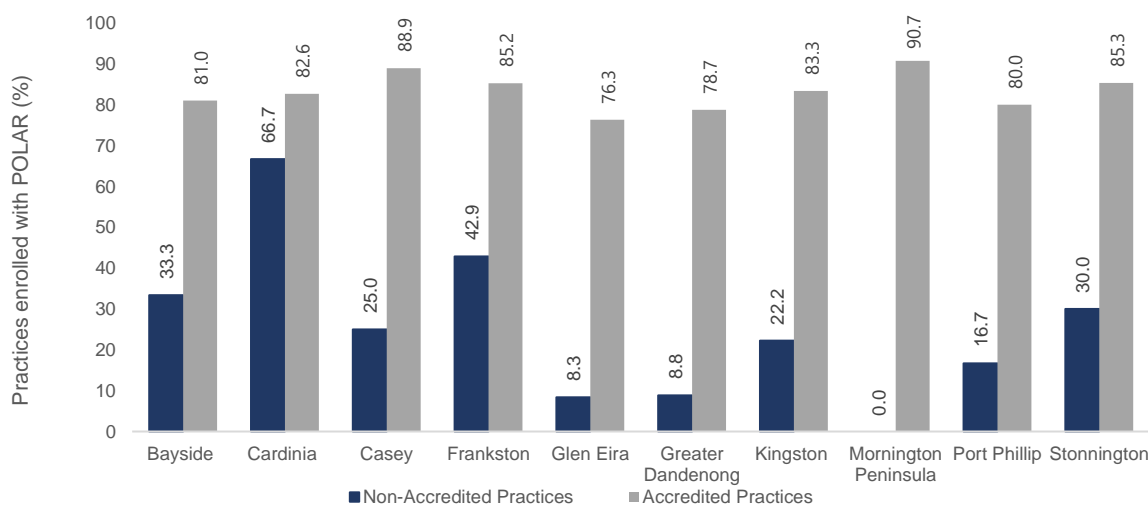
Figure 10.1 Practices with video call enabled by accreditation status and LGA, 2023



Source: SEMPHN CRM, 2023

**POLAR** use is higher among accredited practices. Across all LGAs within the SEMPHN catchment, a higher proportion of accredited practices use POLAR compared with non-accredited practices. Eight LGAs have utilisation rates which are 80% or above in accredited practices (Figure 10.2).

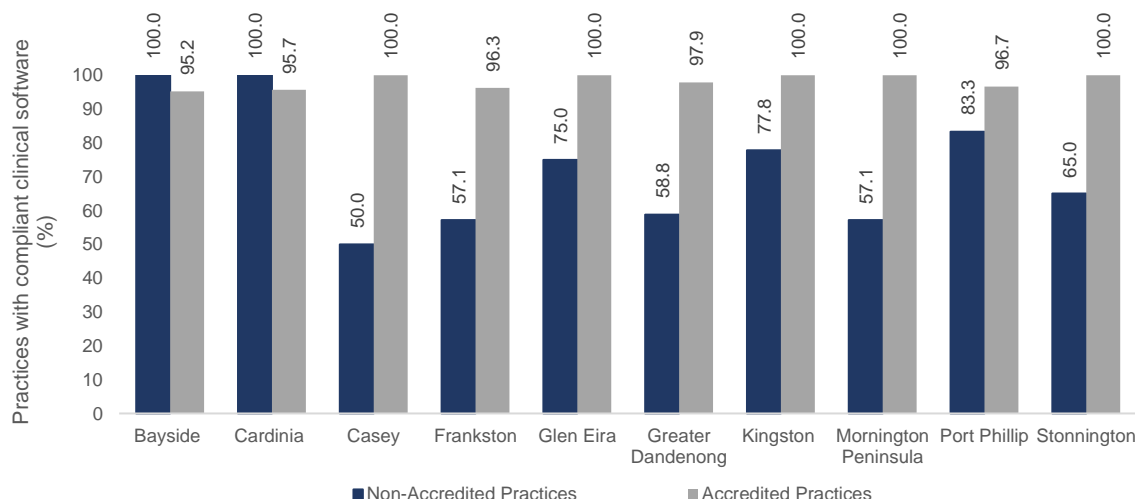
Figure 10.2 Practices using POLAR software by accreditation status and LGA, 2023



Source: SEMPHN CRM, 2023

**Compliant Clinical Software** use mirrors that of accredited practices and their use of other digital technologies. Among accredited practices, half of all LGAs in the region had a utilisation rate for compliant software of 100% (Figure 10.3). Non-accredited practices generally had a lower proportion of compliant software use. While Bayside and Cardinia had 100%, compliance, Casey, Frankston, Mornington Peninsula and Greater Dandenong had less than 60% of non-accredited practices using compliant software.

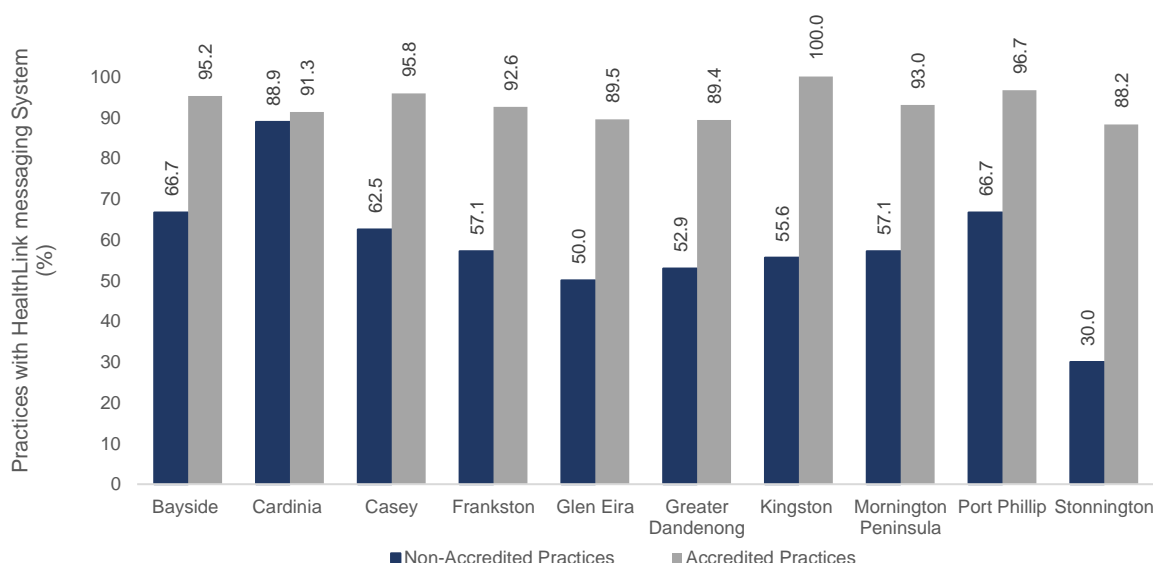
Figure 10.3 Practices using compliant software by accreditation status, 2023



Source: SEMPHN CRM, 2023

The **HealthLink Messaging System** enables health information such as discharge summaries and diagnostic test results to be sent to general practices. A similar pattern of digital health utilisation is seen for accredited practices using HealthLink compared with non-accredited practices (Figure 10.4). Kingston had the highest rate of HealthLink utilisation (100%) among its accredited practices, with the majority of LGA accredited practices having utilisation rates of 90% or above.

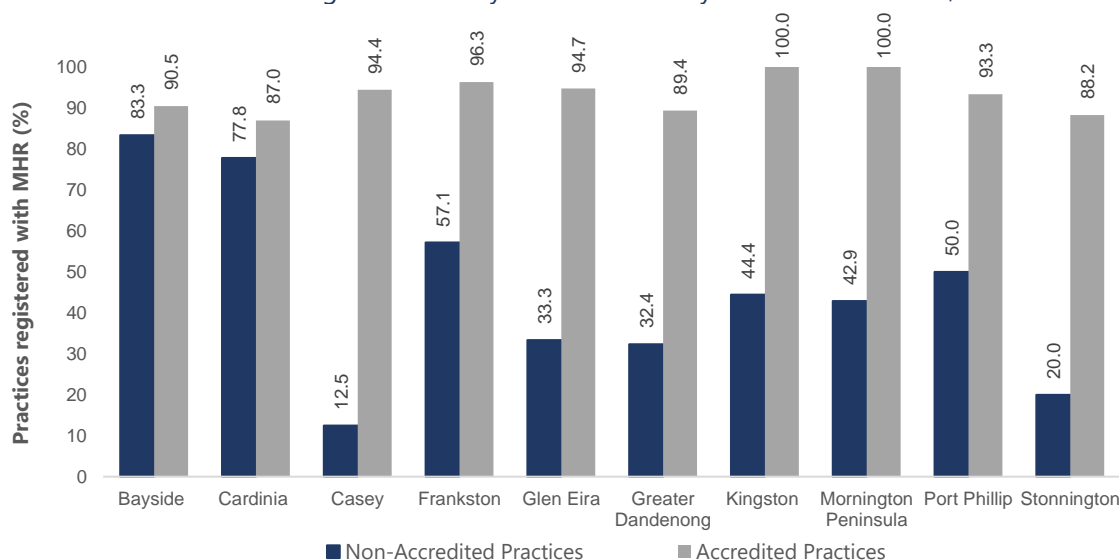
Figure 10.4 Practices using HealthLink by accreditation status, 2023



Source: SEMPHN CRM, 2023

**My Health Record (MyHR)** registration among accredited practices is high, with seven of the ten LGAs recording registrations of more than 90% (Figure 10.5). The pattern of digital health utilisation within non-accredited practices mirrors that seen in other technologies, with a noticeably lower proportion registered for MyHR. Fewer than a quarter of Casey and Stonnington non-accredited practices were registered for MyHR.

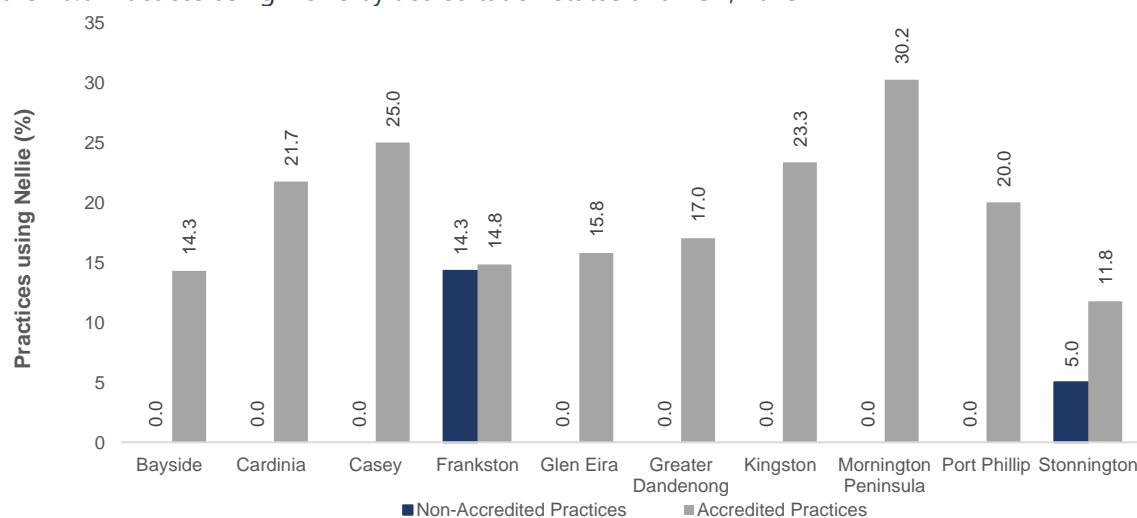
Figure 10.5 General Practices registered for My Health Record by accreditation status, 2023



Source: SEMPHN CRM, 2023

**Nellie** is an automated SMS-based persona for promoting patient self-care provided to general practices by SEMPHN. Its usage within practices is much higher in accredited practices, particularly in Mornington Peninsula. Utilisation of Nellie across all general practices is relatively low (Figure 10.6). Within accredited general practices, areas identified as having a high need of coordinated care that may benefit from digitised healthcare services have recorded low rates of Nellie utilisation (Greater Frankston 15%, Dandenong 17%, Casey 25%). Non-accredited practices in only two of 10 LGAs use Nellie.

