phn SOUTH EASTERN MELBOURNE

An Australian Government Initiative

ANNUAL NEEDS ASSESSMENT

2022-2025

South Eastern Melbourne Primary Health Network

15 November 2022

Acknowledgements

We acknowledge funding from the Commonwealth Government as the principal funding body for Primary Health Networks (PHNs).

We acknowledge the traditional custodians of the land the SEMPHN catchment covers, the Boon Wurrung and Wurundjeri people. We pay our respects to them, their culture and their Elders past, present and future, and uphold their relationship to this land.

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.

Cover image: People walking on the iconic footbridge in Frankston. Greg Brave/Shutterstock.com

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Abbreviations

Acronym	Meaning
ABS	Australian Bureau of Statistics
ACCHO	Aboriginal Community Controlled Health Organisation
ACSC	Ambulatory Care Sensitive Condition
ADIS	Alcohol and Drug Information Service
AIHW	Australian Institute of Health and Welfare
AIR	Australian Immunisation Register
AOD	Alcohol and Other Drugs
AODTS NMDS	Alcohol and Other Drugs Treatment Services National Minimum Dataset
ASGS	Australian Statistical Geography Standard
ASR	Age-standardised rate
ATS	Australian Triage Scale
CALD	Culturally and Linguistically Diverse
CAMHS	Child and Adolescent Mental Health Services
CBD	Central Business District
CDM	Chronic disease management
CHS	Community Health Service
CMHN	Community Mental Health Nurse
COPD	Chronic Obstructive Pulmonary Disease
COVID-19	Coronavirus disease
CRM	Customer Relationship Management System
DALY	Disability-adjusted life year
DoH	Department of Health (Commonwealth)
ED	Emergency Department
GP	General Practitioner
IARE	Indigenous Area
IRSD	Index of Relative Socio-economic Disadvantage
LAC	Local Area Coordination
LGA	Local Government Area
LGBTIQA+	Lesbian, Gay, Bisexual, Transgender, Gender diverse, Intersex, Queer, Asexual and Questioning
LHN	Local Health Network
MBS	Medicare Benefits Schedule
MH	Mental health
MHCSS	Mental Health Community Support Services
NDIS	National Disability Support Scheme
NDSHS	National Drug Strategy Household Survey
NES	Non-English speaking
NPS	National Psychosocial Support
PBS	Pharmaceutical Benefits Scheme
PHN	Primary Health Network
PMHC MDS	Primary Mental Health Care Minimum Dataset
POLAR	Population Level Analysis and Reporting tool
SA1	Statistical Area 1
SA3	Statistical Area 3
SEMPHN	South Eastern Melbourne Primary Health Network
VAHI	Victorian Agency for Health Information

Chapter 1 Introduction

South Eastern Melbourne Primary Health Network (SEMPHN) is a leader, facilitator, and influencer towards the shared goal of better primary health care. We are one of six Primary Health Networks (PHNs) in Victoria, and 31 PHNs across Australia. Reporting to an independent Board, we are funded primarily by the Australian Government to help people in south east Melbourne get the health care they need, when and where they need it. Evidence-based practice is the foundation of our work, and we are constantly asking, 'together, how can we do this even better?'.

We do this by:

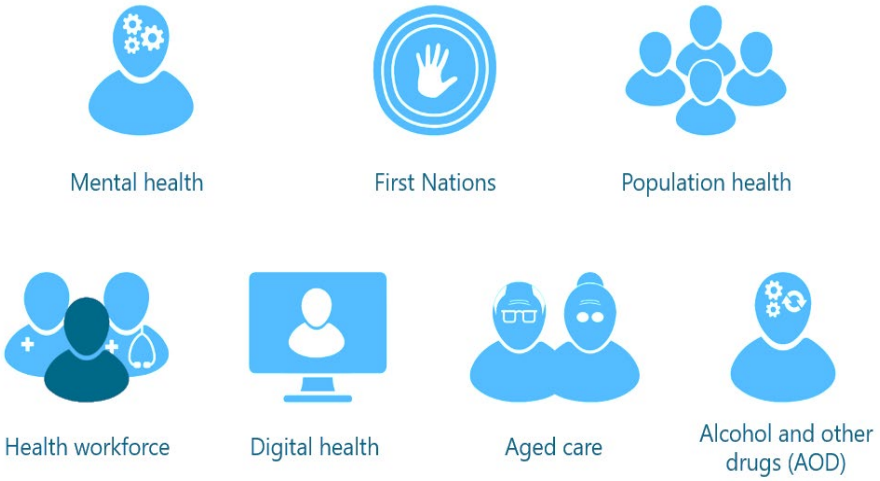
- commissioning out-of-hospital services locally.
- partnering to make quality care more accessible and integrated, and easier to navigate – especially for people who need it most.
- helping primary health care professionals to deliver the best care possible – now, and into the future.
- influencing Government policy on primary health care reform.

Purpose of this document

The Australian Department of Health requires PHNs to conduct and update 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 south eastern region of Melbourne when undertaking population health planning.

Seven priority policy and practice areas have been identified by the Department of Health 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

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.

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, data was updated using available 2021 Census releases and additional data believed to be relevant for new service development and commissioning priority areas e.g., Aged Care.

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 prioritisations can occur to support those most in need.

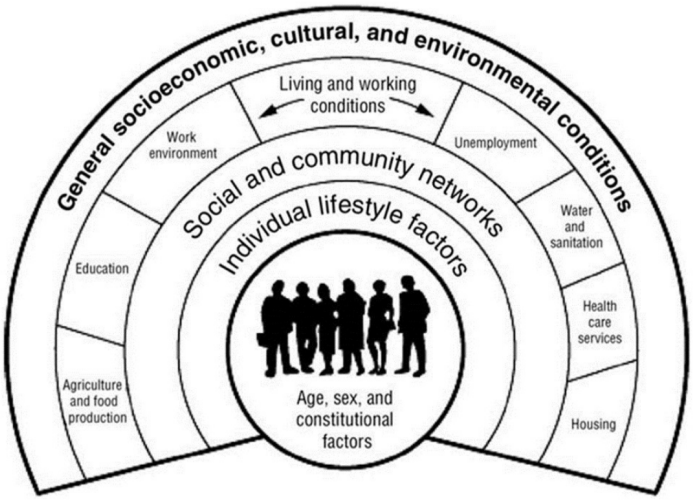
Figure 1.2 Taxonomy of need

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

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 Population Level Analysis and Reporting (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 also 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 or state level estimates where available. 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 demographic cohorts 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), Torrens University Australia	2021
AIHW releases (various)	Australian Institute of Health and Welfare	2016 to present
Crime statistics	Crime Statistics Agency Victoria	2022
Victorian Population Health Survey	Victorian Agency for Health Information (VAHI)	2017, 2020
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
AODStats	Turning Point	2010-2020
Population Level Analysis and Reporting tool (POLAR)	SEMPHN	2022
Primary Mental Health Care Minimum Dataset (PMHC MDS)	SEMPHN	2022
Microsoft Dynamics Customer Relationship Management (CRM)	SEMPHN	2021, 2022
Mortality Over Regions and Time (MORT) books	Australian Institute of Health and Welfare	2016- 2020
GEN Aged Care	Australian Institute of Health and Welfare	2020–21
Coronavirus (COVID-19) Victoria	State Government of Victoria	2022
Payment statistics	Services Australia	2022

Chapter 2 Key insights

Our community

- The SEMPHN region is currently home to 1,563,818 residents, which equates to 24% of Victoria's population.
- Cardinia and Casey are the fastest growing LGAs in the region (25% and 22% growth rates from 2016 to 2021).
- Greater Dandenong is the most culturally and linguistically diverse LGA in the region, followed by Casey.
- Casey and Greater Dandenong welcomed the second (n=8,720) and third (n=7,857) highest number of humanitarian migrants in Victoria from 2000 to 2016.
- Nearly three quarters (71%) of First Nations people in the region reside in the outer region of the catchment: Cardinia, Frankston, Mornington Peninsula and Casey.
- The SEMPHN region has a higher number of people with disability compared to the rest of Victoria.
- One in 20 (5.7%) people in SEMPHN identify as LGBTIQ+.
- Greater Dandenong is the most socioeconomically disadvantaged LGA in the region (IRSD score 895).
- Greater Dandenong, Cardinia, Casey, and Frankston have highest proportions of people who left school at Year 10 or below or did not go to school.
- Glen Eira has the highest rate of family incidents in the region, and 1.4 times higher than the Victorian rate.
- Greater Dandenong and Port Phillip have the highest criminal incident rates in the region.
- There are substantially higher rates of homelessness in Greater Dandenong and Port Phillip compared to other LGAs across the region.

General population health

- The top three leading causes of death in the SEMPHN region are cardiovascular disease (10.9%), followed by dementia including Alzheimer's disease (9.4%) and cerebrovascular disease (6.2%).
- Frankston (7.1 per 100) and Cardinia (6.6 per 100) and Mornington Peninsula (6.0 per 100) have the highest rate of people with two chronic conditions, and which is higher than the Victorian rate (5.8 per 100).
- Stonnington, Port Phillip, Greater Dandenong and Casey have low participation rates for cancer screening.
- Higher proportions of pregnant women in Frankston (12.0%), Cardinia (11.0%), and Mornington Peninsula (9.5%) smoke during the first 20 weeks of pregnancy.
- There are higher rates of teenage pregnancy in Cardinia (7.3 per 1,000), Greater Dandenong (6.4 per 1,000) and Casey (5.8 per 1,000).
- Frankston (28,980. per 100,000), Mornington Peninsula (26,604.4 per 100,000) and Cardinia (26,425.1 per 100,000) have high rates of total emergency department presentations compared to other LGAs across the region and above the Victorian rate (24,988.6 per 100,000).
- Hospital admissions for potentially preventable conditions are higher in Greater Dandenong (2,941.9 per 100,000), Casey (2,723.4 per 100,000), Cardinia (2,642.7 per 100,000) Frankston and (2,621.7 per 100,000) – which are above the Victorian rate.
- Admissions for vaccine-preventable conditions in Greater Dandenong are twice the Victorian rate. Admissions in 2019-20 for all hospitals (ASR per 100,000) were highest in Greater Dandenong (444.3 per 100,000), Stonnington (260.8 per 100,000) and Casey (224.4 per 100,000).