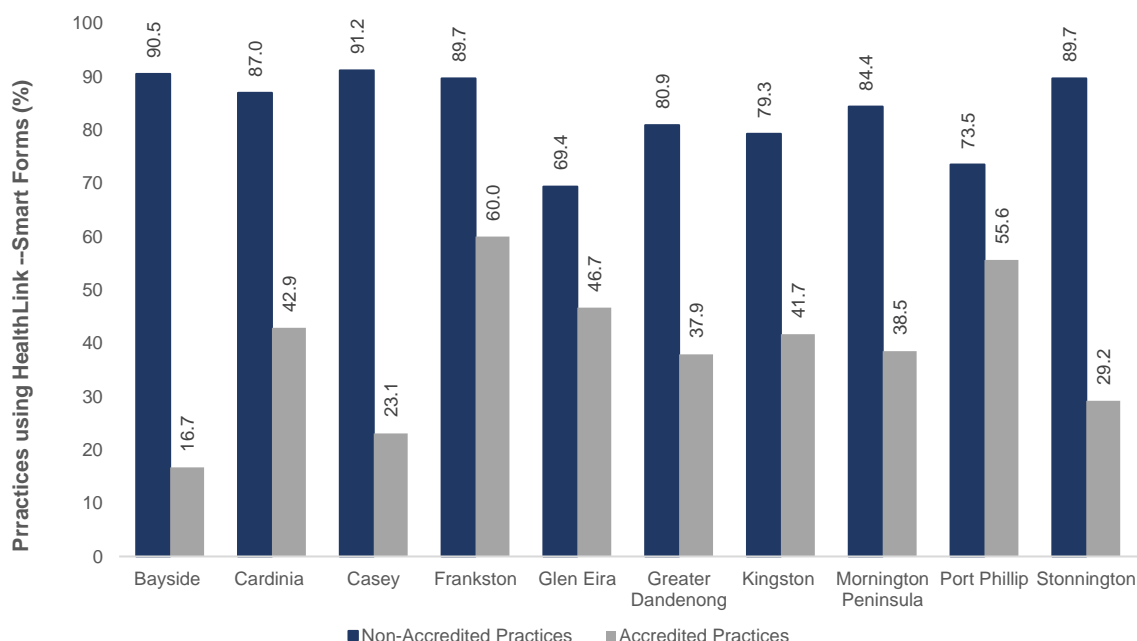
Figure 10.6 Practices using Nellie by accreditation status and LGA, 2023



Source: SEMPHN CRM, 2023

**HealthLink Smart Forms** enable practices to electronically refer a patient to any other healthcare provider or related service. National data show that total HealthLink forms submitted in April 2021 numbered 45,893, just over four times more than the number of forms submitted in April 2020 (Health Link, 2021). Within SEMPHN, the proportion of practices using Smart Forms is significantly different between accredited practices and non-accredited practices (Figure 10.10). Despite many LGAs recording a high proportion of practices using Smart Forms (four LGAs recording 90% or over), Glen Eira and Port Phillip recorded the lowest proportions. Glen Eira's accredited-practice rates also mirror proportions in other utilisation rates of digital health technologies.

Figure 10.7 Practices using Smart Forms by accreditation status, 2021

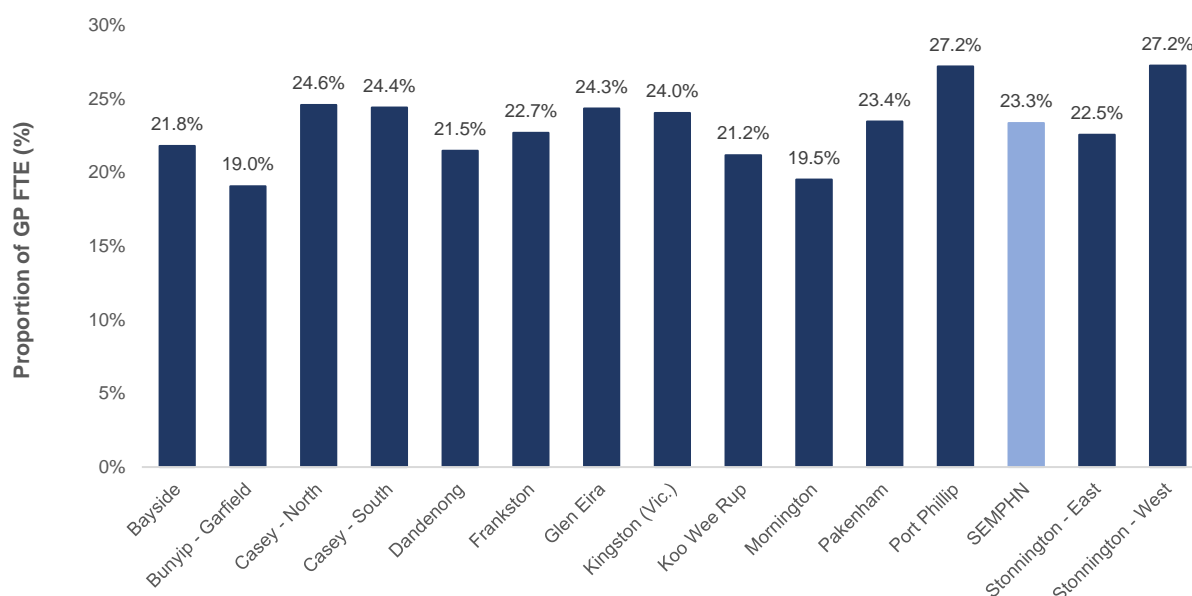


Source: SEMPHN CRM, 2023

### Digital primary care service provision

Primary healthcare service data from the Australian Department of Health and Aged Care's HeaDS UPP tool provides insights into the supply and utilisation of telehealth and phone consultation services provided to residents within each of the 14 GP catchments that comprise the SEMPHN catchment (see Appendix 1 for geographic correspondence to local government area). Figure 10.8 depicts the proportion of general practitioner full-time equivalent (FTE) utilised on telehealth and phone consultations throughout 2022.

Figure 10.8 Proportion of GP FTE utilised on telehealth and phone consultations, 2022








Port Phillip and Stonnington-West had the highest proportion of GP FTE utilised on telehealth and phone consultations at 27.2%, followed by Casey-North (24.6%) and Casey-South (24.4%). Bunyip-Garfield had the lowest at 19.0%, followed by Mornington (19.5%), and Koo Wee Rup (21.2%). Almost a quarter of GP FTE (23.3%) in SEMPHN was utilised on telehealth and phone consultations which is slightly lower than in both 2020 and 2021, but substantially higher for any year before 2020. Lower rates of telehealth and phone consultation provision/utilisation may be a potential indicator of limited population awareness around general practices which offer telehealth services or a lack of telehealth infrastructure to enable practices to reliably offer them.

## Consultation and market analysis



Consultation and market analysis insights show that there are clear themes emerging in relation to the accelerated digitisation of healthcare service provision. These are presented in Table 10.3.

Table 10.3 Market analysis of digital technology utilisation

|   |  |
|---|--|
| <p><b>Digital surge</b></p>  | <p>COVID-19's impact on the healthcare sector has accelerated the digitisation of healthcare. It has driven digitally enabled models of care that use various digital tools:</p> <ul style="list-style-type: none"> <li>• telehealth</li> <li>• mobile health (mHealth)</li> <li>• remote patient monitoring</li> <li>• electronic prescriptions</li> <li>• e-diagnostics</li> <li>• e-referrals.</li> </ul> <p>With the increase in telehealth, e-scripts and home deliveries of prescriptions, there are fewer face-to-face touch points for patients with their healthcare providers. This could lead to an increase in consumers who unintentionally do not follow the instructions for their medical treatment.</p> |
|---|--|

|   |   |
|---|---|
| <p><b>Funding uncertainty</b></p>  | <p>There is uncertainty about telehealth MBS item numbers, which are part of temporary COVID-19 services. Changes to the temporary telehealth MBS item numbers have affected access to the range of telehealth services available via telephone. For example, HealthDirect's telehealth platform and Video Call are currently funded for GPs by the Commonwealth. However, there is uncertainty about ongoing funding for Video Call that may have had an impact on a team's willingness to use it, which may potentially affect services if funding is discontinued. The Commonwealth is also funding the cost of the SMS involved in Electronic Prescriptions. However, once this funding is discontinued, the sector may see a shift towards email or Active Script List as alternatives. Uncertainty about future funding of these initiatives may have led to reluctance to commit to their use.</p> |
| <p><b>Co-design</b></p>           | <p>It is important to continue SEMPHN's work in the co-design of digital health technologies with providers and consumers. For example, the Nellie automated SMS persona has involved co-design events where attendees are users at practices (such as practice nurses/care coordinators/practice managers). Co-design workshop sessions are conducted for the purpose of designing the Nellie protocol as well as its messages and its implementation plan. For some Nellie projects, patient involvement is also sought, especially when exploring new areas. Greater input from patients is necessary when developing or tweaking protocols. Greater involvement from GPs in co-design would lead to greater buy-in and GP recommendation to patients, which has been shown to be of great value influencing patient uptake.</p>   |
| <p><b>Inquiries</b></p>          | <p>Recent Royal Commission inquiries have provided insights into digital health service needs relevant to SEMPHN. The recommendations from the Royal Commission into Aged Care Quality and Safety and subsequent Commonwealth funding announcements on universal MyHR adoption, telehealth capability and roll-out of electronic medication charts in the aged care setting will drive overall need and support for aged care services and general practitioners working in aged care. The recommendations from the Royal Commission into Victoria's Mental Health System emphasise the importance of digital technology in the future of the mental health system in Victoria and that service providers will need to provide minimum digital functionality. Service providers will need to explore digitally enabled models of care.</p>  |
| <p><b>New technologies</b></p>   | <p>Provider Connect Australia is a new technology that maintains the accuracy of healthcare service and practitioner contact details. When healthcare provider organisations update their contact details in the Provider Connect Australia service, this automatically sends their new details to nominated hospitals, pathology and radiology services, public service directories, secure messaging providers and more. This could introduce significant efficiencies in organisational workflows and have follow-on improvements in continuity of communications between different healthcare providers.</p>  |



|  |   |
|--|---|
| <p><b>Reporting</b></p>   | <p>Recent changes to mandatory Australian Immunisation Register (AIR) reporting require that from 1 July 2021 vaccination providers must report all National Immunisation Program (NIP) vaccines administered to AIR. This will drive the need for more efficient methods for accessing AIR records and uploading to AIR in both general practice and pharmacy settings.</p>  |
| <p><b>Engagement</b></p>  | <p>Commissioned service providers are highly engaged. In particular, GP liaison teams at local hospital networks are highly engaged, but there is a need to engage more with other teams within the hospital networks to support more integrated models of care.</p> <p>Further engagement is vital with allied health providers, specialists, and non-traditional service providers (for example, for social prescribing where SEMPHN engaged with a Neighbourhood House to help develop a Nellie protocol during COVID-19 to address social isolation among its users). There are ongoing challenges in engaging with non-accredited general practices.</p> |

# Appendices

## Appendix 1 – SEMPHN Geographic Classifications

Table 1. Geographic classifications frequently utilised for population health planning within the SEMPHN catchment

| Geographic Classification            | Description  |
|--------------------------------------|--|
| National (Australia)                 | -  |
| State (Victoria)                     | -  |
| Primary Health Network (PHN)         | Independent organisations funded by the Australian Government responsible for coordinating primary care within their respective geographic catchments. There are 31 PHNs nationally, with six located in Victoria.   |
| Local Government Areas (LGAs)        | <p><b>Number in SEMPHN catchment: 10</b></p> <p>LGAs are administrative divisions of a state or territory in Australia that are responsible for providing local government services to their communities.</p>  |
| Statistical Area Level 3 (SA3)       | <p><b>Number in SEMPHN catchment: 12</b></p> <p>SA3s are often the functional areas of regional towns and cities with a population in excess of 20,000 or clusters of related suburbs around urban commercial and transport hubs within the major urban areas. SA3s are constructed through clustering groups of SA2s that leave no gaps or overlaps.</p>  |
| General Practitioner (GP) Catchments | <p><b>Number in SEMPHN catchment: 14</b></p> <p>GP Catchments are geographic regions designed to more accurately identify areas where patients access their health services constructed by the Department of Health &amp; Aged Care based on:</p> <ul style="list-style-type: none"> <li>• GP workforce &amp; services</li> <li>• Patient movements</li> <li>• Service accessibility (travel distance)</li> <li>• Natural boundaries (e.g., mountains, water bodies, islands)</li> </ul> |

|                                |   |
|--------------------------------|---|
| Population Health Areas (PHAs) | <p><b>Number in SEMPHN catchment: 57</b></p> <p>PHAs are areas produced and utilised by PHIDU comprised of a combination of whole or multiple (aggregates of) SA2s for the purposes of accurately summarising population health data.</p>   |
| Postal Areas (POAs)            | <p><b>Number in SEMPHN catchment: 99</b></p> <p>POAs are geographic regions that represent their underlying postcodes, often assigned to a singular suburb but can be more complex in areas with low population.</p>  |
| Statistical Area Level 2 (SA2) | <p><b>Number in SEMPHN catchment: 105</b></p> <p>SA2s are designed to represent a community and varies in size from about 3,000 to 25,000 usual residents that interact together socially and economically. SA2s are constructed through clustering groups of SA1s that leave no gaps or overlaps.</p> <p>Note: SA2s are the smallest geographic area for the release of ABS non-census statistics.</p> |
| Statistical Area Level 1 (SA1) | <p><b>Number in SEMPHN catchment: 3,297</b></p> <p>SA1s are the smallest available ABS geographic structure, designed to maximise the geographic detail available for census data. SA1s generally have a population of between 200 to 800 people.</p>   |

# Geographic correspondence for geographic classification in the SEMPHN catchment

| LGA                  | SA3                  | GP Catchment       |
|----------------------|----------------------|--------------------|
| Bayside              | Bayside              | Bayside            |
| Cardinia             | Cardinia             | Bunyip – Garfield  |
|                      |                      | Koo Wee Rup        |
|                      |                      | Pakenham           |
| Casey                | Casey – North        | Casey – North      |
|                      | Casey – South        | Casey – South      |
| Frankston            | Frankston*           | Frankston          |
| Glen Eira            | Glen Eira            | Glen Eira          |
| Greater Dandenong    | Dandenong*           | Dandenong          |
| Kingston             | Kingston             | Kingston           |
| Mornington Peninsula | Mornington Peninsula | Mornington         |
| Port Phillip         | Port Phillip*        | Port Phillip       |
| Stonnington          | Stonnington – East   | Stonnington – East |
|                      | Stonnington – West   | Stonnington – West |

\* indicates that the geographic boundaries are different than that of the parent LGA

## Appendix 2 – Data Tables

### Appendix 2.1 – Our Community (Chapter 3)

Table 2.1.1 Population growth by LGA, 2016, 2021, 2030

| LGA                  | Area (km <sup>2</sup> ) | 2016 Usual Resident Population | 2021 Usual Resident Population | Population growth rate 2016-2021 (%) | 2030 Estimated Resident Population <sup>47</sup> | Estimated Population growth rate 2021-2030 (%) |
|----------------------|-------------------------|--------------------------------|--------------------------------|--------------------------------------|--|--|
| Bayside              | 37.2                    | 97,087                         | 101,262                        | 4.3                                  | 122,054  | 20.5   |
| Cardinia             | 1282.3                  | 94,128                         | 117,626                        | 25.0                                 | 166,893  | 41.9   |
| Casey                | 409.4                   | 299,301                        | 365,063                        | 22.0                                 | 483,095  | 32.3   |
| Frankston            | 129.6                   | 134,143                        | 139,336                        | 3.9                                  | 163,909  | 17.6   |
| Glen Eira            | 40.7                    | 140,875                        | 149,062                        | 5.8                                  | 187,113  | 25.5   |
| Greater Dandenong    | 151.1                   | 152,050                        | 158,308                        | 4.1                                  | 208,621  | 31.8   |
| Kingston             | 69.8                    | 151,389                        | 157,927                        | 4.3                                  | 194,525  | 23.2   |
| Mornington Peninsula | 724.2                   | 182,618                        | 168,528                        | -7.7                                 | 194,519  | 15.4   |
| Port Phillip         | 25.9                    | 100,863                        | 101,919                        | 1.1                                  | 139,218  | 36.6   |
| Stonnington          | 25.7                    | 103,832                        | 104,787                        | 0.9                                  | 143,690  | 37.1   |
| <b>SEMPHN</b>        | <b>2895.9</b>           | <b>1,456,286</b>               | <b>1,563,818</b>               | <b>7.4</b>                           | <b>2,003,637</b>                                 | <b>28.1</b>                                    |
| <b>Victoria</b>      | <b>227,444</b>          | <b>5,926,624</b>               | <b>6,503,491</b>               | <b>9.7</b>                           | <b>8,054,587</b>                                 | <b>23.9</b>                                    |

Source: ABS Census 2021, Australian Bureau of Statistics (June 2022), G01 SELECTED PERSON CHARACTERISTICS BY SEX, accessed on 20 August 2022. PHIDU 2022, Torrens University Australia (June 2022), Population projections: Persons, accessed 20 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).

<sup>47</sup> Should be noted that the 2030 Resident Population estimates are based off the 2016 projections provided by PHIDU. These estimates will be updated as and when made available.

Table 2.1.2 People born in non-English speaking countries and poor proficiency in English by LGA, 2021

| LGA                     | 2021 URP         | People born in a predominantly non-English speaking (NES) country resident in Australia for less than 5 years |                | People born overseas reporting poor proficiency in English |                |
|-------------------------|------------------|---|----------------|--|----------------|
|                         |                  | Number  | Proportion (%) | Number   | Proportion (%) |
| Bayside                 | 101,262          | 12,887  | 12.7           | 1,417  | 1.4            |
| Cardinia                | 117,626          | 16,290  | 13.8           | 1,630  | 1.4            |
| Casey                   | 365,063          | 112,002   | 30.7           | 16,645   | 4.6            |
| Frankston               | 139,336          | 13,756  | 9.9            | 1,462  | 1.0            |
| Glen Eira               | 149,062          | 33,203  | 22.3           | 4,567  | 3.1            |
| Greater Dandenong       | 158,308          | 69,974  | 44.2           | 22,748   | 14.4           |
| Kingston                | 157,927          | 31,839  | 20.2           | 5,258  | 3.3            |
| Mornington Peninsula    | 168,528          | 2,824   | 1.7            | 550  | 0.3            |
| Port Phillip            | 101,919          | 15,873  | 15.6           | 1,742  | 1.7            |
| Stonnington             | 104,787          | 17,646  | 16.8           | 2,389  | 2.3            |
| <b>SEMPHN catchment</b> | <b>1,563,818</b> | <b>326,294</b>  | <b>20.6</b>    | <b>58,408</b>  | <b>3.7</b>     |
| <b>Victoria</b>         | <b>6,503,491</b> | <b>269,744</b>  | <b>4.1</b>     | <b>233,912</b>   | <b>3.8</b>     |

Source: (ABS, 2021d; PHIDU, 2021a). Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).

Table 2.1.3 First Nations peoples population growth by LGA, 2016-2021

| LGA                     | 2016<br>URP<br>(n) | 2021<br>URP<br>(n) | Population growth<br>2016-2021<br>(%) |
|-------------------------|--------------------|--------------------|---------------------------------------|
| Bayside                 | 197                | 267                | 35.5                                  |
| Casey                   | 762                | 1,126              | 47.8                                  |
| Cardinia                | 1,629              | 2,378              | 46.0                                  |
| Frankston               | 1,347              | 1,803              | 33.9                                  |
| Glen Eira               | 230                | 406                | 76.5                                  |
| Greater Dandenong       | 518                | 617                | 19.1                                  |
| Kingston                | 579                | 730                | 26.1                                  |
| Mornington Peninsula    | 1,295              | 1,700              | 31.3                                  |
| Port Phillip            | 387                | 517                | 33.6                                  |
| Stonnington             | 300                | 370                | 23.3                                  |
| <b>SEMPHN catchment</b> | <b>7,244</b>       | <b>9,914</b>       | <b>36.9</b>                           |
| <b>Victoria</b>         | <b>47,788</b>      | <b>65,646</b>      | <b>37.3</b>                           |

Source: Census 2021, Australian Bureau of Statistics (June 2022), I03C AGE BY INDIGENOUS STATUS BY SEX, accessed on 20 August 2022. 2016 Census of Population and Housing, Australian Bureau of Statistics (2017), I03C Age by Indigenous Status by Sex, accessed on 20 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).