Mental health

- Nearly one in 10 people in the SEMPHN region (8.3%, n=129,277) report experiencing a mental health condition.
- Residents in Port Phillip (27.3%), Mornington Peninsula (26.3%), Casey (25.5%) and Frankston (24.4%) report higher levels of psychological distress.
- There are higher rates of deaths by suicide and self-inflicted injuries in Frankston (21.6 per 100,000), Mornington Peninsula (15.8 per 100,000) and Cardinia (15.0 per 100,000). Compared to the Victorian rate (10.6 per 100,000), eight of ten SEMPHN LGAs recorded a higher rate (i.e. lower than Victorian rates observed in Stonnington (10.2 per 100,000) and Greater Dandenong (9.2 per 100,000)).
- Intentional self-harm hospitalisations are higher in the SEMPHN region compared to Victoria for men in all age categories and women aged 25 years and over.
- General practitioners are the main referrers into SEMPHN commissioned mental health services (49.1%-60.2%), followed by non-clinical psychologists (16.9%-19.7%).
- Casey had substantially higher numbers of mental health treatment plans provided by GPs compared to other LGAs between FY20/21 and FY21/22.
- Frankston (1,479 per 100,000), Greater Dandenong (1,363.9 per 100,000) and Casey (1,029.9 per 100,000) have higher mental health-related emergency department presentations compared to the Victorian rate (924.3 per 100,000).
- Most LGAs in SEMPHN have higher rates of mental health related hospital admissions compared to the Victorian rate (1,673.2 per 100,000), and which are substantially higher in Glen Eira (3,098.5 per 100,000), Bayside (2,233.3 per 100,000), Frankston (2,212.3 per 100,000) and Greater Dandenong (2,007.0 per 100,000).
- A higher proportion of SEMPHN residents in Casey (17.5%). Frankston (15.3%) and Greater Dandenong (13.0%) access SEMPHN commissioned mental health services compared to other LGAs.

Alcohol and Other Drugs

- Higher rates of alcohol consumption in the SEMPHN region compared to the Victorian rate (14.4 per 100) are observed in seven of the 10 LGAs. In particular, there are higher rates in Mornington Peninsula (21.3 per 100), Bayside (19.5 per 100), and Port Phillip (19.0 per 100).
- Port Phillip (n=908), Stonnington (n=857) and Mornington Peninsula (n=828) have nearly double the number of liquor licence venues compared to other LGAs in the region.
- There are higher rates of alcohol induced deaths in Mornington Peninsula (130.6 per 100,000), Bayside (179.5 per 100,000), Frankston (147.2 per 100,000) compared to the Victorian rate (130.6 per 100,000)
- Higher rates of smoking are 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) compared to Victoria (15.5 per 100).
- There has been a 2.0% increase in illicit drug use in the SEMPHN region between 2016 and 2019, which is comparable to the Victorian increase.
- There are higher rates of illicit drug ambulance attendances and hospitalisations in Port Phillip, Stonnington, Greater Dandenong and Frankston.
- Frankston and Mornington Peninsula have the highest episodes of care for alcohol, illicit drugs and pharmaceutical drugs compared to Victoria.

First Nations peoples

- First Nations peoples represent 0.6% (n=9,914) of the SEMPHN region.
- Glen Eira has the fastest growing First Nations population (76.5% increase from 2016 to 2021.
- In 2020, Port Phillip had the lowest rates of First Nations peoples participating in vocational education and training (ASR 15.0 per 100), followed by Greater Dandenong (ASR of 18 per 100) across SEMPHN region (ASR 23.2 per 100 First Nations peoples).
- 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.
- When comparing median household income across SEMPHN region, First Nations households have lower median personal income (weekly) 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).
- Among the 9,297 First Nations peoples in Victoria, who had a health check in 2020-21, one in four (24.4%) had no previous health check. One in seven (14.0%) had a follow up service in the 12 months following their health check.

Aged Care

- One in six residents in the SEMPHN catchment are aged over 65 years (16.2%, n=255,020)
- As of 30 June 2021, there were 157 residential aged care services, 149 home care services and 126 home support services in the region.
- Mornington Peninsula has the largest older population in the region (27.2%) followed by Bayside (21.2%) and Kingston (18.5%).
- Almost as many older people living in the SEMPHN region were born overseas (46.6%, n=112,230) as were born in Australia (53.4%, n=128,429)
- Around one in 15 older people live alone in the region (6.7%, n=17,151). Mornington Peninsula, Kingston and Casey have the highest number of older people who live alone.
- Casey (n=3,448), Greater Dandenong (n=2,789) and Mornington Peninsula (2,630) have the highest number of older people who need assistance.
- Rates of chronic conditions in the older population vary across the catchment, however Greater Dandenong and Cardinia have higher rates of most chronic conditions.
- Greater Dandenong and Bayside have the highest rates of Dementia.

Health Workforce

- There are 499 general practices and 2,747 GPs working in the SEMPHN region.
- Casey (n=80) and Greater Dandenong (n=75) have the highest number of general practices.
- Greater Dandenong and Stonnington have the highest GP FTE per 1,000 people in the region.
- The SEMPHN region has a lower rate of mental health professionals per 100,000 people compared to Victoria.
- Stonnington and Bayside have substantially higher number of AOD workforce professionals compared to other areas across the region and Victoria.

Digital Health

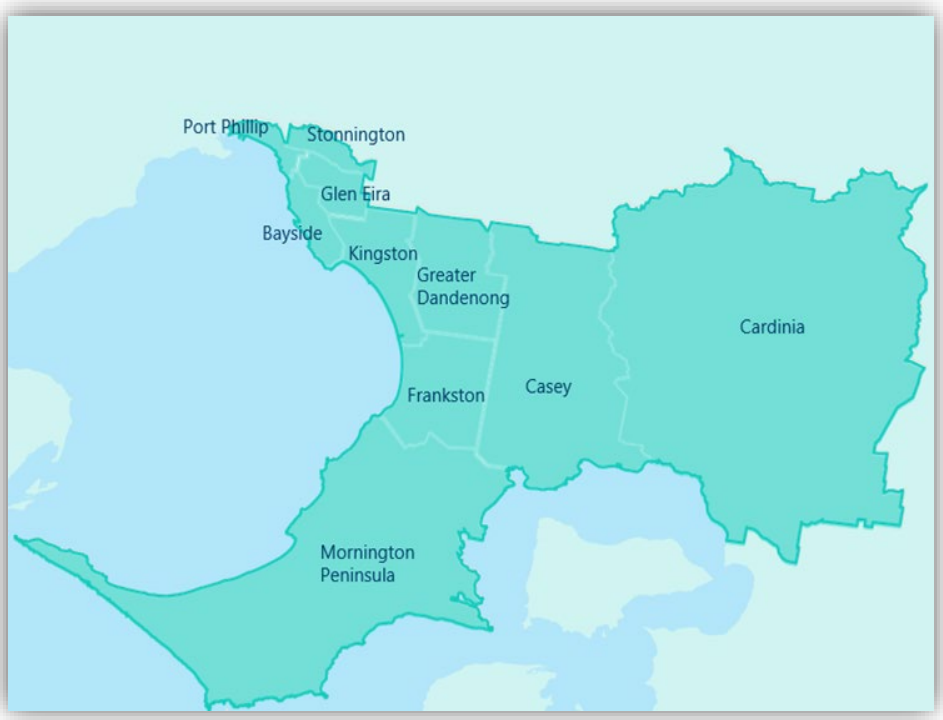
- Access to household internet varies across the catchment. Greater Dandenong and Mornington Peninsula have the highest proportion of residents who do not have access to the internet (16.8%, 13.6% respectively).
- Uptake and use of digital technologies is lowest in Stonnington, Greater Dandenong and Glen Eira.
- Digital health capabilities for accredited practices were substantially higher than non-accredited practices.
- Greater Dandenong has the lowest overall rate of digital health capability across accredited practices.

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). Our catchment also includes 4% of the City of Monash (the suburb of Hughesdale)[1]. We share 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), 499 General Practices, 157 Residential Aged Care Facilities, 328 Pharmacies and two Aboriginal Community Controlled Health Organisations[2].

Figure 3.1 Map of the SEMPHN region and LGA boundaries



Population density and growth

The SEMPHN region is currently home to an estimated 1,563,818 residents (Australian Bureau of Statistics, 2021b), which equates to approximately one quarter (24%) of the total Victorian population

[1] For the purposes of this report, data from the City of Monash is excluded (unless otherwise stated) due to most of its population being captured within Eastern Melbourne PHN.

[2] Dandenong and District Aborigines Co-operative Ltd https://www.naccho.org.au/members_affiliates/dandenong-district-aboriginies-co-operative-limited/ and Ngwala Willumbong Co-operative Ltd https://www.naccho.org.au/members_affiliates/ngwala-willumbong-co-operative-ltd-2/

(Table 3.1). From 2016 to 2021, there was a 7.4% increase in population in the catchment, slowing from the 10% growth rate in the five years prior (2012-2016).[3]

By population, Casey is the largest LGA (n=365,063, 23.3%) and second fastest growing LGA (22.0% growth from 2016 to 2021), just behind Cardinia, which is the largest LGA geographically in the region (25.0% growth). Stonnington and Port Phillip are our smallest LGAs by land. 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 (Australian Bureau of Statistics, 2016b, 2021b).

Population projections indicate that the region will be home to more than two million people by 2030 (Department of Environment Land Water and Planning, 2019). By this time, it is expected that the Casey will be home to the largest population in the region (n=483,095, 24.1%) (Department of Environment Land Water and Planning, 2019).

Table 3.1 Population density and growth by LGA, 2016, 2021, 2030

LGA	Area (kms^2)	2016 Usual Resident Population (n)	2021 Usual Resident Population (n)	Population growth rate 2016-2021 (%)	2030 Estimated Resident Population[4] (n)	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
SEMPHN region	2895.9	1,456,286	1,563,818	7.4	2,003,637	28.1
Victoria	227,444	5,926,624	6,503,491	9.7	8,054,587	23.9

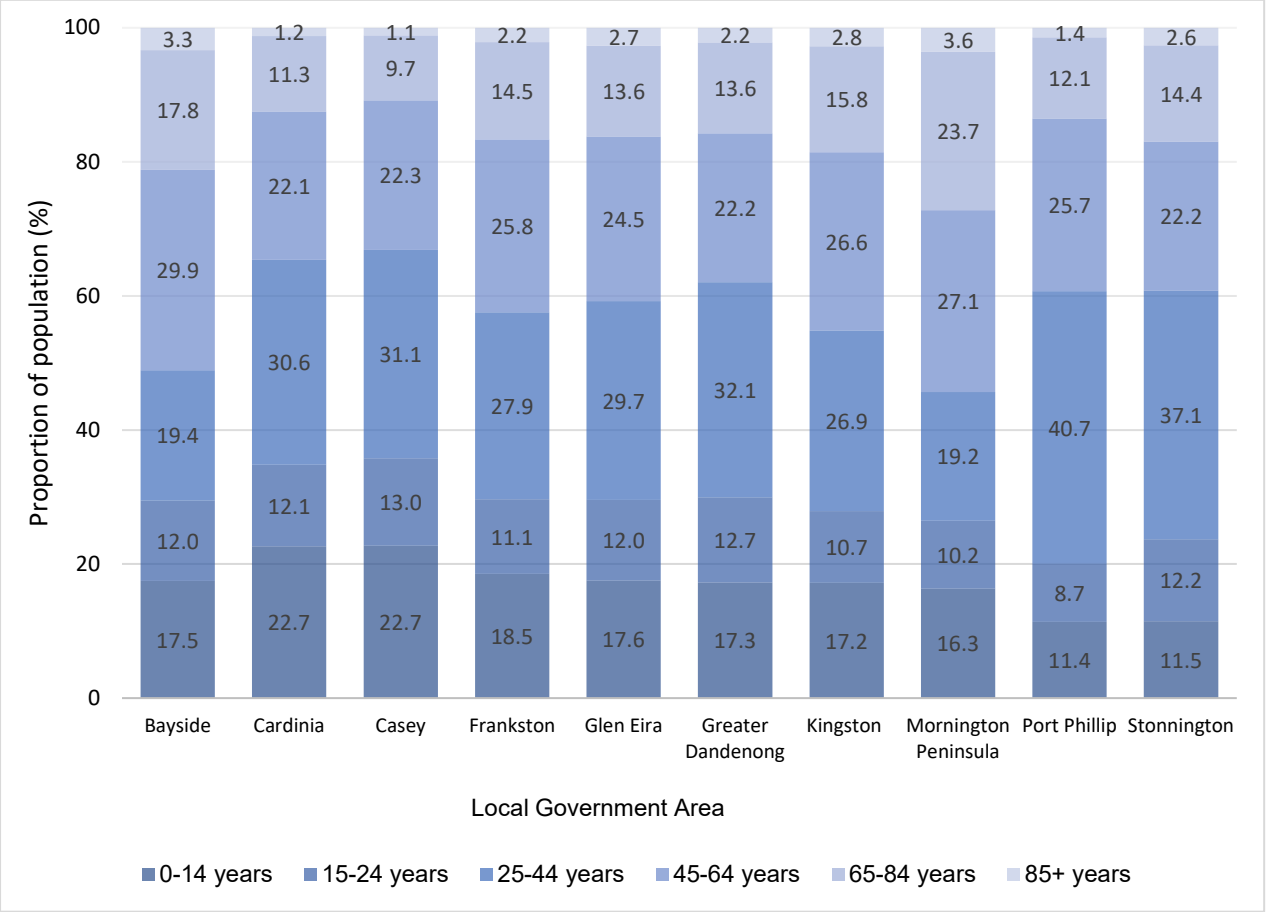
Source: Census 2021, Australian Bureau of Statistics (June 2022), G01 SELECTED PERSON CHARACTERISTICS BY SEX, accessed on 20 August 2022. PHIDU 2022, Torrens University Australia (June 2022), Population projections: Persons, accessed 20 August 2022. Please note Monash LGA is excluded due to the small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

Figure 3.2 shows that LGAs within the catchment have different age profiles. There are higher proportions of older people (65 years and over) living in Mornington Peninsula and Bayside, and the outer region's LGAs have larger younger populations (0-24 years) e.g., Casey and Cardinia.

[3] 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.

[4] Should be noted that the 2030 Resident Population estimates are based off the 2016 projections provided by PHIDU. These estimates will be updated as an when made available.

Figure 3.2 Population age distribution by LGA, 2021



Source: 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 region (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). Table 3.2 shows the number and proportion of residents who were born in a predominantly non-English speaking country who have been in Australia for less than five years and residents who were born overseas reporting poor proficiency in English. 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).

Approximately one quarter of residents (26.0%, n=408,695) in the SEMPHN region were born overseas in predominantly non-English speaking countries. Greater Dandenong is the most culturally diverse LGA, with 9.4% of residents (n=14,944) born in a predominantly non-English speaking (NES) country who have been in Australia for less than five years, and 15.3% of residents (n=22,748) who were born overseas who report poor proficiency in English. Casey is the second most culturally and linguistically diverse LGA, with nearly one third (4.9%, n =17,825) of residents born in a NES country who have lived

in Australia for less than five years, and 4.9% of residents (n=16,645) born overseas and reporting poor proficiency in English.

In 2021, the top five countries of birth in 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%) (Public Health Information Development Unit, 2021a). The highest proportion of people born overseas are aged 25-44 years (Australian Bureau of Statistics, 2021b).

Table 3.2 People born in non-English speaking countries and poor proficiency in English by LGA, 2021

LGA	2021 URP (n)	People born in a predominantly non-English speaking (NES) country resident in Australia for less than five years		People born overseas reporting poor proficiency in English	
		(n)	(%)	(n)	(%)
Bayside	101,262	1,964	1.9	1,417	1.5
Cardinia	117,626	2,859	2.4	1,630	1.5
Casey	365,063	17,825	4.9	16,645	4.9
Frankston	139,336	1,536	1.1	1,462	1.1
Glen Eira	149,062	7,853	5.3	4,567	3.2
Greater Dandenong	158,308	14,944	9.4	22,748	15.3
Kingston	157,927	4,537	2.9	5,258	3.5
Mornington Peninsula	168,528	742	0.4	550	0.4
Port Phillip	101,919	4,765	4.7	1,742	1.8
Stonnington	104,787	5,059	4.8	2,389	2.4
SEMPHN region	1,563,818	63,019	4.0	58,878	4.0
Victoria	6,503,491	269,744	4.1	233,912	3.8

Source: (Australian Bureau of Statistics, 2021b; Public Health Information Development Unit, 2021a)

Refugee and asylum seekers

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

From 2000 to 2016, our catchment settled 18,547 permanent migrants under the Offshore Humanitarian Program, which was 28.4% of all humanitarian entrants in Victoria (Australian Bureau of Statistics, 2016a; Public Health Information Development Unit, 2021c) (Table 3.3).

- 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 region have settled in Casey and Greater Dandenong.
    - Casey welcomed the second largest number of humanitarian entrants in Victoria (n=8,720) which represented 2.9% of the LGA's total population, just behind Hume (n=9,642) in the northwest 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.

Table 3.3 Number of permanent migrants entering Australia under the Offshore Humanitarian Program (2000 – 2016)

LGA	Permanent migrants entering Australia under the Offshore Humanitarian Program – arrived 2000 and 9th August 2016	
	(n)	(%)
Bayside	77	0.1
Cardinia	669	0.7
Casey	8,720	2.9
Frankston	421	0.3
Glen Eira	135	0.1
Greater Dandenong	7,857	5.2
Kingston	254	0.2
Mornington Peninsula	21	0.01
Port Phillip	218	10.2
Stonnington	188	0.2
SEMPHN region	18,547	1.3
Victoria	64,092	1.1

Source: PHIDU 2019, Torrens University Australia (October 2019), Humanitarian migrants: Permanent migrants entering Australia under the Offshore Humanitarian Program, accessed 20 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN region (4%).

First Nations peoples

The traditional custodians of the lands and waterways of the SEMPHN region 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 (Australian Bureau of Statistics, 2021a), although this number is likely to be an underestimation. 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) (Table 3.4).

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. [5] The largest proportion of First Nations peoples in the region are children aged 5 to14 years (19.8%, n=1,117), followed by young people aged between 15 to 24 years (18.7%, n = 1,855). Older First Nations

[5] 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 by factors including demographic change, improved Census coverage and response rates and a change towards greater propensity to identify as being of First Nations origins.

peoples (over the age of 50[6]) 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 SEMPHN's general population.

Table 3.4 First Nations peoples population growth by LGA, 2016-2021

LGA	2016 URP (n)	2021 URP (n)	Population growth 2016-2021 (%)
Bayside	197	267	35.5
Cardinia	762	1,126	47.8
Casey	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
SEMPHN region	7,244	9,914	36.9
Victoria	47,788	65,646	37.3

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 region (4%).

Disability

All LGAs in the SEMPHN region 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).

Mornington Peninsula has the highest proportion of people living with moderate or mild (11.4%) and profound or severe disability[7] (5.7%), which can be partially attributed to an older population (Table

[6] Older First Nations people are defined by AIHW as 50 years and over compared to older non-First Nations population (65 years and over)

[7] 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).

3.5). 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).

Table 3.5 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	
	(n)	(%)	(n)	(%)
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
SEMPHN region	72,736	4.7	115,794	7.4
Victoria	360,500	3.2	530,600	2.8

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 region (4%).

LGBTIQ+

In 2017, the Victorian Population Health Survey estimated that one in twenty people (5.7%, n=1,300) in the SEMPHN region identified as LGBTIQ+[8]. The SEMPHN region 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 (Table 3.6).

[8] Due to COVID-19, this data was not updated in the 2020 survey.

Table 3.6 Estimated 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
Victoria	5.7	88.1	3.4

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 region (4%).

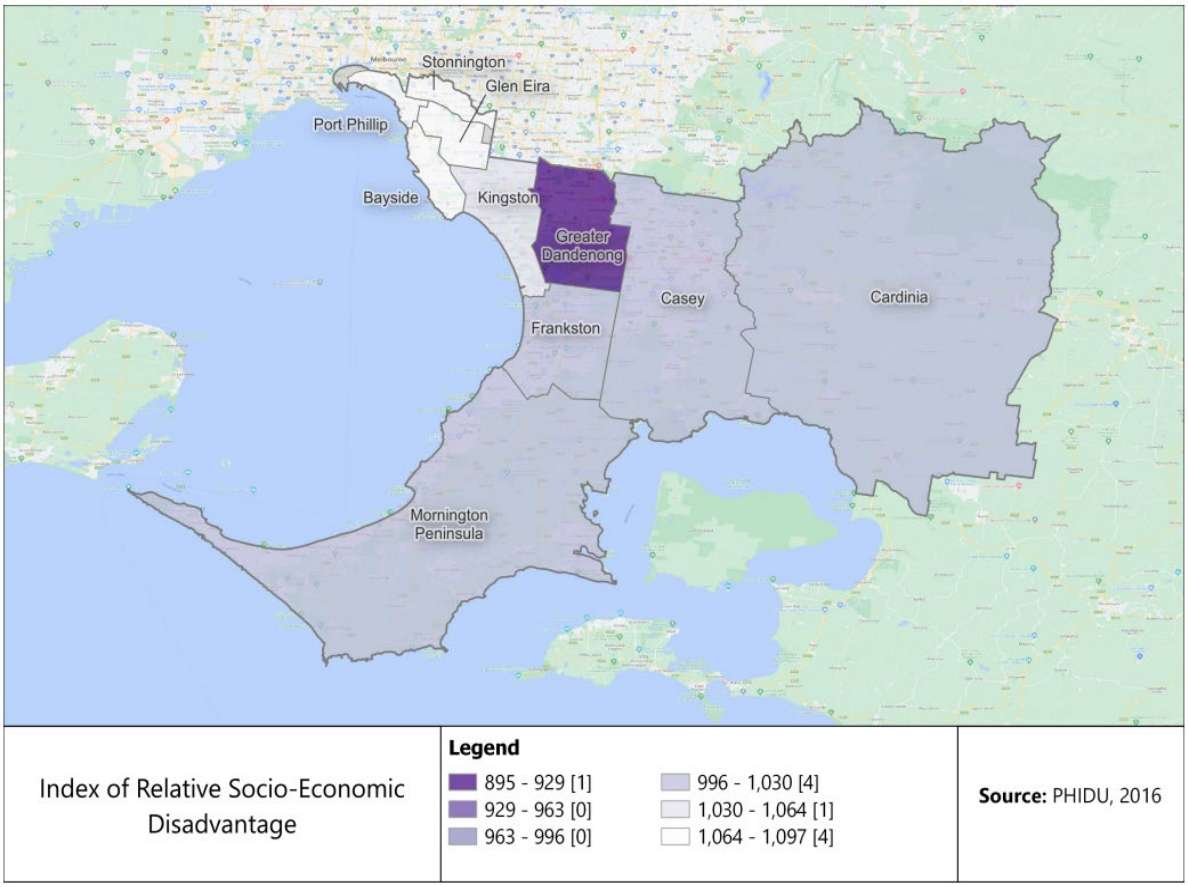
Socioeconomic disadvantage

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)[9] 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 3.3 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 1097). 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. The socioeconomic effects of COVID-19 show that services need to enable accessible and affordable care to those requiring health care. 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-serviced e.g. First Nations peoples, LGBTIQ+ community (Australian Institute of Health and Welfare, 2020c).