Table 2.1.4 Persons living with core activity limitation by LGA, 2018

| LGA                     | Persons with profound or severe core activity limitation |                | Persons with moderate or mild core activity limitation |                |
|-------------------------|--|----------------|--|----------------|
|                         | Number   | Proportion (%) | Number   | Proportion (%) |
| Bayside                 | 4,389  | 4.2            | 7,018  | 6.7            |
| Cardinia                | 5,297  | 4.9            | 8,234  | 7.7            |
| Casey                   | 15,713   | 4.6            | 22,804   | 6.7            |
| Frankston               | 7,194  | 5.1            | 13,648   | 9.7            |
| Glen Eira               | 6,082  | 4.0            | 8,926  | 5.8            |
| Greater Dandenong       | 8,960  | 5.4            | 12,305   | 7.5            |
| Kingston                | 8,130  | 5.0            | 12,387   | 7.6            |
| Mornington Peninsula    | 9,316  | 5.7            | 18,813   | 11.4           |
| Port Phillip            | 3,662  | 3.3            | 5,981  | 5.3            |
| Stonnington             | 3,993  | 3.4            | 5,678  | 4.9            |
| <b>SEMPHN catchment</b> | <b>72,736</b>  | <b>4.7</b>     | <b>115,794</b>   | <b>7.4</b>     |
| <b>Victoria</b>         | <b>360,500</b>   | <b>3.2</b>     | <b>530,600</b>   | <b>2.8</b>     |

Source: Survey of Disability, Ageing and Carers for Local Government Areas 2018, Australian Bureau of Statistics, Table 2.3 Local Government Areas (LGAs): Persons with profound or severe core activity limitation by age; Table 3.3 Local Government Areas (LGAs): Persons with moderate or mild core activity limitation by age, accessed on 20 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA within SEMPHN catchment (4%).

Table 2.1.5 LGBTIQ+ community by LGA, 2017

| LGA                  | LGBTIQ+ (%) | Not LGBTIQ+ (%) | Refused to answer (%) |
|----------------------|-------------|-----------------|-----------------------|
| Bayside              | 3.2         | 93.4            | 2.2                   |
| Cardinia             | 4.3         | 92.7            | 2.0                   |
| Casey                | 5.6         | 83.7            | 4.1                   |
| Frankston            | 5.4         | 91.6            | 1.9                   |
| Glen Eira            | 6.2         | 89.0            | 2.5                   |
| Greater Dandenong    | 4.6         | 79.2            | 6.9                   |
| Kingston             | 4.4         | 90.7            | 2.5                   |
| Mornington Peninsula | 5.4         | 92.3            | 2.0                   |
| Port Phillip         | 10.6        | 88.6            | 0.7                   |
| Stonnington          | 7.8         | 87.0            | 3.6                   |
| <b>Victoria</b>      | <b>5.7</b>  | <b>88.1</b>     | <b>3.4</b>            |

Source: Victorian Population Health Survey 2017, VAHI (2020), Table 4: Proportion of the adult (18+ years) population, by LGBTIQ+ status and by metropolitan Local Government Area, Victoria, 2017, accessed on 18 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA within SEMPHN catchment (4%). Note that proportions do not add up to 100% due to missing responses.



Table 2.1.6 School leavers at Year 10 or below by LGA, 2021

| LGA                     | People who left school at Year 10 or below, or did not go to school |             |
|-------------------------|---|-------------|
|                         | Number  | ASR per 100 |
| Bayside                 | 8,416   | 9.1         |
| Cardinia                | 22,670  | 27.2        |
| Casey                   | 63,063  | 25.3        |
| Frankston               | 28,240  | 24.8        |
| Glen Eira               | 12,286  | 10.3        |
| Greater Dandenong       | 34,274  | 27.6        |
| Kingston                | 23,635  | 17.4        |
| Mornington Peninsula    | 34,193  | 20.3        |
| Port Phillip            | 7,748   | 9.4         |
| Stonnington             | 6,514   | 7.5         |
| <b>SEMPHN catchment</b> | <b>241,917</b>  | <b>19.2</b> |
| <b>Victoria</b>         | <b>1,108,886</b>  | <b>21.0</b> |

Source: PHIDU 2022, Torrens University Australia (June 2022), Education: People who left school at Year 10 or below, or did not go to school (2016 URP), accessed 20 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).

Table 2.1.7 Payment recipients by payment type and LGA, March 2023

| LGA                     | Number of recipients |                   |                |                            |
|-------------------------|----------------------|-------------------|----------------|----------------------------|
|                         | JobSeeker Payment    | Parenting Payment | Age Pension    | Disability Support Pension |
| Bayside                 | 1,080                | 25                | 6,680          | 1,415                      |
| Cardinia                | 2,980                | 340               | 9,315          | 2,635                      |
| Casey                   | 10,850               | 1,870             | 25,260         | 9,135                      |
| Frankston               | 4,960                | 200               | 14,640         | 5,220                      |
| Glen Eira               | 2,275                | 120               | 10,485         | 2,535                      |
| Greater Dandenong       | 6,905                | 840               | 17,050         | 6,220                      |
| Kingston                | 3,155                | 100               | 16,685         | 3,750                      |
| Mornington Peninsula    | 3,740                | 165               | 23,920         | 4,510                      |
| Port Phillip            | 2,930                | 60                | 5,520          | 3,105                      |
| Stonnington             | 1,675                | 25                | 5,410          | 1,580                      |
| <b>SEMPHN catchment</b> | <b>40,550</b>        | <b>3,745</b>      | <b>134,965</b> | <b>40,105</b>              |
| <b>Victoria</b>         | <b>191,210</b>       | <b>15,965</b>     | <b>609,325</b> | <b>186,460</b>             |

Source: DSS Payment Demographic Data 2023, Department of Social Services (March 2022), Table: LGA (extracted on 31 March 2023), accessed on 16 August 2023.

Table 2.1.8 People experiencing homelessness by LGA, 2021

| LGA                     | Persons       | ASR per 10,000 |
|-------------------------|---------------|----------------|
| Bayside                 | 212           | 18.7           |
| Cardinia                | 144           | 23.1           |
| Casey                   | 931           | 41.2           |
| Frankston               | 465           | 41.2           |
| Glen Eira               | 382           | 34.9           |
| Greater Dandenong       | 1,515         | 121.9          |
| Kingston                | 352           | 0.0            |
| Mornington Peninsula    | 272           | 21.7           |
| Port Phillip            | 1,461         | 101.2          |
| Stonnington             | 523           | 35.1           |
| <b>SEMPHN catchment</b> | <b>6,257</b>  | <b>39.1</b>    |
| <b>Victoria</b>         | <b>24,825</b> | <b>41.9</b>    |

Source: (ABS, 2021e)

## Appendix 2.3 – Mental Health (Chapter 5)

Table 2.3.1 Life satisfaction by LGA, 2020

| LGA   | Life satisfaction          |                               |
|---|----------------------------|-------------------------------|
|   | Low to medium<br>(0-6) (%) | High to very high<br>(7+) (%) |
| Bayside   | 18.2                       | 81.5                          |
| Cardinia  | 14.9                       | 84.8                          |
| Casey   | 27.6                       | 69.9                          |
| Frankston   | 24.5                       | 75.0                          |
| Glen Eira   | 19.2                       | 80.4                          |
| Greater Dandenong   | 26.3                       | 69.9                          |
| Kingston  | 26.3                       | 72.9                          |
| Mornington Peninsula  | 23.6                       | 76.4                          |
| Port Phillip  | 27.8                       | 70.7                          |
| Stonnington   | 16.3                       | 82.6                          |
| <b>SEMPHN catchment</b>   | <b>22.5</b>                | <b>76.4</b>                   |
| <b>Victoria</b>   | <b>22.3</b>                | <b>76.5</b>                   |
| Estimates may not add to 100 per cent due to a proportion of 'do not know' or 'refused to say' responses not reported here. |                            |                               |

Source: Victorian Population Health Survey Dashboard, 2020; Estimates by LGA (MENTAL HEALTH and WELLBEING – Life satisfaction)

Table 2.3.2 Psychological distress (K10) by LGA, 2021

| LGA  | Low<br>(K10: < 16)<br>(%) | Moderate<br>(K10: 16–21)<br>(%) | High<br>(K10: 22–29)<br>(%) | Very high<br>(K10: 30+)<br>(%) |
|--|---------------------------|---------------------------------|-----------------------------|--------------------------------|
| Bayside  | 52.3                      | 30.8                            | 7.2                         | 6.8                            |
| Cardinia   | 52.5                      | 23.3                            | 13.6                        | 6.8                            |
| Casey  | 42.6                      | 25.3                            | 12.9                        | 12.6                           |
| Frankston  | 42.9                      | 27.2                            | 12.2                        | 12.2                           |
| Glen Eira  | 48.4                      | 30.8                            | 15.4                        | 2.6                            |
| Greater Dandenong  | 47.1                      | 21.5                            | 16.4                        | 7.6                            |
| Kingston   | 46.6                      | 25.8                            | 16.5                        | 7.2                            |
| Mornington Peninsula   | 47.4                      | 25.1                            | 13.0                        | 13.3                           |
| Port Phillip   | 43.2                      | 26.0                            | 16.9                        | 10.4                           |
| Stonnington  | 53.9                      | 24.0                            | 15.8                        | 4.3                            |
| <b>SEMPHN catchment</b>  | <b>47.7</b>               | <b>26.0</b>                     | <b>14.0</b>                 | <b>8.4</b>                     |
| <b>Victoria</b>  | <b>44.9</b>               | <b>26.4</b>                     | <b>15.2</b>                 | <b>8.3</b>                     |
| Estimates may not add to 100% due to a proportion of 'don't know' or 'refused to say' responses not reported here. The Kessler Psychological Distress Scale (K10) is an indicator of psychological distress. |                           |                                 |                             |                                |

Source: Victorian Population Health Survey Dashboard, 2020; Estimates by LGA (MENTAL HEALTH and WELLBEING – Level of psychological distress)

Table 2.3.3 Intentional self-harm hospitalisations by age and sex 2020–21

| Age group<br>(years) | Females                 |                                       |                               | Males                   |                                       |                               |
|----------------------|-------------------------|---------------------------------------|-------------------------------|-------------------------|---------------------------------------|-------------------------------|
|                      | SEMPHN catchment<br>(n) | SEMPHN catchment<br>(ASR per 100,000) | Victoria<br>(ASR per 100,000) | SEMPHN catchment<br>(n) | SEMPHN catchment<br>(ASR per 100,000) | Victoria<br>(ASR per 100,000) |
| 0-24                 | 474                     | 196.1                                 | 206.4                         | 150                     | 58.4                                  | 56.6                          |
| 25-44                | 359                     | 143.8                                 | 125.7                         | 202                     | 82.2                                  | 76.6                          |
| 45-64                | 218                     | 108.5                                 | 98.7                          | 115                     | 60.3                                  | 57.8                          |
| 65+                  | 55                      | 40.1                                  | 31.4                          | 51                      | 44.2                                  | 32.6                          |
| <b>Total</b>         | <b>1,106</b>            | <b>133.4</b>                          | <b>127.3</b>                  | <b>518</b>              | <b>64</b>                             | <b>59.3</b>                   |