[9] The Index has a base of 1000 for Australia and scores above 1000 indicate a relative lack of disadvantage and those below indicates relatively greater disadvantage

Figure 3.3 Map of socioeconomic disadvantage (IRSD) by LGA, 2016



Source: ABS 2016, Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA), accessed on 10 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN region (4%).

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 region, there is considerable variability in school leaver status. Table 3.7 shows that there are lower education levels in Greater Dandenong (27.6 per 100 people), Cardinia (27.2 per 100 people) and Casey (25.3 per 100 people) (Public Health Information Development Unit, 2021a). These LGAs have education levels below the Victorian figure (21.0 per 100 people). The City of Stonnington (7.5 per 100), Bayside (9.1 per 100) and Port Phillip (9.7 per 100) have the highest proportion of people who finished school.

Table 3.7 People who left school at Year 10 or below or did not go to school by LGA, 2021

LGA	People who left school at Year 10 or below, or did not go to school	
	(n)	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
SEMPHN region	241,917	19.2
Victoria	1,108,886	21.0

Source: PHIDU 2022, Torrens University Australia (June 2022), Education: People who left school at Year 10 or below, or did not go to school (2021 URP), accessed 20 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN region (4%).

Income support

Income support payments help with living costs and depends on life circumstances (Services Australia, 2022b). Table 3.8 shows income support payments received by residents across LGAs in the SEMPHN region (Department of Social Services, 2022).

- 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 2022, (n = 10,476; 25.7% of all people receiving Jobseeker payments in SEMPHN region), followed by Frankston (n=5,108, 12.5%).
- 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 region (n = 2,035, 48.9%).
- Age Pension is a support payment for both men and women who are 65 years and above. In March 2022, Casey (n=24,422) and Mornington Peninsula (n=23,775) recorded largest number of people receiving Age Pensions accounting for 18.2% and 17.8% of all people receiving Age pension in SEMPHN region.
- 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=8,881) and Greater Dandenong (n=6,237).

Table 3.8 Payment recipients and payment type by LGA, March 2022

LGA	Payment support type			
	JobSeeker Payment (n)	Parenting Payment (n)	Age Pension (n)	Disability Support Pension (n)
Bayside	1,196	30	6,694	1,475
Cardinia	2,966	403	8,973	2,569
Casey	10,476	2,035	24,422	8,881
Frankston	5,108	233	14,464	5,215
Glen Eira	2,371	134	10,584	2,588
Greater Dandenong	6,710	870	16,968	6,237
Kingston	3,328	147	16,616	3,768
Mornington Peninsula	3,913	201	23,775	4,575
Port Phillip	3,004	71	5,438	3,013
Stonnington	1,732	38	5,406	1,625
SEMPHN region	40,804	4,162	133,340	39,946
Victoria	192,401	18,067	601,830	185,284

Source: DSS Payment Demographic Data 2022, Department of Social Services (March 2022), Table: LGA (extracted on 25 March 2022), accessed on 19 July 2022.

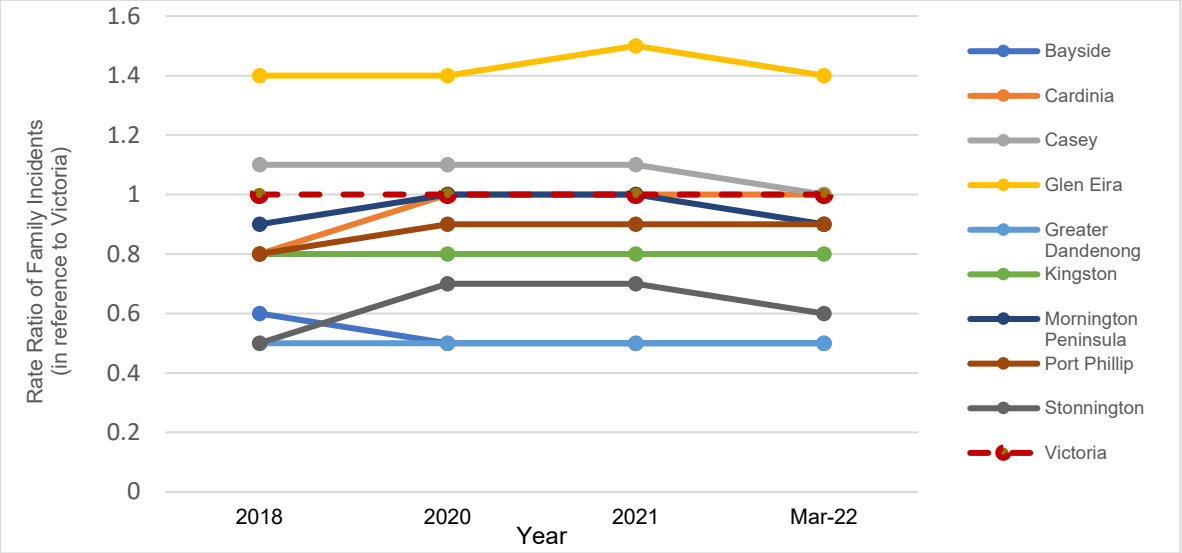
Family and community safety

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).

Figure 3.4 shows that there are rates of family incidents in SEMPHN LGAs compared to all of Victoria[10]. Rate of Family Incidents (per 10,000) is 1.4 times more in Glen Eira (190.65 per 10,000) compared to the rest of Victoria (137.4 per 10,000). Cardinia (134.5 per 10,000) and Casey (133.4 per 10,000) has rates comparable to the rest of Victoria (with a rate ratio of 1). Comparing rates from April 2018 to March 2022, there has been an increase in rates of family incidents were observed in Port Phillip and Cardinia. While rate ratios in Port Phillip indicate a lower rate of family incidents compared to Victoria (rate ratio of 0.9 since 2020), rates of family incidents in Port Phillip have increased by 26.4% from 2018 (98.1 per 10,000) to 2022 (124.1 per 10,000).

[10] 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 > 1 suggests an increased rate of family incidents in the LGA compared to Victoria. A rate ratio < 1 suggests a reduced rate in the LGA compared to Victoria.

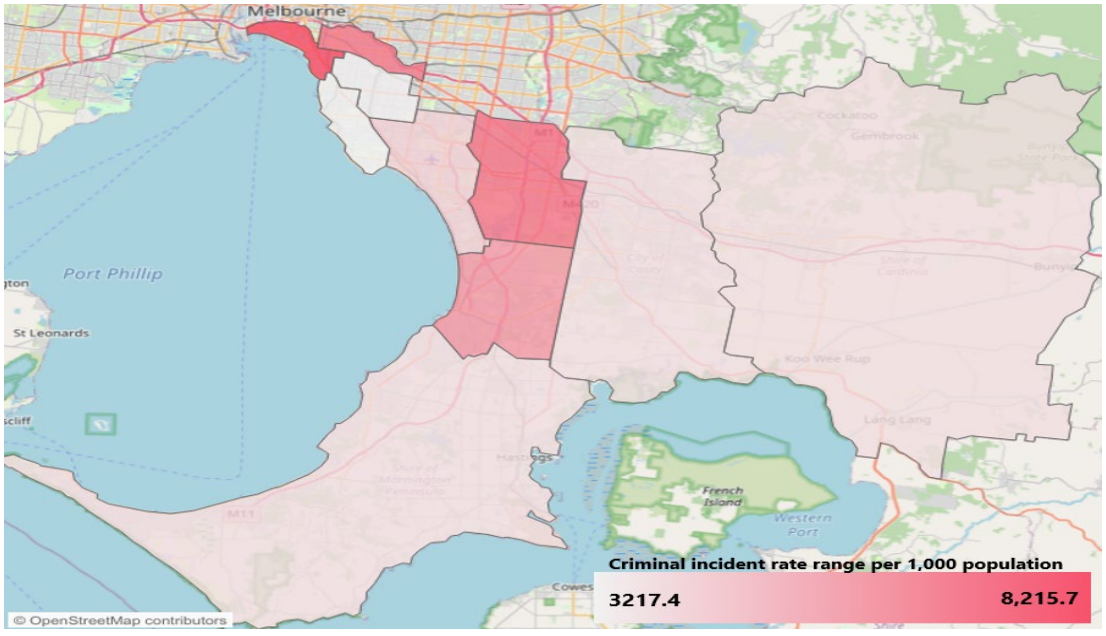
Figure 3.4 Rate ratios of family incidents by LGA, 2018-2022



Source: Crime Statistics Agency 2022, June 2022, Table: Family Incidents Year Ending March 2022, accessed on 28 July 2022. (Crime Statistics Agency, 2022)

High rates of criminal incidents have been observed in Port Phillip and Greater Dandenong (Figure 3.5). Port Phillip reported 9,157 (8,215.7 per 100,000) criminal incidents, 12,023 (10,787 per 100,000) offences recorded, 6,009 (5,391.3 per 100,000) person victim reports, and 1,383 (1,240.8 per 100,000) family incident reports for the year ending March 2022. Greater Dandenong reported 11,358 (7,154.1 per 100,000) criminal incidents, 15,614 (9,834.9 per 100,000) offences recorded, 6,238 (3,929.2 per 100,000) person victim reports, and 2,516 (1,584.8 per 100,000) family incident reports for the year ending March 2022.

Figure 3.5 Map of criminal incidents across SEMPHN region (as at 30 March 2022)



Source: Crime Statistics Agency 2022, June 2022, Table: Criminal Incidents Year Ending March 2022, accessed on 28 July 2022. (Crime Statistics Agency, 2022)

Homelessness

People may experience homelessness due to social, economic, or health-related factors (Australian Human Rights Commission, 2008). Census data from 2021 is not yet available, however Census data from 2016 indicates that just over 6,000 (3.8%) people in the SEMPHN region experienced homelessness. The top 10 Local Government Areas by number of people experiencing homelessness in Victoria in 2016 included Greater Dandenong (n = 1,942), Casey (n = 1280) and Port Phillip (n = 1, 127) (Parliament of Victoria, 2021). Dr Michael Fotheringham from AHURI (Parliament of Victoria, 2021), noted that homelessness is spread across the suburbs beyond Melbourne CBD and is increasingly prevalent across the suburbs. He attributed this increase to overcrowding, lower income levels, and through those higher rates of homelessness or inadequate housing, which he noted was a continuing and increasing effect (Parliament of Victoria, 2021).

Data indicates that Greater Dandenong (121.9 per 10,000 people) and Port Phillip (101.2 per 10,000) have considerably higher rates of homelessness to the rest of the region (Table 3.9). 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.