Source: AIHW, Suicide and Self-harm Monitoring National Hospital Morbidity Database, Table NHMD S7: Intentional self-harm hospitalisations, by Primary Health Network areas, age, and sex, 2020–21

Table 2.3.4 Mental health-related emergency department presentations and hospital admissions by LGA, 2019-2020

| LGA                     | Emergency department presentations for mental and behavioural disorders |                 | Admissions for mental health related conditions - Public hospitals |                 | Admissions for intentional self-harm, - Public hospitals |                 |
|-------------------------|---|-----------------|--|-----------------|--|-----------------|
|                         | Number  | ASR per 100,000 | Number   | ASR per 100,000 | Number   | ASR per 100,000 |
| Bayside                 | 712   | 681.4           | 753  | 694.7           | 81   | 78.0            |
| Cardinia                | 1,082   | 960.9           | 906  | 838.6           | 84   | 73.1            |
| Casey                   | 3,570   | 989.8           | 2,845  | 832.1           | 227  | 61.4            |
| Frankston               | 2,128   | 1,505.3         | 1,835  | 1,287.2         | 229  | 164.2           |
| Glen Eira               | 964   | 594.5           | 1,093  | 679.3           | 136  | 83.8            |
| Greater Dandenong       | 2,123   | 1,225.9         | 2,022  | 1,184.0         | 138  | 78.9            |
| Kingston                | 1,366   | 818.6           | 1,437  | 843.3           | 117  | 71.6            |
| Mornington Peninsula    | 61  | 672.9           | 52   | 580.1           | 182  | 120.2           |
| Port Phillip            | 1,802   | 1,135.5         | 1,508  | 871.2           | 142  | 116.3           |
| Stonnington             | 1,059   | 835.3           | 1,637  | 1,312.0         | 102  | 78.5            |
| <b>SEMPHN catchment</b> | <b>15,546</b>   | <b>943.9</b>    | <b>14,947</b>  | <b>911.7</b>    | <b>1,441</b>   | <b>87.8</b>     |
| <b>Victoria</b>         | <b>63,009</b>   | <b>936.4</b>    | <b>56,414</b>  | <b>841.9</b>    | <b>5,700</b>   | <b>84.6</b>     |

Source: PHIDU data, 2018-2019

## Appendix 2.4 – Alcohol and Other Drugs (Chapter 6)

Table 2.4.1 Serious road injuries during alcohol hours by LGA, 2019-2020

| LGA                  | Number       | Rate per 100,000 |
|----------------------|--------------|------------------|
| Bayside              | 9            | 8.4              |
| Cardinia             | 22           | 18.9             |
| Casey                | 38           | 10.4             |
| Frankston            | 11           | 7.7              |
| Glen Eira            | 9            | 5.7              |
| Greater Dandenong    | 29           | 17.2             |
| Kingston             | 20           | 12.0             |
| Mornington Peninsula | 23           | 13.6             |
| Port Phillip         | 10           | 8.6              |
| Stonnington          | 11           | 9.3              |
| <b>Victoria</b>      | <b>1,809</b> | <b>13.7</b>      |

Source: Turning Point (AODStats), Serious Road Injuries, <https://aodstats.org.au/explore-data/serious-road-injuries/>

Table 2.4.2 Family violence and assaults where alcohol might have been involved by LGA, 2019-20

| LGA                  | Family violence incidents where alcohol was definitely or possibly involved |                  | Incidents of assault during high alcohol hours |                  |
|----------------------|---|------------------|--|------------------|
|                      | Number  | Rate per 100,000 | Number   | Rate per 100,000 |
| Bayside              | 80  | 74.4             | 39   | 36.3             |
| Cardinia             | 121   | 104.1            | 77   | 66.3             |
| Casey                | 334   | 91.6             | 269  | 73.8             |
| Frankston            | 319   | 222.6            | 154  | 107.4            |
| Glen Eira            | 100   | 63.2             | 43   | 27.2             |
| Greater Dandenong    | 193   | 114.6            | 159  | 94.4             |
| Kingston             | 208   | 124.3            | 95   | 56.8             |
| Mornington Peninsula | 299   | 177.1            | 106  | 62.8             |
| Port Phillip         | 248   | 212.9            | 121  | 103.9            |
| Stonnington          | 136   | 114.7            | 154  | 129.8            |
| <b>Victoria</b>      | <b>8580</b>   | <b>128.1</b>     | <b>5396</b>                                    | <b>80.6</b>      |

Source: Turning Point (AODStats), Table: Family violence (LGA), 2019-2020; accessed via <https://aodstats.org.au/explore-data/family-violence/>

Table 2.4.3 Alcohol-related emergency service utilisation and deaths

| LGA                  | Ambulance attendances<br>(2021-22) |                  | Hospitalisations<br>(2019-20) |                  | Deaths<br>(2020-21) |                  |
|----------------------|------------------------------------|------------------|-------------------------------|------------------|---------------------|------------------|
|                      | Number                             | Rate per 100,000 | Number                        | Rate per 100,000 | Number              | Rate per 100,000 |
| Bayside              | 187                                | 182.73           | 863                           | 807.6            | 193                 | 179.5            |
| Cardinia             | 250                                | 209.17           | 507                           | 452.0            | 111                 | 95.5             |
| Casey                | 754                                | 204.09           | 1,510                         | 426.7            | 311                 | 85.3             |
| Frankston            | 650                                | 461.62           | 1,221                         | 856.0            | 211                 | 147.2            |
| Glen Eira            | 276                                | 183.16           | 1,279                         | 817.2            | 192                 | 121.4            |
| Greater Dandenong    | 581                                | 362.74           | 1,048                         | 623.1            | 231                 | 137.2            |
| Kingston             | 451                                | 282.64           | 960                           | 579.1            | 240                 | 143.5            |
| Mornington Peninsula | 613                                | 359.76           | 1,223                         | 729.6            | 313                 | 185.4            |
| Port Phillip         | 608                                | 587.39           | 1,362                         | 1,178.2          | 111                 | 95.3             |
| Stonnington          | 517                                | 486.46           | 1,115                         | 946.8            | 155                 | 130.7            |
| <b>Victoria</b>      | <b>20458</b>                       | <b>312.43</b>    | <b>34,610</b>                 | <b>524.7</b>     | <b>8,747</b>        | <b>130.6</b>     |

Source: Turning Point (AODStats) accessed via, <https://aodstats.org.au/explore-data>

Table 2.4.4 Number and rate (per 100,000) of Illicit drug-related<sup>48</sup> emergency service utilisation and deaths

| LGA                                      | Ambulance attendances<br>(2021-22) |                  | Hospitalisations<br>(2019-2020) |                  | Drug-induced deaths<br>(2020-21) |                  |
|--|------------------------------------|------------------|---------------------------------|------------------|----------------------------------|------------------|
|  | Number                             | Rate per 100,000 | Number                          | Rate per 100,000 | Number                           | Rate per 100,000 |
| Bayside                                  | 105                                | 102.6            | 376                             | 351.9            | <5                               | n.p.             |
| Cardinia                                 | 158                                | 132.19           | 307                             | 273.7            | 0                                | n.p.             |
| Casey                                    | 498                                | 134.79           | 768                             | 217.0            | <5                               | n.p.             |
| Frankston                                | 396                                | 281.23           | 687                             | 481.6            | <5                               | n.p.             |
| Glen Eira                                | 179                                | 118.79           | 713                             | 455.6            | <5                               | n.p.             |
| Greater Dandenong                        | 465                                | 290.31           | 728                             | 432.8            | 0                                | n.p.             |
| Kingston                                 | 214                                | 134.11           | 567                             | 342.0            | <5                               | n.p.             |
| Mornington Peninsula                     | 259                                | 152              | 501                             | 298.9            | 0                                | n.p.             |
| Port Phillip                             | 498                                | 481.12           | 849                             | 734.4            | <5                               | n.p.             |
| Stonnington                              | 372                                | 350.03           | 551                             | 467.9            | <5                               | n.p.             |
| <b>Victoria</b>                          | 12,968                             | 198.04           | <b>18,611</b>                   | <b>282.2</b>     | <b>78</b>                        | <b>1.16</b>      |
| n.p. Not calculated due to small numbers |                                    |                  |                                 |                  |                                  |                  |

Source: Turning Point (AODStats) accessed via, <https://aodstats.org.au/explore-data>

<sup>48</sup> Illicit drugs (Any): indicates case where any illicit drug was primarily involved in the event, including heroin, opioids, amphetamines, cannabis, stimulants, hallucinogens, inhalants, or other illicit drugs not explicitly mentioned.



Table 2.4.5 Treatment episodes by alcohol and drug-related treatment by type and region, 2021-22

| Type of Treatment           | SEMPHN catchment (%) | Victoria (%) | Australia (%) |
|-----------------------------|----------------------|--------------|---------------|
| Counselling                 | 26.9                 | 24.7         | 36.5          |
| Assessment only             | 29.9                 | 21.2         | 20.9          |
| Support and case management | 16.0                 | 22.6         | 15.5          |
| Withdrawal management       | 5.9                  | 10.7         | 9.0           |
| Information and education   | 0.7                  | 1.0          | 2.8           |
| Rehabilitation              | 4.2                  | 2.5          | 5.7           |
| Pharmacotherapy             | 1.3                  | 1.1          | 1.9           |
| Other                       | 15.2                 | 16.2         | 10.1          |
| <b>Total</b>                | <b>100.0</b>         | <b>100.0</b> | <b>100.0</b>  |

Source: AIHW, 2021-22

Table 2.4.6 Episodes of care for alcohol, illicit drugs<sup>49</sup>, and pharmaceutical drugs by LGA, 2019-20

| LGA                                      | Alcohol       |                  | Illicit drugs |                  | Pharmaceutical drugs |                  |
|--|---------------|------------------|---------------|------------------|----------------------|------------------|
|  | Number        | Rate per 100,000 | Number        | Rate per 100,000 | Number               | Rate per 100,000 |
| Bayside                                  | 62            | 58.0             | 126           | 117.9            | 10                   | 9.4              |
| Cardinia                                 | 86            | 76.7             | 131           | 116.8            | 8                    | 7.1              |
| Casey                                    | 231           | 65.3             | 402           | 113.6            | 22                   | 6.2              |
| Frankston                                | 523           | 366.7            | 789           | 553.1            | 62                   | 43.5             |
| Glen Eira                                | 136           | 86.9             | 177           | 113.1            | 15                   | 9.6              |
| Greater Dandenong                        | 195           | 115.9            | 307           | 182.5            | 15                   | 8.9              |
| Kingston                                 | 213           | 128.5            | 225           | 135.7            | 18                   | 10.9             |
| Mornington Peninsula                     | 635           | 378.8            | 725           | 432.5            | 61                   | 36.4             |
| Port Phillip                             | 215           | 186.0            | 349           | 301.9            | 25                   | 21.6             |
| Stonnington                              | 107           | 90.9             | 139           | 118.0            | 10                   | 8.5              |
| <b>Victoria</b>                          | <b>13,990</b> | <b>212.1</b>     | <b>21,573</b> | <b>327.1</b>     | <b>1,402</b>         | <b>21.3</b>      |
| n.p. Not calculated due to small numbers |               |                  |               |                  |                      |                  |

Source: AODStats, Table Treatment services (LGA), 2021-22; accessed <https://aodstats.org.au/explore-data/treatment-services-vadc/>

<sup>49</sup> Illicit Drugs (Any): indicates case where any illicit drug was primarily involved in the event, including heroin, opioids, amphetamines, cannabis, stimulants, hallucinogens, inhalants, or other illicit drugs not explicitly mentioned.