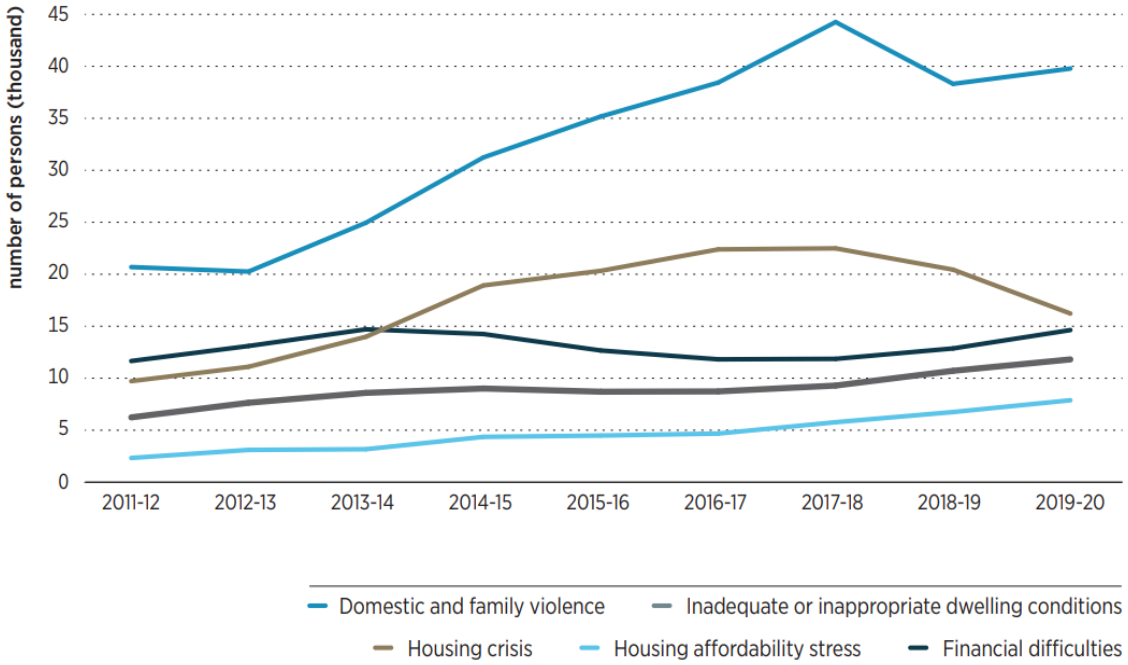
Table 3.9 Estimated people experiencing homelessness by LGA, 2016

LGA	(n)	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	<0.1
Mornington Peninsula	272	21.7
Port Phillip	1,461	101.2
Stonnington	523	35.1
SEMPHN region	6,257	39.1
Victoria	24,825	41.9

Source: (Australian Bureau of Statistics, 2016b)

Figure 3.6 shows the reasons people sought homelessness services between the years 2011–12 and 2019–20, indicating that the top three reasons were domestic and family violence, inadequate or inappropriate housing conditions and financial difficulties. The trend for domestic and family violence shows a rise of 81.5%, growth of 20,813 persons in 2011–12 to 38,540 persons in 2018–19.

Figure 3.6 Main reasons for seeking assistance from homelessness services, 2011-2019



Source: Australian Institute of Health and Welfare, Specialist Homelessness Services Collection (SHSC) data cubes, SHSC demographics data cube, < https://www.aihw.gov.au/reports/homelessness-services/shsc-data-cubes/contents/specialisthomelessness-services-collection-shsc-data-cubes

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[11]. In 2020, life expectancy at birth in Australia was 80.9 years for men and 83.0 years for women. Data from 2016 to 2020 show that the median age at death[12] among males in South East Melbourne was 80.6 years and among females was 85.7 years (Australian Institute of Health and Welfare, 2021f).

Nationally, chronic conditions are the leading causes 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 increase in the ageing population as a result of longer life expectancy and 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 heath inequities across population groups and the life course through a preventive approach.

Leading causes of death

Table 4.1 shows the top 10 leading causes of death in the SEMPHN region between 2016-2020. Dementia including Alzheimer's disease was the leading cause of death among females (accounting for 12.4% of all causes), while coronary heart disease was the leading cause for death among males (accounting for 12.7% of all causes). Ischemic health 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[13] are ranked as the second leading cause of death in the 85 years and over cohort.

The data show there is a substantially higher rate ratio for accidental falls. Falls are Australia's largest contributor to hospitalised injuries and a leading cause of injury deaths for the older population. In

[11] 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.

[12] 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.

[13] 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

2019–20, 42% of hospitalised injuries and 40% of injury deaths were due to falls in the older population. The south eastern 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 the 65 and over age group across both genders.

Table 4.1 Leading causes of death in SEMPHN region, 2016–2020

Cause of death	Deaths (n)	All causes (%)	Rate (per 100,000)	Rate ratio (relative to Australia)
Coronary heart disease	5,076	10.9	50.0	0.89
Dementia including Alzheimer's disease	4,371	9.4	39.9	0.96
Cerebrovascular disease	2,884	6.2	27.6	0.90
Lung cancer	2,331	5.0	25.1	0.89
Chronic obstructive pulmonary disease (COPD)	1,857	4.0	18.7	0.82
Colorectal cancer	1,466	3.2	15.4	0.88
Accidental falls	1,392	3.0	13.0	1.41
Diabetes	1,280	2.8	12.8	0.82
Heart failure and complications and ill-defined heart disease	1,230	2.6	11.6	1.14
Influenza and pneumonia	1,115	2.4	10.3	1.00

Source: (Australian Institute of Health and Welfare, 2021f)

COVID-19 deaths

Since March 2020, Victoria has experienced the largest number and proportion of COVID-19 deaths in Australia (n=3,606, 38.2%). Table 4.2 shows the number and proportion of registered COVID-19 deaths from March 2020 to 31 August 2022 across Australia. This table does not include people who have died from COVID-19 related health issues.

People with pre-existing chronic conditions have a greater risk of developing severe illness from COVID-19 (ABS, 2021a). While pre-existing chronic conditions do not cause COVID-19, they increase the risk of COVID-19 complications and therefore increase the risk of death (ABS, 2021a). Pre-existing chronic conditions were reported on death certificates for 5,387 (57.1%) of the 9,428 deaths due to COVID-19 deaths outlined in this report. Of these 5,387 deaths: Chronic cardiac conditions including coronary atherosclerosis, cardiomyopathies and atrial fibrillation were the most commonly certified co-morbidities, present in 38.1% of the 5,387 deaths. Table 4.2 reports on Deaths due to COVID-19 as released by ABS. The data includes COVID-19 death registrations only. Numbers will differ to disease surveillance systems. Includes all COVID-19 deaths (both doctor and coroner certified) that occurred and were registered by 31 August 2022. Data provided by ABS is provisional and subject to change (ABS, 2021a).

Table 4.2 Deaths due to COVID-19 (August 2022)

Jurisdiction	n	%
Victoria	3,606	38.2
New South Wales	3,375	35.8
Queensland	1,264	13.4
South Australia	506	5.4
Western Australia	369	3.9
Tasmania	146	1.5
Northern Territory	33	0.4
Australian Capital Territory	129	1.4
Australia	9,428	100

Source: Australian Bureau of Statistics, COVID-19 Mortality in Australia: Deaths registered until 31 August 2022, extraction date of 30/09/2022

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, and which increases 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 4.3 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 SEMPHN region have higher rates of risky drinking compared to the Victorian rate (14.4 per 100). These are in descending order: Mornington Peninsula (21.3 per100), 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 region LGAs are similar to the state (22.7 per 100) and national rate (22.8 per 100).

Table 4.3 Health risk factors (modelled estimates) by LGA, 2017-18

LGA	Adult current smokers		Adults who consumed >2 standard alcoholic drinks per day on average		Adults with adequate fruit intake		Adults with low or no exercise in the previous week		Adults who are obese		Adults with high blood pressure	
	n	ASR per 100	n	ASR per 100	n	ASR per 100	n	ASR per 100	n	ASR per 100	n	ASR per 100
Bayside	6,078	7.8	15,713	19.5	44,407	54.9	40,478	50.2	8,449	21.7	18,709	21.2
Cardinia	13,075	17.0	11,486	15.3	36,612	49.6	50,232	67.7	13,663	37.6	16,507	23.6
Casey	37,684	15.1	21,168	8.9	120,526	51.4	174,387	73.6	40.632	35.0	49,275	22.8
Frankston	19,802	18.1	18.793	17.2	49,495	45.5	74,191	68.1	18,978	35.7	23,859	21.8
Glen Eira	12,406	10.4	16,027	13.7	62,924	54.0	70,566	60.2	13,514	24.4	25,970	23.0
Greater Dandenong	24,392	18.9	7,269	5.8	64,385	51.6	98,481	78.2	18,096	28.9	27,612	23.5
Kingston	16,957	13.5	19,625	15.5	64,783	50.7	81,425	64.0	17,568	28.5	27,740	21.4
Mornington Peninsula	19,395	16.3	27,522	21.3	66,884	50.4	77,875	59.5	19,821	30.9	32,923	21.9
Port Phillip	14,514	14.7	17,893	19.0	46,306	50.7	50,672	54.4	11.521	26.0	18,208	22.3
Stonnington	11,116	11.3	15,984	17.0	53,768	57.2	48,702	51.5	9,093	21.0	18,858	22.1
SEMPHN region	176,188	14.6	172.278	14.4	613,399	51.5	771,379	64.5	172,130	29.7	261,074	22.4
Victoria	764,052	15.5	703,026	14.4	2,507,633	51.5	3,228,660	65.7	776,649	32.6	1,095,716	22.7

Source: PHIDU (2021), Social Health Atlas of Australia: Victoria (June 2022 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 provide an indication of the health status (and risk of death) of individuals in the community. 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 4.4 shows the number of persons and age standardised rates per 100 people with two chronic health conditions. Frankston (7.1 per 100), Cardinia (6.6 per 100) and Mornington Peninsula (6.0 per 100) have the highest proportion of people with comorbidities in the SEMPHN region and equal to or above the Victorian rate.

Table 4.4 Number and rate of persons with two chronic health conditions, 2021

LGA	Number of persons	ASR per 100 population
Bayside	5,272	4.6
Cardinia	6,598	6.6
Casey	17,133	5.8
Frankston	9,880	7.1
Glen Eira	7,089	4.9
Greater Dandenong	7,216	4.8
Kingston	8,849	5.3
Mornington Peninsula	12,749	6.0
Port Phillip	4,761	4.9
Stonnington	4,749	4.5
SEMPHN region	84,733	5.5
Victoria	371,819	5.8

Source: Census 2021, Australian Bureau of Statistics (July 2022 release). Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN region (4%).

Arthritis

Arthritis describes a range of inflammatory conditions affecting the bones, muscles, and joints, including osteoarthritis and rheumatoid arthritis (AIHW, 2020a). 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). Table 4.5 shows that the highest rates of arthritis are observed in Frankston (9.4 per 100), Cardinia (9.3 per 100) and Mornington Peninsula (8.5 per 100).

Table 4.5 Prevalence of arthritis by LGA, 2021

LGA	Number of persons	ASR per 100 population
Bayside	7,895	6.5
Cardinia	8,843	9.3
Casey	21,930	8.0
Frankston	12,962	9.4
Glen Eira	9,325	6.5
Greater Dandenong	9,583	6.5
Kingston	12,284	7.2
Mornington Peninsula	19,777	8.5
Port Phillip	5,502	6.0
Stonnington	6,118	5.9
SEMPHN region	114,685	7.5
Victoria	518,625	8.1

Source: Census 2021, Australian Bureau of Statistics (July 2022 release) Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN region (4%).

Asthma

Asthma is a respiratory chronic condition. In Australia, around one in ten Australians (10.7%) had asthma in 2020-21. Table 4.6 shows that higher rates of asthma were observed in Frankston (103.6 per 1,000) and Cardinia (94.2 per 1,000). Analysis shows there is a higher proportion of males aged between 0 – 14 years (n =10, 414; 8%) living with asthma in the SEMPHN region compared to females (n=6,616, 5%) in the same age group (ABS, 2022b). Across all other age groups, there is a higher proportion of women are living with asthma compared to males. Asthma was the anomaly amongst other chronic conditions reported where such high prevalence was observed in the 0-14 years age group (n=17,030, 13%) (ABS, 2022b).

Table 4.6 Prevalence of asthma by LGA, 2021

LGA	Number of persons	ASR per 100 population
Bayside	7,585	7.5
Cardinia	11,054	9.5
Casey	27,974	7.8
Frankston	14,399	10.4
Glen Eira	10,631	7.1
Greater Dandenong	10,161	6.1
Kingston	12,754	8.0
Mornington Peninsula	15,098	8.9
Port Phillip	7,818	7.5
Stonnington	8,005	7.5
SEMPHN region	126,063	8.0
Victoria	543,045	8.3

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 region (4%).

Stroke

Stroke occurs when there is a sudden block of blood supply from a blood vessel to the brain or the blood vessel ruptures and begins to bleed. In 2021, 234,651 people reported having a stroke in Australia. There are multiple lifestyle factors which increase the risk of having a stroke, including high blood pressure, diabetes, physical inactivity, being overweight, drinking alcohol and smoking. Table 4.7 shows that in SEMPHN, there were higher rates of stroke in Cardinia (1.1 per 100), Frankston (1.1 per 100), Casey (1.0 per 100) and Greater Dandenong (1.0 per 100) compared to the Victorian rate (0.9 per 100).

Table 4.7 Prevalence of stroke by LGA, 2021

LGA	Number of persons	ASR per 100 population
Bayside	860	0.7
Cardinia	970	1,1
Casey	2,691	1.0
Frankston	1,583	1.1
Glen Eira	1,048	0.7
Greater Dandenong	1,511	1.0
Kingston	1,549	0.9
Mornington Peninsula	2,264	0.9
Port Phillip	651	0.7
Stonnington	702	0.7
SEMPHN region	13,747	0.9
Victoria	59,855	0.9

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 were living 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 among 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 This is often attributed to genetic, lifestyle, environmental and migration related factors (TEWARI & LIN, 2019). Table 4.8 shows higher rates of diabetes (excluding gestational diabetes) are observed in Casey (6.7 per 100), Greater Dandenong (6.6 per 100), Cardinia (5.3 per 100) and Frankston (51 per 100). Gender and age distribution analysis (excluding gestational diabetes) shows that there is a higher proportion of men (n = 38,145; 54.0%) living with diabetes compared to women (31,884; 46.0%) in SEMPHN region. Males aged between 55 -84 years of age account for 38% (n=26,205) of all people living with diabetes in the region.

Table 4.8 Prevalence of diabetes mellitus (excluding gestational diabetes) by LGA, 2021

LGA	Number of persons	ASR per 100 population
Bayside	3,087	2.6
Cardinia	5,182	5.3
Casey	18,991	6.7
Frankston	7,140	5.1
Glen Eira	5,619	3.9
Greater Dandenong	9,655	6.6
Kingston	7,241	4.3
Mornington Peninsula	7,725	3.5
Port Phillip	2,572	2.7
Stonnington	2,808	2.8
SEMPHN region	70,253	4.6
Victoria	303,368	4.7

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 region (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 condition (AIHW, 2021). There is higher prevalence of cardiovascular conditions observed in males and 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 compared with those in the least disadvantaged areas (6.4% and 4.8%, respectively).

Higher rates of cardiovascular conditions were observed in Frankston (4.3 per 100), Cardinia (4.2 per 100) and Casey (4.2 per 100). These rates are higher than the Victorian rate of 3.8 per 100 (Table 4.9).

Table 4.9 Prevalence of cardiovascular conditions by LGA, 2021

LGA	Number of persons	ASR per 100 population
Bayside	4,183	3.4
Cardinia	3,814	4.2
Casey	10,841	4.2
Frankston	5,851	4.3
Glen Eira	5,046	3.5
Greater Dandenong	5,097	3.5
Kingston	6,327	3.7
Mornington Peninsula	9,435	3.9
Port Phillip	2,704	3.1
Stonnington	3,219	3.1
SEMPHN region	56,749	3.7
Victoria	243,111	3.8

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 region (4%).

Lung conditions including Chronic Obstructive Pulmonary Disorder (COPD) and emphysema

Chronic Obstructive Pulmonary Disorder is a group of breathing-related diseases affecting the lungs, including emphysema and chronic bronchitis. COPD is more prevalent in people aged 45 and First Nations peoples (AIHW, 2020b). 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 (13.0%) 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 (Australian Bureau of Statistics, 2020). Prevalence was higher in the lowest socioeconomic area compared with those 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, although in 2017-18 high prevalence (ASR per 100) was observed in Frankston, Cardinia and Port Phillip (Table 4.10).

Table 4.10 Prevalence of lung conditions incl. COPD or emphysema by LGA, 2021

LGA	Number of persons	ASR per 100 population
Bayside	1,308	1.1
Cardinia	1,735	1.9
Casey	4,052	1.5
Frankston	2,881	2.1
Glen Eira	1,453	1.0
Greater Dandenong	1,807	1.2
Kingston	2,252	1.3
Mornington Peninsula	3,652	1.5
Port Phillip	1,048	1.2
Stonnington	932	0.9
SEMPHN region	21,142	1.4
Victoria	97,278	1.5

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 region (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 of the SEMPHN region were living with some form of cancer including those in remission. Of this group, 22,523 (52.0%) were females. Table 4.11 shows that higher rates were observed in Mornington Peninsula (3.4 per 100), Bayside (3.2 per 100) and Frankston (3.2 per 100). Gender and age analysis indicates a higher prevalence among persons aged between 55 and 84 years (n =12,725; 29.0%) and gender distribution is consistent across all age groups with prevalence increasing across both males and females over 55 years of age.

Table 4.11 Prevalence of cancer by LGA, 2021

LGA	Number of persons	ASR per 100 population
Bayside	3,839	3.2
Cardinia	2,861	3.0
Casey	6,921	2.5
Frankston	4,369	3.2
Glen Eira	4,006	2.8
Greater Dandenong	3,002	2.0
Kingston	4,844	2.9
Mornington Peninsula	7,867	3.4
Port Phillip	2,601	2.9
Stonnington	3,072	3.0
SEMPHN region	43,488	2.9
Victoria	179,331	2.8

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 region (4%).

Analysis of mortality data for the SEMPHN catchment also showed that between 2016 and 2020, cancers were among the top 10 causes of death in the region, with lung cancer ranking as fourth, accounting for 5% (ASR: 2.5 per 100) of all causes and colorectal cancer ranking as sixth, accounting for 3.2% (ASR: 1.5 per 100) of all causes of death in the region.

Cancer screening programs are a way to detect cancer in the early stages and can assist in rates of survival and better health outcomes. Some cancers can be detected through screening, which allows for early detection, intervention, and treatment. Australia has three national cancer screening programs:

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

Table 4.12 Cancer screening participation rates in the SEMPHN region by LGA, 2022

LGA	Cancer screening participation		
	Bowel Cancer (%) (2019-2020)	Breast Cancer (%) (2019)	Cervical Cancer (%) (2018)
Bayside	48.5	48.1	68.5
Cardinia	43.8	44.4	52.8
Casey - North	41.2	44.7	55.7
Casey - South	37.7	42.0	49.9
Dandenong	38.8	42.4	53.3
Frankston	40.3	41.4	53.4
Glen Eira	41.6	47.2	59.6
Kingston	44.5	47.9	61.6
Mornington Peninsula	48.0	48.7	59.1
Port Phillip	38.2	40.6	57.0
Stonnington - East	44.5	48.7	60.2
Stonnington - West	35.6	37.5	58.0
SEMPHN region	42	44.7	56.7
Victoria	44.6	45.7	62.2

Source: AIHW, Cancer screening programs: quarterly data (15 July 2022), National Cancer Screening Programs participation. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN region (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, who returned a completed screening test within that period or by 30 June of the following year. These numbers have seen a steady increase since 2014 where participations rates have gone up from 37.4% (invited: 154,608) to 42% in 2019 (invited: 362,414). The number of SEMPHN residents who participated in the bowel screening programs in 2019-2020 (n = 152,329), were more than double the SEMPHN residents that participated in 2014 (n = 57,748).

LGAs with lowest screening participation rates in 2019-2020 include Stonnington West (35.6%), Casey – south (37.7%), Port Phillip (38.2%) and Greater Dandenong (38.8%), all well below the average Victorian participation rate of 44%, and national average of 41.8% (Table 4.12).

Breast cancer

Breast cancer screening participation rates were captured women in the eligible population aged 50–74 screened by BreastScreen Australia over 2 calendar years. These numbers have seen a slight dip since 2014 where participations rates have gone up from 48.9% (invited: 187,473) to 44.7% in 2019 (invited: 214,454). Despite an increase in the number of residents invited to participate in these screening programs since 2014, number of women participating has only increased from 91,674 in 2014, to 95,939.

BreastScreen Australia mammograms significantly fell during the COVID-19 pandemic, but numbers have now risen (AIHW, 2020). To protect clients and health care workers from the spread of COVID-19, screening mammograms delivered through BreastScreen Australia were temporarily suspended from late March 2020. They resumed in late April/early May. Australia's other national cancer screening programs (for bowel and cervical cancer) were not suspended (AIHW, 2020).

LGAs with lowest screening participation rates in 2019 include Stonnington West (37.5%), Port Phillip (40.6%), Frankston (41.4%) and Casey South (42%); all well below the average Victorian participation rate of 51.2%, and national average of 52.9% (Table 4.12).

Cervical cancer

Cervical cancer screening rates were measured for women in the eligible population aged 25-75 who had a least one cervical screening test (primary screening or 12-month repeat HPV test) in 2018 to 2021. Available for one year only due as 5-year circle was introduced in 2017. Cervical cancer data is only an estimation of participation won't have actual participation until 5-year participation in the program. Most LGA's in SEMPHN region reported higher than the Victorian Average of 56.7%. LGAs reporting low participation rates in 2018 were Casey – South (49.9%), Cardinia (52.8%), Greater Dandenong (53.3%), Frankston (53.4%) and Casey North (55.7%) (Table 4.12).