## Appendix 2.5 – First Nations Peoples (Chapter 7)

Table 2.5.1 Core activity need for assistance for First Nations population by LGA, 2021

| LGA                     | People who need assistance | First Nations Population (URP) 2021 | ASR per 100 population |
|-------------------------|----------------------------|-------------------------------------|------------------------|
| Bayside                 | 13                         | 282                                 | 4.6                    |
| Cardinia                | 93                         | 1,162                               | 8.0                    |
| Casey                   | 260                        | 2,400                               | 10.8                   |
| Frankston               | 229                        | 1,800                               | 12.7                   |
| Glen Eira               | 20                         | 413                                 | 4.8                    |
| Greater Dandenong       | 85                         | 607                                 | 14.0                   |
| Kingston                | 62                         | 721                                 | 8.6                    |
| Mornington Peninsula    | 164                        | 1,715                               | 9.6                    |
| Port Phillip            | 45                         | 519                                 | 8.7                    |
| Stonnington             | 9                          | 377                                 | 2.4                    |
| <b>SEMPHN catchment</b> | <b>980</b>                 | <b>9,996</b>                        | <b>9.8</b>             |
| <b>Victoria</b>         | <b>6,570</b>               | <b>65,639</b>                       | <b>10.0</b>            |

Source: Census 2021, Australian Bureau of Statistics (June 2022), I09 Core Activity Need for Assistance by Age by Sex for Aboriginal and/or Torres Strait Islander Persons, accessed on 20 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%)

Table 2.5.2 Participation rates in vocational education and training for the First Nations people, 2021

| LGA                     | Participation in vocational education and training (2021) |             |                   |             |
|-------------------------|---|-------------|-------------------|-------------|
|                         | First Nations   |             | Non-First Nations |             |
|                         | Number  | ASR per 100 | Number            | ASR per 100 |
| Bayside                 | 90  | 31.3        | 10,225            | 10.8        |
| Cardinia                | 205   | 19.3        | 18,696            | 15.4        |
| Casey                   | 520   | 21.8        | 54,385            | 14.1        |
| Frankston               | 340   | 19.1        | 20,655            | 14.8        |
| Glen Eira               | 110   | 23.3        | 15,565            | 10.0        |
| Greater Dandenong       | 145   | 21.7        | 20,495            | 12.1        |
| Kingston                | 140   | 19.0        | 19,280            | 12.4        |
| Mornington Peninsula    | 6   | 20.1        | 866               | 10.2        |
| Port Phillip            | 385   | 23.6        | 21,615            | 14.9        |
| Stonnington             | 105   | 16.4        | 10,915            | 9.4         |
| <b>SEMPHN catchment</b> | <b>2,125</b>  | <b>21.4</b> | <b>202,175</b>    | <b>12.5</b> |
| <b>Victoria</b>         | <b>14,182</b>   | <b>21.3</b> | <b>887,022</b>    | <b>13.3</b> |

Source: PHIDU (June 2023 release), accessed on 11 July 2023, Table: Education. <https://phidu.torrens.edu.au/social-health-atlases/maps/#aboriginal-torres-strait-islander-social-health-atlas-of-australia>. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%)

Table 2.5.3 Summary of persons attending an educational institution by First Nations status by LGA, 2021

| LGA                  | Preschool     |                   |            | Primary School |                   |            | Secondary School |                   |            | Tertiary Education |                   |            |
|----------------------|---------------|-------------------|------------|----------------|-------------------|------------|------------------|-------------------|------------|--------------------|-------------------|------------|
|                      | First Nations | Non-First Nations | Rate Ratio | First Nations  | Non-First Nations | Rate Ratio | First Nations    | Non-First Nations | Rate Ratio | First Nations      | Non-First Nations | Rate ratio |
|                      | Number (%)    | Number (%)        |            | Number (%)     | Number (%)        |            | Number (%)       | Number (%)        |            | Number (%)         | Number (%)        |            |
| Bayside              | 9<br>(2.2)    | 2124<br>(6.3)     | 0.3        | 21<br>(1.6)    | 8,432<br>(6.8)    | 0.2        | 43<br>(4.4)      | 8346<br>(8.2)     | 0.5        | 22<br>(2.8)        | 7,225<br>(6.4)    | 0.4        |
| Casey                | 53<br>(13.2)  | 3270<br>(9.6)     | 1.4        | 227<br>(17.1)  | 11,510<br>(9.2)   | 1.9        | 107<br>(10.9)    | 8,082<br>(8.0)    | 1.4        | 62<br>(8.0)        | 7,198<br>(6.4)    | 1.3        |
| Cardinia             | 115<br>(28.6) | 9083<br>(26.8)    | 1.1        | 347<br>(26.1)  | 35,997<br>(28.9)  | 0.9        | 256<br>(26.0)    | 26,959<br>(26.6)  | 0.97       | 149<br>(19.3)      | 25,289<br>(22.6)  | 0.9        |
| Frankston            | 78<br>(19.4)  | 3285<br>(9.7)     | 2          | 265<br>(19.9)  | 10,962<br>(8.8)   | 2.3        | 190<br>(19.3)    | 8,490<br>(8.4)    | 2.3        | 147<br>(19.0)      | 7,947<br>(7.1)    | 2.7        |
| Glen Eira            | 12<br>(3)     | 3433<br>(10.1)    | 0.3        | 38<br>(2.9)    | 12003<br>(9.6)    | 0.3        | 27<br>(2.7)      | 10,413<br>(10.3)  | 0.3        | 55<br>(7.1)        | 13,149<br>(11.7)  | 0.6        |
| Greater Dandenong    | 22<br>(5.5)   | 2796<br>(8.2)     | 0.6        | 64<br>(4.8)    | 11,234<br>(9.0)   | 0.5        | 52<br>(5.3)      | 9,604<br>(9.5)    | 0.6        | 36<br>(4.7)        | 12,624<br>(11.3)  | 0.4        |
| Kingston             | 26<br>(6.5)   | 3586<br>(10.6)    | 0.6        | 71<br>(5.3)    | 12,268<br>(9.8)   | 0.5        | 76<br>(7.7)      | 10,217<br>(10.1)  | 0.8        | 59<br>(7.6)        | 10,786<br>(9.6)   | 0.8        |
| Mornington Peninsula | 77<br>(19.2)  | 3170<br>(9.3)     | 2.1        | 247<br>(18.6)  | 12,288<br>(9.9)   | 1.9        | 188<br>(19.1)    | 10,489<br>(10.3)  | 1.9        | 103<br>(13.3)      | 7,736<br>(6.9)    | 1.9        |
| Port Phillip         | 7<br>(1.7)    | 1,556<br>(4.6)    | 0.4        | 32<br>(2.4)    | 4,829<br>(3.9)    | 0.7        | 19<br>(1.9)      | 3841<br>(3.8)     | 0.5        | 78<br>(10.1)       | 9,052<br>(8.1)    | 1.2        |
| Stonnington          | 3             | 1,612             | 0.1        | 17             | 5,153             | 0.3        | 26               | 5,000             | 0.5        | 63                 | 11055             | 0.28       |

| LGA  | Preschool        |                     |            | Primary School     |                      |            | Secondary School |                      |            | Tertiary Education |                      |            |
|--|------------------|---------------------|------------|--------------------|----------------------|------------|------------------|----------------------|------------|--------------------|----------------------|------------|
|  | First Nations    | Non-First Nations   | Rate Ratio | First Nations      | Non-First Nations    | Rate Ratio | First Nations    | Non-First Nations    | Rate Ratio | First Nations      | Non-First Nations    | Rate ratio |
|  | Number (%)       | Number (%)          |            | Number (%)         | Number (%)           |            | Number (%)       | Number (%)           |            | Number (%)         | Number (%)           |            |
|  | (0.7)            | (4.8)               |            | (1.3)              | (4.1)                |            | (2.6)            | (4.9)                |            | (8.1)              | (9.9)                |            |
| <b>SEMPHN catchment</b>  | <b>402 (100)</b> | <b>33,915 (100)</b> | <b>1.0</b> | <b>1,329 (100)</b> | <b>124,676 (100)</b> | <b>1.0</b> | <b>984 (100)</b> | <b>101,441 (100)</b> | <b>1.0</b> | <b>774 (100)</b>   | <b>112,061 (100)</b> | <b>1.0</b> |
| Tertiary Education includes vocational education (including TAFE and private training providers), and university or other higher education<br>Rate ratio is the rate for First Nations Australians divided by the rate for non-First Nations Australians. Rate ratio of 1.0 indicates equal rates in the two groups, a rate ratio greater than 1.0 indicates an increased risk for the group in the numerator, and a rate ratio less than 1.0 indicates a decreased risk for the group in the numerator. |                  |                     |            |                    |                      |            |                  |                      |            |                    |                      |            |

Source: Census 2021, Australian Bureau of Statistics (June 2022), 105 Highest Year of School Completed by Indigenous Status by Sex, accessed on 20 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%)

Table 2.5.4 Employment status in the labour force for First Nations peoples, 2021

| IARE of residence  | First Nations persons learning or earning at ages 15 to 24 |                | First Nations unemployment |                |
|--|--|----------------|----------------------------|----------------|
|  | Number   | Proportion (%) | Number                     | Proportion (%) |
| Cardinia   | 153  | 75.7           | 35                         | 7.7            |
| Cranbourne – Narre Warren  | 360  | 79.1           | 94                         | 9.8            |
| Frankston  | 372  | 81.9           | 102                        | 9.3            |
| Greater Dandenong  | 87   | 68.5           | 30                         | 15.2           |
| Melbourne - East (part b)  | 202  | 89.8           | 45                         | 7.5            |
| Melbourne - Port Phillip (part b)  | 107  | 85.6           | 25                         | 8.2            |
| Mornington Peninsula   | 263  | 81.2           | 48                         | 6.5            |
| <b>SEMPHN catchment</b>  | <b>81.2</b>  | <b>80.4</b>    | <b>371</b>                 | <b>8.5</b>     |
| <b>Victoria</b>  | <b>81.2</b>  | <b>76.9</b>    | <b>2,493</b>               | <b>9.6</b>     |
| LGAs covered in the IARE are Cardinia (Cardinia Shire), Cranbourne - Narre Warren (City of Casey), Frankston (City of Frankston, City of Kingston), Greater Dandenong (City of Greater Dandenong), Melbourne - East (part b) (city of Bayside, City of Glen Eira, City of Stonnington), Melbourne - Port Phillip (City of Port Phillip), Mornington Peninsula (Mornington Peninsula Shire) |  |                |                            |                |