Immunisation

Immunisation protects against communicable diseases {Australian Institute of Health and Welfare, 2021 #124}. 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 associated with these. Victoria is one of five jurisdictions that have coverage rates for one-year-olds above the 95% target (Victoria 95.2% at 30 June 2021). Nationally, no state or territory has coverage rates for two-year-olds above the target rate of 95%. Victoria's rate at 30 June 2021 was 93.07%. Victoria is one of four states/territories that have coverage rates for five-year-olds above the target rate of 95% (96.07% at 30 June 2021) (Australian Department of Health, 2021).

Childhood immunisation rates in the SEMPHN catchment are lower than state averages (see Table 4.13). Children living in areas of least socioeconomic disadvantage were slightly more likely than those living in areas of greatest disadvantage to be fully immunised at age two (91% compared with 89%).

Table 4.13 Immunisation coverage for children as of 30 June 2021

Immunisation rates for vaccines in the national schedule	SEMPHN region (%)	Victoria (%)	National (%)
1 year	94.9	95.2	94.9
2 years	92.8	93.1	92.6
5 years	95.8	96.1	95.2

COVID-19 vaccination coverage

Table 4.14 shows that as on 22nd September 2022, rate of active cases by LGA across the region. Frankston (5.9 per 1,000), Mornington Peninsula (5.9 per 1,000) and Cardinia (5.7 per 1,000) have experienced higher rates of active cases compared to other areas of the region.

Table 4.14 Rate of active COVID-19 cases by LGA (as at 22nd September 2022)

LGA	Active cases ASR per 1,000 population
Bayside	4.3
Cardinia	5.7
Casey	5.1
Frankston	5.9
Glen Eira	5.4
Greater Dandenong	4.5
Kingston	5.2
Mornington Peninsula	5.9
Port Phillip	4.2
Stonnington	4.9
Victoria (n = 7,839)	1.2

Source: Coronavirus (COVID-19) Victoria (2022), accessed on 22/09/2022 via https://www.coronavirus.vic.gov.au/latest-covid-19-data

The most popular channel of recieving vaccination doses was though primary care among those above the age of 5 years across SEMPHN region, accouting for 63.6% (n = 3,194,511) of all doses administered until the 22nd of September 2022. Within primary care providers, GPs administered nearly three quarters of doses (n = 2,326,448, 72.8%) , followed by pharmacies (n = 642, 980; 20.0%), other commercial entities (n = 137,672, 4.3%) and community health centres (n = 46, 823; 1.4%) (Department of Health and aged Care, 2022b).

COVID-19 vaccination rates are presented in Table 4.15 showing the proportion of people vaccinated across the SEMPHN region. Port Phillip (19.2%), Stonnington (17.7%), and Casey (17.7%) have substantially higher proportions of unvaccinated residents. All LGAs in the region have a lower proportion of the population with full vaccination coverage compared to the Victorian average (74.3%).

Table 4.15 Proportion of vaccinated persons (over 5 years of age) by LGA, October 2022

LGA	Not vaccinated (%)	1 dose (%)	2 doses (%)	3+ doses (%)
Bayside	5.9	98.9	97.0	71.7
Cardinia	3.5	92.2	89.4	54.7
Casey	17.7	94.6	91.2	54.1
Frankston	9.3	92.4	90.2	59.6
Glen Eira	10.5	93.8	91.4	65.2
Greater Dandenong	7.7	97.5	93.9	58.1
Kingston	8.9	95.5	93.4	65.4
Mornington Peninsula	5.7	93.4	91.5	64.8
Port Phillip	19.2	91.4	89.3	65.3
Stonnington	17.7	92.7	90.6	68.7
SEMPHN region	11.4	94.4	91.7	61.3
Victoria	n.p.	97.7	96.6	74.3
n.p. not publishable because of small numbers, confidentiality, or other concerns about the quality of the data. Data for Victoria is calculated for people aged 16 and over (as on 19th October 2022)				

Source: Australian Government, Department of Health and Aged Care, data updated on 13th October 2022.

Figure 4.1 identifies summary rates[14] for Port Phillip (44.9 per 1000), Mornington Peninsula Shire (44.0 per 1000), Cardinia (42.9 per 1000) as LGAs of high concern with high rates of unvaccinated people and high active cases in the LGAs. Bayside and Greater Dandenong come up as LGAs of lower concern with lower rates of unvaccinated populations or low case numbers in the community.

[14] Summary Rate is calculated by combining the rate of active cases per LGA and rate of unvaccinated population per LGA (each per 1000 population). Each rate has been multiplied by 0.5 (denoting the coefficient of importance of all factors used).

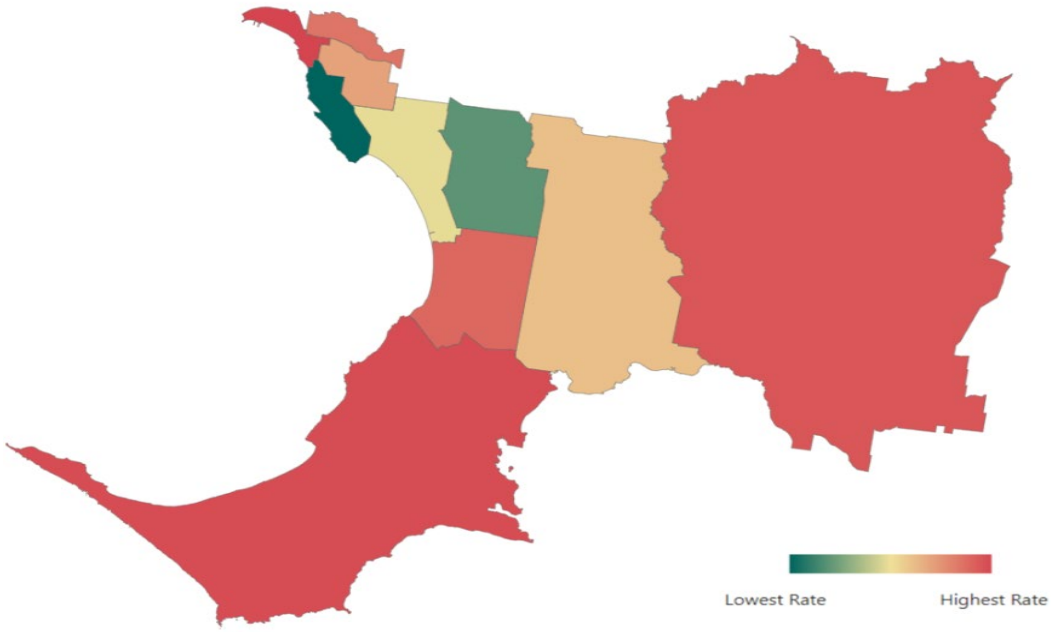


Figure 4.1 COVID-19 rate of unvaccinated population by LGA (rate per 1,000 population as of 13th October 2022)

Maternal and child health

Fertility

In 2020, Victoria's fertility rate[15] was approximately 2 babies per woman, below the Australia-wide total fertility rate (TFR) of 1.66. The TFR for Aboriginal and Torres Strait Islander mothers in Australia in 2019 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 babies per woman. There were 78,463 births registered in Victoria in 2019, a decrease of 1,212 births (1.5%) since 2018. In Victoria, women aged 30-34 continue to have the highest fertility rate, followed by women aged 25-29 (Women's Health Atlas, 2020). Half of LGAs in the SEMPHN region had fertility rates higher than the Victoria average (1.53) (Table 4.16).

[15] The Total Fertility Rate (TFR) measures the average number of babies born to a woman throughout her reproductive lifetime.

Table 4.16 Number of births and fertility rates by LGA, 2020

LGA	Estimated resident population	Number of births	Age-specific fertility rate[16]
Bayside	10,7541	789	1.52
Cardinia	116,193	1,721	1.99
Casey	364,600	5,213	1.89
Frankston	143,338	1,726	1.77
Glen Eira	158,216	1,549	1.29
Greater Dandenong	168,362	2,031	1.72
Kingston	167,293	1,721	1.53
Mornington Peninsula	168,862	1,417	1.75
Port Phillip	116,476	1,124	0.98
Stonnington	118,614	895	0.9
Victoria	6,694,884	73,543	1.53

Source: PHIDU, Total fertility rate (2020)

Smoking during pregnancy

Overall, a lower proportion of women smoked during pregnancy across the SEMPHN region compared to the Victorian average (7.1 compared with 8.0 per 100), but the proportions of women in Frankston (12.0 per 100), Cardinia (11.0 per 100) and Mornington Peninsula (9.5 per 100) who smoke during pregnancy are concerning (Table 4.17).

[16] 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 4.17 Women who smoked while pregnant by LGA, 2020

LGA	Smoked during the first 20 weeks of pregnancy (n)	Women who gave birth (n)	Smoked during the first 20 weeks (%)
Bayside	14	771	1.8
Cardinia	192	1,752	11.0
Casey	480	5,379	8.9
Frankston	208	1,730	12.0
Glen Eira	44	1,638	2.7
Greater Dandenong	165	2,493	6.6
Kingston	39	1,345	2.9
Mornington Peninsula	137	1,436	9.5
Port Phillip	22	940	2.3
Stonnington	14	771	1.8
SEMPHN region	1,328	18,612	7.1
Victoria	6,078	76,261	8.0

AIHW (Australian Institute of Health and Welfare). National Perinatal Data Collection (NPDC) 2020, 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, 2020.

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 in pregnancy, fewer interventions in late pregnancy and positive child health outcomes. Most mothers (93.4%) who gave birth in 2020 attended five or more antenatal visits, with lowest proportions observed in Mornington Peninsula (87.4%) and Frankston (89.3%) (Australian Institute of Health and Welfare, 2020d) (Table 4.18).

Table 4.18 Women who attended 5 or more antenatal visits by LGA, 2020

LGA	5 or more antenatal visits (n)	Total women who gave birth (n)	5 or more antenatal visits (%)
Bayside	709	749	94.7
Cardinia	1,645	1,722	95.5
Casey	4,960	5,251	94.5
Frankston	1,425	1,596	89.3
Glen Eira	1,504	1,588	94.7
Greater Dandenong	2,279	2,448	93.1
Kingston	1,126	1,242	90.7
Mornington Peninsula	1,198	1,371	87.4
Port Phillip	1,081	1,118	96.7
Stonnington	874	906	96.5
SEMPHN region	16,801	17,991	93.4
Victoria	70,142	76,261	92.8

Source: AIHW (Australian Institute of Health and Welfare). National Perinatal Data Collection (NPDC) 2020, 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, 2020

The National Institute of Health and Clinical Excellence (NICE) guidelines suggest that the first antenatal visit occurs before 10 weeks 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 region who gave birth attended an antenatal visit in the first trimester (less than 14 weeks). The lowest rates were observed in Port Phillip (n = 777, 68.2%) and Stonnington (West) (n = 441, 74.4%).

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, 2020; the overall rate of teenage pregnancies is 3.9 births per 1,000 teenage mothers in the SEMPHN region. However, pockets of higher rates are observed in Cardinia and Greater Dandenong reporting 7.3 births per 1,000 and 6.4 births per 1000 teenage mothers respectively. Data in several LGAs have not been published due to low numbers and concerns about maintaining confidentiality and potential data quality (Table 4.19).