Source: PHIDU (June 2023 release), accessed on 17 July 2023, Table: Education. <https://phidu.torrens.edu.au/social-health-atlases/maps/#aboriginal-torres-strait-islander-social-health-atlas-of-australia>. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%)

Table 2.5.5 Median weekly personal and household income for First Nations populations by LGA, 2021

| LGA                     | First Nations        |                       | Non-First Nations    |                       |
|-------------------------|----------------------|-----------------------|----------------------|-----------------------|
|                         | Personal income (\$) | Household income (\$) | Personal income (\$) | Household income (\$) |
| Bayside                 | 919                  | 2,729                 | 1,098                | 2,486                 |
| Cardinia                | 697                  | 1,811                 | 832                  | 1,875                 |
| Casey                   | 606                  | 1,794                 | 784                  | 1,919                 |
| Frankston               | 614                  | 1,638                 | 808                  | 1,653                 |
| Glen Eira               | 838                  | 2,016                 | 1,021                | 2,133                 |
| Greater Dandenong       | 489                  | 1,257                 | 619                  | 1,454                 |
| Kingston                | 808                  | 1,970                 | 878                  | 1,914                 |
| Mornington Peninsula    | 656                  | 1,622                 | 762                  | 1,553                 |
| Port Phillip            | 1,015                | 1,883                 | 1,290                | 2,070                 |
| Stonnington             | 1,108                | 2,271                 | 1,295                | 2,209                 |
| <b>SEMPHN catchment</b> | <b>753</b>           | <b>1,847</b>          | <b>855</b>           | <b>1,917</b>          |
| <b>Victoria</b>         | <b>619</b>           | <b>1,565</b>          | <b>805</b>           | <b>1,762</b>          |

Source: Census 2021, Australian Bureau of Statistics (June 2022), I04 Selected Medians and Averages, accessed on 20 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%)



Table 2.5.6 Proportions of chronic conditions in First Nations population (as percentage) by LGA, 2021

| LGA                  | Arthritis  | Asthma      | Cancer inc. remission | Dementia inc. Alzheimer | Diabetes   | Heart Disease | Kidney Disease | Lung condition inc. COPD or emphysema | Mental health condition | Stroke     |
|----------------------|------------|-------------|-----------------------|-------------------------|------------|---------------|----------------|---------------------------------------|-------------------------|------------|
| Bayside              | 10.1       | 18.0        | 3.7                   | 0.0                     | 2.2        | 5.2           | 0.0            | 2.2                                   | 30.0                    | 0.0        |
| Cardinia             | 12.1       | 33.5        | 2.8                   | 0.9                     | 7.5        | 6.2           | 2.8            | 3.9                                   | 31.3                    | 2.3        |
| Casey                | 13.6       | 32.1        | 2.8                   | 0.8                     | 8.7        | 6.9           | 1.7            | 4.1                                   | 35.4                    | 1.8        |
| Frankston            | 15.6       | 37.0        | 3.5                   | 1.6                     | 9.8        | 5.3           | 1.9            | 4.6                                   | 44.2                    | 3.5        |
| Glen Eira            | 13.3       | 27.3        | 5.7                   | 0.7                     | 7.9        | 5.7           | 0.7            | 4.2                                   | 37.9                    | 0.7        |
| Greater Dandenong    | 17.8       | 34.7        | 3.2                   | 0.5                     | 12.3       | 9.9           | 5.2            | 10.9                                  | 41.7                    | 4.2        |
| Kingston             | 14.2       | 27.4        | 4.2                   | 0.4                     | 7.0        | 6.4           | 2.9            | 3.7                                   | 37.3                    | 1.5        |
| Mornington Peninsula | 14.6       | 29.6        | 3.5                   | 0.4                     | 8.4        | 6.6           | 1.9            | 4.6                                   | 34.5                    | 2.5        |
| Port Phillip         | 10.6       | 27.9        | 7.0                   | 1.9                     | 6.6        | 5.6           | 0.6            | 5.4                                   | 49.7                    | 2.1        |
| Stonnington          | 11.9       | 26.2        | 1.9                   | 1.6                     | 1.9        | 4.6           | 1.6            | 0.0                                   | 36.2                    | 0.0        |
| <b>Victoria</b>      | <b>7.3</b> | <b>16.2</b> | <b>1.9</b>            | <b>0.4</b>              | <b>4.9</b> | <b>3.6</b>    | <b>1.2</b>     | <b>2.5</b>                            | <b>18.3</b>             | <b>1.1</b> |

Source: Census 2021, Australian Bureau of Statistics (June 2022) I12: Type of Long-Term Health Condition by Age for Aboriginal and/or Torres Strait Islander Persons, accessed on 20 August 2022.  
 Note that Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%)

Table 2.5.7 First Nations who did not attend antenatal care, by IARE, 2017-2019

| IARE   | First Nations women who did not attend antenatal care within the first 10 weeks | First Nations women who gave birth | First Nations women who did not attend antenatal care within the first 10 weeks (%) |
|--|---|------------------------------------|---|
| Cardinia   | 13  | 47                                 | 27.7  |
| Cranbourne - Narre Warren  | 50  | 104                                | 48.1  |
| Frankston  | 33  | 99                                 | 33.3  |
| Greater Dandenong  | 20  | 36                                 | 55.6  |
| Melbourne - East (part b)  | 22  | 33                                 | 66.0  |
| Melbourne - Port Phillip (part b)  | 14  | 18                                 | 79.6  |
| Mornington Peninsula   | 23  | 61                                 | 37.7  |
| <b>SEMPHN catchment</b>  | <b>175</b>  | <b>403</b>                         | <b>43.4</b>   |
| <b>Victoria</b>  | <b>1,659</b>  | <b>3,017</b>                       | <b>55.0</b>   |
| LGAs covered in the IARE are Cardinia (Cardinia Shire), Cranbourne - Narre Warren (City of Casey), Frankston (City of Frankston, City of Kingston), Greater Dandenong (City of Greater Dandenong), Melbourne - East (part b) (city of Bayside, City of Glen Eira, City of Stonnington), Melbourne - Port Phillip (City of Port Phillip), Mornington Peninsula (Mornington Peninsula Shire) |   |                                    |   |

Source: PHIDU (June 2023 release), accessed on 17 July 2023, Table: Mothers and Babies. <https://phidu.torrens.edu.au/social-health-atlases/maps/#aboriginal-torres-strait-islander-social-health-atlas-of-australia>. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%)

Table 2.5.8 Weights of newborns (grams) by First Nations status across Victoria, 2021

| Birthweight (grams) | First Nations |                | Non- First Nations |                |
|---------------------|---------------|----------------|--------------------|----------------|
|                     | Number        | Proportion (%) | Number             | Proportion (%) |
| Mean (grams)        | 3,245.0       |                | 3,341.0            |                |
| Less than 1,500     | 25            | 2.0            | 803                | 1.0            |
| 1,500 – 2,499       | 109           | 8.6            | 4,089              | 5.0            |
| 2,500 – 2,999       | 244           | 19.3           | 13,448             | 16.6           |
| 3,000 – 3,499       | 417           | 33.0           | 30,609             | 37.7           |
| 3,599 – 4,000       | 351           | 27.7           | 24,105             | 29.7           |
| 4,000 – 4,499       | 94            | 7.4            | 7,052              | 8.7            |
| 4,500 and over      | 25            | 2.0            | 1,033              | 1.3            |
| Not stated          | 0.0           | 0.0            | 14                 | 0.0            |
| <b>Total</b>        | <b>1,265</b>  | <b>100.0</b>   | <b>81,153</b>      | <b>100.0</b>   |

Source: AIHW analysis of National Perinatal Data Collection, 2021. Table 3.12: Live births of Aboriginal and Torres Strait Islander mothers, by birthweight and state and territory, 2021, Table 3.9: Live births, by birthweight and state and territory, 2021

Table 2.5.9 Prevalence of suicides among First Nations peoples by age and sex, Victoria, 2018-2021

| Age Group         | First Nations |                | Non-First Nations |                |
|-------------------|---------------|----------------|-------------------|----------------|
|                   | Number        | Proportion (%) | Number            | Proportion (%) |
| Under 18 years    | 5             | 5.4            | 75                | 2.8            |
| 18 – 24 years     | 23            | 25.0           | 296               | 10.9           |
| 25 – 34 years     | 25            | 27.2           | 520               | 19.2           |
| 35 – 44 years     | 16            | 17.4           | 494               | 18.3           |
| 45 – 54 years     | 2             | 21.7           | 478               | 17.7           |
| 55 – 64 years     | 3             | 3.3            | 417               | 15.4           |
| 65 years and over | 0             | 0.0            | 426               | 15.7           |
| <b>Total</b>      | <b>92</b>     | <b>100.0</b>   | <b>2,706</b>      | <b>100.0</b>   |

Source: Coroners Court of Victoria. Victorian suicides of Aboriginal and Torres Strait Islander people (January 2022), Table 5: Overall suicide frequency and proportion by age group, among Aboriginal and Torres Strait Islander people and non-Indigenous people, Victoria 2018—2021.

Table 2.5.10 Emergency department presentations - resuscitation, emergency and urgent, by principal diagnosis by IARE, 2019-20

| Indigenous Area (IARE)            | Urgent presentations |                 | Semi-urgent presentations |                 | Non-urgent presentations |                 | Total presentations |                 | Urgent presentations for diseases of the respiratory system |                 | Presentations for mental and behavioural disorders |                 |
|-----------------------------------|----------------------|-----------------|---------------------------|-----------------|--------------------------|-----------------|---------------------|-----------------|---|-----------------|--|-----------------|
|                                   | Number               | ASR per 100,000 | Number                    | ASR per 100,000 | Number                   | ASR per 100,000 | Number              | ASR per 100,000 | Number  | ASR per 100,000 | (n)  | ASR per 100,000 |
| Cardinia                          | 182                  | 18,593.7        | 100                       | 10,017.8        | 21                       | 2,153.3         | 368                 | 37,443.4        | 25  | 2,349.2         | 26   | 2,790.4         |
| Cranbourne - Narre Warren         | 412                  | 19,961.6        | 293                       | 14,021.1        | 24                       | 1,162.6         | 907                 | 43,886.5        | 62  | 2,940.1         | 58   | 2,873.6         |
| Frankston                         | 457                  | 17,747.3        | 333                       | 13,168.9        | 43                       | 1,678.8         | 1,071               | 41,730.5        | 78  | 3,058.9         | 57   | 2,188.7         |
| Greater Dandenong                 | 200                  | 28,008.5        | 152                       | 21,964.4        | 28                       | 4,028.2         | 490                 | 69,236.5        | 48  | 6,539.3         | 56   | 8,177.5         |
| Melbourne – East (part b)         | 220                  | 14,615.7        | 159                       | 10,814.1        | 30                       | 1,971.1         | 494                 | 33,003.2        | 29  | 2,238.8         | 76   | 4,538.0         |
| Melbourne – Port Phillip (part b) | 538                  | 25,678.5        | 423                       | 20,823.1        | 103                      | 4,790.0         | 1,197               | 57,484.5        | 68  | 4,211.0         | 181  | 7,085.7         |
| Mornington Peninsula              | 292                  | 16,594.9        | 255                       | 14,790.8        | 32                       | 1,864.9         | 703                 | 40,240.6        | 53  | 2,895.5         | 43   | 2,607.6         |
| <b>Victoria</b>                   | <b>14,287</b>        | <b>22,555.6</b> | <b>13,771</b>             | <b>21,735.9</b> | <b>2,718</b>             | <b>4,313.8</b>  | <b>36,262</b>       | <b>57,314.1</b> | <b>3,326</b>  | <b>5,189.0</b>  | <b>2,576</b>                                       | <b>4,120.5</b>  |

Source: PHIDU (June 2023 release), accessed on 18 July 2023, Table: Emergency department presentations, by principal diagnosis. <https://phidu.torrens.edu.au/social-health-atlases/maps/#aboriginal-torres-strait-islander-social-health-atlas-of-australia>. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%)

Table 2.5.11 First Nations peoples' hospital admissions and average annual admission rates for various conditions by IARE, 2017-18 to 2019-20

| Indigenous area (IARE)   | Mental health related conditions |                 | Circulatory system diseases |                 | Respiratory system diseases |                 | Potentially preventable conditions |                 | Same-day admissions for dialysis for kidney disease |                  |
|--|----------------------------------|-----------------|-----------------------------|-----------------|-----------------------------|-----------------|------------------------------------|-----------------|---|------------------|
|  |                                  |                 |                             |                 |                             |                 |                                    |                 |   |                  |
|  | Number                           | ASR per 100,000 | Number                      | ASR per 100,000 | Number                      | ASR per 100,000 | Number                             | ASR per 100,000 | Number  | ASR per 100,000  |
| Cardinia   | 126                              | 4,646.40        | 22                          | 882.1           | 47                          | 1,584.80        | 103                                | 3,708.50        | No data   | -                |
| Cranbourne - Narre Warren  | 165                              | 2,806.50        | 81                          | 1,445.70        | 117                         | 1,945.00        | 259                                | 4,404.90        | 286   | 5,371.50         |
| Frankston  | 169                              | 2,182.60        | 92                          | 1,083.30        | 137                         | 1,757.00        | 250                                | 3,147.50        | 617   | 7,335.10         |
| Greater Dandenong  | 160                              | 7,807.30        | 74                          | 2,885.50        | 78                          | 3,388.20        | 164                                | 7,184.70        | 48  | 1,901.30         |
| Melbourne – East (part b)  | 215                              | 4,308.20        | 45                          | 991.6           | 75                          | 1,915.60        | 112                                | 2,584.50        | 252   | 5,698.20         |
| Melbourne – Port Phillip (part b)  | 369                              | 4,857.20        | 107                         | 1,849.70        | 146                         | 3,030.10        | 225                                | 3,935.90        | 983   | 16,731.10        |
| Mornington Peninsula   | 68                               | 1,388.10        | 74                          | 1,207.30        | 92                          | 1,622.20        | 190                                | 3,407.30        | No data   | -                |
| <b>Victoria</b>  | <b>4,828</b>                     | <b>2,639.50</b> | <b>3,043</b>                | <b>1,652.00</b> | <b>5,039</b>                | <b>2,697.30</b> | <b>8,423</b>                       | <b>4,558.90</b> | <b>18,670</b>                                       | <b>10,217.30</b> |
| LGAs covered in the IARE are Cardinia (Cardinia Shire), Cranbourne - Narre Warren (City of Casey), Frankston (City of Frankston, City of Kingston), Greater Dandenong (City of Greater Dandenong), Melbourne - East (city of Bayside, City of Glen Eira, City of Stonnington, City of Boroondara[1]), Melbourne - Port Phillip (City of Port Phillip), Mornington Peninsula (Mornington Peninsula Shire). No data: Data was not available or provided for this cell, and thus corresponding ASR could not be calculated. |                                  |                 |                             |                 |                             |                 |                                    |                 |   |                  |

Source: PHIDU (June 2023 release), accessed on 18 July 2023, Table: Hospital admissions, by principal diagnosis. <https://phidu.torrens.edu.au/social-health-atlases/maps/#aboriginal-torres-strait-islander-social-health-atlas-of-australia>. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%)

## Appendix 2.6 – Aged care

Table 2.6.1 Population aged 65 and over by LGA, 2021

|                         | Estimated Resident Population | Estimated proportion, 2016 | Projected proportion, 2030 |
|-------------------------|-------------------------------|----------------------------|----------------------------|
| Bayside                 | 21,439                        | 21.2                       | 20.2                       |
| Cardinia                | 14,841                        | 12.6                       | 50.6                       |
| Casey                   | 39,583                        | 10.8                       | 45.9                       |
| Frankston               | 23,173                        | 16.6                       | 29.1                       |
| Glen Eira               | 24,218                        | 16.3                       | 21.1                       |
| Greater Dandenong       | 24,856                        | 15.7                       | 28.6                       |
| Kingston                | 29,325                        | 18.5                       | 21.9                       |
| Mornington Peninsula    | 45,980                        | 27.2                       | 19.2                       |
| Port Phillip            | 13,801                        | 13.5                       | 48.2                       |
| Stonnington             | 17,804                        | 17.0                       | 27.2                       |
| <b>SEMPHN catchment</b> | <b>255,020</b>                | <b>16.3</b>                | <b>29.7</b>                |
| <b>Victoria</b>         | <b>1,580,104</b>              | <b>24.2</b>                | <b>25.8</b>                |

Source: Census 2021, Australian Bureau of Statistics (June 2022)

Table 2.6.2 Number and proportion of older people by country of birth and LGA, 2021

| Country of birth                          | Bayside       | Cardinia      | Casey         | Frankston     | Glen Eira     | Kingston      | Mornington Peninsula | Port Phillip  | Stonnington   | Greater Dandenong | SEMPHN         |
|---|---------------|---------------|---------------|---------------|---------------|---------------|----------------------|---------------|---------------|-------------------|----------------|
| <b>Australia</b>                          | 13,382        | 8,785         | 15,652        | 13,196        | 10,418        | 14,367        | 29,559               | 7,363         | 10,025        | 5,682             | <b>128,429</b> |
| <b>Overseas</b>                           | 7,096         | 5,030         | 21,882        | 8,705         | 12,694        | 13,642        | 13,138               | 5,410         | 6,735         | 17,898            | <b>112,230</b> |
| <b>Born elsewhere</b>                     | 1,217         | 571           | 3,119         | 999           | 3,657         | 1,816         | 1,096                | 1,181         | 1,090         | 2,134             | <b>16,880</b>  |
| <b>Not stated</b>                         | 955           | 1,016         | 2,036         | 1,286         | 1,130         | 1,310         | 3,260                | 1,010         | 1,004         | 1,293             | <b>14,300</b>  |
| <b>Total</b>                              | <b>22,650</b> | <b>15,402</b> | <b>42,689</b> | <b>24,186</b> | <b>27,899</b> | <b>31,135</b> | <b>47,053</b>        | <b>14,964</b> | <b>18,854</b> | <b>27,007</b>     | <b>271,839</b> |
| <b>Among those who were born Overseas</b> |               |               |               |               |               |               |                      |               |               |                   |                |
| <b>Primarily English Speaking (total)</b> | 36%           | 45%           | 21%           | 50%           | 15%           | 21%           | 57%                  | 27%           | 23%           | 8%                | <b>27%</b>     |
| <b>Other European (total)</b>             | 21%           | 21%           | 15%           | 18%           | 23%           | 28%           | 23%                  | 27%           | 29%           | 18%               | <b>21%</b>     |
| <b>Other countries (total)</b>            | 43%           | 35%           | 64%           | 32%           | 62%           | 51%           | 20%                  | 47%           | 48%           | 74%               | <b>52%</b>     |
| <b>Total</b>                              | 7,096         | 5,030         | 21,882        | 8,705         | 12,694        | 13,642        | 13,138               | 5,410         | 6,735         | 17,898            | <b>112,230</b> |

Source: Census 2021, Australian Bureau of Statistics (June 2022 release) Table G09: Country of birth of person by age by sex, Victoria, accessed on 20 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN catchment (4%).



Table 2.6.3 Number and rate of older persons with a chronic condition by LGA, 2021

| LGA                  | Heart Disease  |                | Kidney Disease |                | Lung condition |                | Stroke        |                | Mental health (including anxiety and depression) |                | Dementia      |                |
|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|----------------|--|----------------|---------------|----------------|
|                      | Number         | Rate per 1,000 | Number         | Rate per 1,000 | Number         | Rate per 1,000 | Number        | Rate per 1,000 | Number   | Rate per 1,000 | Number        | Rate per 1,000 |
| Bayside              | 3,274          | 152.7          | 514            | 24             | 988            | 46.1           | 684           | 31.9           | 1,507  | 70.3           | 986           | 46             |
| Cardinia             | 2,453          | 165.3          | 544            | 36.7           | 1,074          | 72.4           | 601           | 40.5           | 1,307  | 88.1           | 521           | 35.1           |
| Casey                | 6,499          | 164.2          | 1,472          | 37.2           | 2,403          | 60.7           | 1,706         | 43.1           | 3,418  | 86.4           | 1,569         | 39.6           |
| Frankston            | 3,784          | 156.2          | 805            | 33.2           | 1,040          | 42.9           | 802           | 33.1           | 2,280  | 98.4           | 1,018         | 43.9           |
| Glen Eira            | 3,556          | 143.1          | 908            | 36.5           | 1,217          | 49             | 1,075         | 43.2           | 1,946  | 80.4           | 1,050         | 43.4           |
| Greater Dandenong    | 3,939          | 170            | 942            | 40.7           | 1,807          | 78             | 1,023         | 44.1           | 2,259  | 90.9           | 1,251         | 50.3           |
| Kingston             | 4,687          | 159.8          | 955            | 32.6           | 1,607          | 54.8           | 1,108         | 37.8           | 2,432  | 82.9           | 1,221         | 41.6           |
| Mornington Peninsula | 7,521          | 163.6          | 1,309          | 28.5           | 2,715          | 59             | 1,756         | 38.2           | 3,834  | 83.4           | 1,781         | 38.7           |
| Port Phillip         | 1,849          | 134            | 354            | 25.7           | 625            | 45.3           | 419           | 30.4           | 1,071  | 77.6           | 336           | 24.3           |
| Stonnington          | 2,481          | 139.4          | 441            | 24.8           | 706            | 39.7           | 534           | 30             | 1,158  | 65             | 655           | 36.8           |
| <b>Victoria</b>      | <b>171,699</b> | <b>157.1</b>   | <b>35,623</b>  | <b>32.6</b>    | <b>64,333</b>  | <b>58.9</b>    | <b>42,291</b> | <b>38.7</b>    | <b>92,497</b>                                    | <b>84.6</b>    | <b>43,130</b> | <b>39.5</b>    |

Source: Australian Bureau of Statistics, 2021 Data. Please note Monash LGA is excluded as it was not possible to distinguish which proportion of the Monash LGA was within the SEMPHN catchment. Data for Mental Health and Dementia was sourced from Victorian Government, health Information Surveillance System. Accessed 10 July 2022.

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