Table 4.19 Teenage mothers aged 15 – 19 years by LGA, 2020

LGA	Teenage mothers (n)	Females aged 15–19 years (n)	Births per 1,000 teenage mothers
Bayside	n.p.	3,629	n.p.
Cardinia	26	3,584	7.3
Casey	64	11,106	5.8
Frankston	19	3,768	5.0
Glen Eira	n.p.	4,470	n.p.
Greater Dandenong	35	5,465	6.4
Kingston	n.p.	3,526	n.p.
Mornington Peninsula	n.p.	1,623	n.p.
Port Phillip	19	4,719	4.0
Stonnington	n.p.	2,544	n.p.
SEMPHN region	175	44,434	3.9
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) 2020, Table 5.10: Teenage mothers who gave birth, aged between 15 and 19, by Statistical Area Level 3 of mother's usual residence, 2020

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 in infancy. Long-term health effects can include poor cognitive development and risk of developing chronic diseases later in life.

In 2020, 6.3% (n = 1,194) of total births in the SEMPHN region (N = 18,849) had low birthweight. Higher proportions of low birthweight births were observed in Greater Dandenong (7.4%, n=186), followed by Cardinia (7.1%, n=126) and Casey (7.1%, n=384) (Table 4.20).

Table 4.20 Low birthweight births, by LGA, 2020

LGA	Low birthweight births (n)	Total births (n)	**Proportion of low** birthweight births (%)
Bayside	39	788	4.9
Cardinia	126	1,763	7.1
Casey	384	5,441	7.1
Frankston	78	1,749	4.5
Glen Eira	99	1,667	5.9
Greater Dandenong	186	2,503	7.4
Kingston	96	1,365	7.0
Mornington Peninsula	63	1,459	4.3
Port Phillip	56	1,157	4.8
Stonnington	67	957	7.0
SEMPHN region	1,194	18,849	6.3
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) 2020, Table 5.11: Low birthweight live births, by Statistical Area Level 3 of mother's usual residence, 2020

Unplanned service utilisation

Emergency department presentations

Table 4.21 shows that Frankston (28,980.9 per 100,000), Cardinia (26,425.1 per 100,000) and Mornington Peninsula (26,604.4 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 lowest rates of emergency department presentations in the region (14,719.8 per 100,000) followed by Glen Eira (16,166.8 per 100,000).

Table 4.21 Emergency department presentations by LGA, 2018-19

LGA	Emergency presentations		Urgent presentations		Semi-urgent presentations		Non-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	2,714	2,414.8	8,314	7,646.8	7,904	7,439.4	889	840.4	19,918	18,455.2
Cardinia	5,410	5,043.2	13,491	12,162.8	9,271	8,007.5	1,396	1,219.7	29,721	26,425.1
Casey	15,770	4,752.6	38,226	11,074.4	25,045	6,895.3	3,631	1,004.3	83,082	23,654.0
Frankston	8,047	5,576.9	18,650	12,994.5	12,545	8,774.0	2,011	1,411.0	41,542	28,980.9
Glen Eira	3,762	2,242.7	10,778	6,888.3	9,175	5,842.7	1,472	928.9	25,328	16,166.8
Greater Dandenong	6,846	4,112.8	17,038	10,069.3	12,523	7,358.4	1,993	1,173.3	38,664	22,849.7
Kingston	5,888	3,447.7	15,802	8,938.1	11,910	7,175.2	1,472	886.4	34,539	15,452.5
Mornington Peninsula	8,809	4,687.2	20,214	11,265.9	15,320	9,111.6	2,000	1,213.4	46,629	26,604.4
Port Phillip	2,572	2,306.7	10,036	8,940.9	10,210	9,078.7	2,203	1,861.5	25,159	22,316.1
Stonnington	1,935	1,658.2	7,074	5,984.6	6,720	5,752.4	1,503	1,241.0	17,330	14,719.8
SEMPHN region	62,039	3,846.7	159,551	9,840.8	121,051	7,439.4	18,645	1,142.5	363,354	22,386.4
Victoria	231,589	3,503.6	670,806	10,101.9	626,977	9,424.3	119,577	1,793.2	1,659,943	24,988.6

Source: PHIDU, Torrens University 2021, Social Health Atlas of Australia, Table: Emergency department presentations, by triage category; Emergency department presentations, by principal diagnosis

Potentially preventable hospitalisations

Table 4.22 shows that hospital admission rates vary across LGAs.

- Hospital admissions for potentially preventable conditions are higher in Greater Dandenong (2,941.9 per 100,000), Casey (2,723.4 per 100,000), Cardinia (2,642.7 per 100,000) Frankston and (2,621.7 per 100,000) – which are above the Victorian rate.
- The rate of hospital admissions in the region for chronic disease mirrors that of Victoria. However, there is a higher rate of admissions in the cluster of LGAs in the outer south-eastern area. These areas are frequently identified as having 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 (1,485.8 per 100,000), Greater Dandenong (1,397.0 per 100,00), Cardinia (1,361.4 per 100,000) and Frankston (1,287.4 per 100,000).
- Admissions for vaccine-preventable conditions in Greater Dandenong are twice the Victorian rate. Admissions in 2019-20 for all hospitals (ASR per 100,000) were highest in Greater Dandenong (444.3 per 100,000), Stonnington (260.8 per 100,000) and Casey (224.4 per 100,000).

Table 4.22 Potentially preventable hospitalisations – public hospitals, by LGA, 2019-20

LGA	Hospital admissions for potentially preventable conditions		Hospital admissions for chronic conditions		Hospital admissions for vaccine-preventable conditions	
	(n)	ASR per 100,000	(n)	ASR per 100,000	(n)	ASR per 100,000
Bayside	1,419	1,344.9	622	499.2	152	130.2
Cardinia	2,539	2,642.7	1,282	1,361.4	180	175.6
Casey	7,954	2,723.4	4,173	1,485.8	699	224.4
Frankston	3,478	2,621.7	1,859	1,287.4	245	168.9
Glen Eira	2,341	1,684.7	1,150	754.1	272	177.1
Greater Dandenong	4,413	2,941.9	2,230	1,397.0	726	444.3
Kingston	3,079	1,958.8	1,553	875.2	317	182.5
Mornington Peninsula	3,809	1,703.5	1,973	872.2	255	189.1
Port Phillip	2,021	2,066.6	872	870.7	283	125.6
Stonnington	1,282	2,062.9	598	524.4	145	260.8
SEMPHN region	32,417	2,032.3	16,384	1,035.7	3,289	205.4
Victoria	142,102	2,162.5	96,814	1,516.4	13,139	209.5

Source: PHIDU, Torrens University 2023, Social Health Atlas of Australia, Table: Admissions by principal diagnosis – Persons; Potentially preventable hospitalisations.

After hours

SEMPHN commissions accredited general practices across the SEMPHN catchment to extend their opening hours on weekdays and weekends. After-hours GP attendances are higher in the SEMPHN region compared to other PHNs across Australia (SEMPHN, 2017). For individuals in the region, attendance at after-hour services is higher than the national rate. Analysis also highlights LGAs where services are most needed. This funding also helps increase general practice or nursing service capacity after hours and helps enhance connections between local services and community (SEMPHN, 2017). In SEMPHN region, the age-standardised proportion of adults in the region who saw a GP after-hours in the preceding 12 months was 10.9%, which was the third highest proportion of all PHNs and much higher than the national proportion of 8.6% (2016-17) (AIHW, 2020c). The age-standardised rate of after-hours GP attendances per person in the region was 0.66, higher than the national rate of 0.49 (2016-17) (Australian Institute of Health and Welfare, 2018c). In 2017, SEMPHN undertook an after-hours needs analysis. The analysis factored in key social determinants, priority populations, indicators of health status and outcomes, utilisation of after-hours primary health care, hospital and emergency department services, and after-hours service availability. The results were used to rank the 12 locations at SA3 level within the region based on need (from highest to lowest need).

1. Cardinia
2. Casey (South)
3. Dandenong
4. Frankston
5. Mornington Peninsula
6. Kingston
7. Casey (North)
8. Glen Eira
9. Bayside
10. Stonnington (West)
11. Stonnington (East)
12. Port Phillip

In 2016-17, the age-standardised proportion of adults who needed to see a GP but did not in the preceding 12 months was 15.2%, which slightly higher than the national proportion of 14.8% (Australian Institute of Health and Welfare, 2018c). Based on 2016-17 figures (Australian Institute of Health and Welfare, 2018c), expenditure on after-hours GP attendances in the region are higher per person than the national figure. The aged-standardised Medicare benefits expenditure on after-hours GP attendances was $40.52 per person, compared with $32.42 nationally (Australian Institute of Health and Welfare, 2018c).

SEMPHN funds accredited general practices across the SEMPHN catchment to increase and sustain effective and accessible face to face primary care (General Practitioner (GP) and Registered Nursing services). Analysis of consumer experience survey of After-hours clinics conducted in 2022 (SEMPHN, 2022a), which surveyed almost 900 consumers, identified that most consumers preferred to access SEMPHN After hours clinics during weekdays (645, 78.5%); with 385 (42.8%) preferring to access clinics before or after business hours during the week, and 264 (29.7%) preferring to access afterhours clinics during normal 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. This could be as almost 48.5% 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 cost of medication (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.

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 last 12 months, one in five Australians (21.4%) experienced a mental health disorder (AIHW, 2022m), and one in six Australians (17.0%) is currently experiencing depression, anxiety or both (Beyond Blue, 2022). In Australia, there are different population and age groups of people who are more likely to experience mental ill health during their lifetime (AIHW, 2022l). These include people who live in regional and remote areas, First Nations peoples, people who are Culturally and Linguistically Diverse (CALD) and the LGBTIQA+ community (Mental Health Australia, 2022).

Life satisfaction

Life satisfaction is a self-reported measure of a person's wellbeing and happiness. Life satisfaction was measured by asking survey respondents to indicate how satisfied they were with their lives and choose their 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).

Life satisfaction reduced in Australia from a score of 7.5 out of 10 in 2019 to 7.2 in mid-2020. Table 5.1 shows lower rates of life satisfaction across half the SEMPHN region compared to the Victorian average. Low rates of high to very high life satisfaction are observed in Greater Dandenong (69.9%), Casey (69.9%). Port Phillip (70.7%) and Kingston (72.9%).

Table 5.1 Life satisfaction by LGA, 2020

LGA	Life satisfaction	
	Low to medium (0-6) (%)	High to very high (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
SEMPHN region	22.5	76.4
Victoria	22.3	76.5
Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.		

Source: VPHS 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 has increased since the COVID-19 pandemic for Victorians (Australian Bureau of Statistics, 2021c). In June 2021, more than one in four (27%) people living in Victoria experienced high or very high levels of psychological distress, compared with 18% in the rest of Australia (Australian Bureau of Statistics, 2021c). Table 5.2 indicates that there are higher levels of psychological distress (score of 22 or above) in Port Phillip (27.3%), Mornington Peninsula (26.3%), Casey (25.5%) and Frankston (24.4%).

Table 5.2 Psychological distress (K10) by LGA, 2020

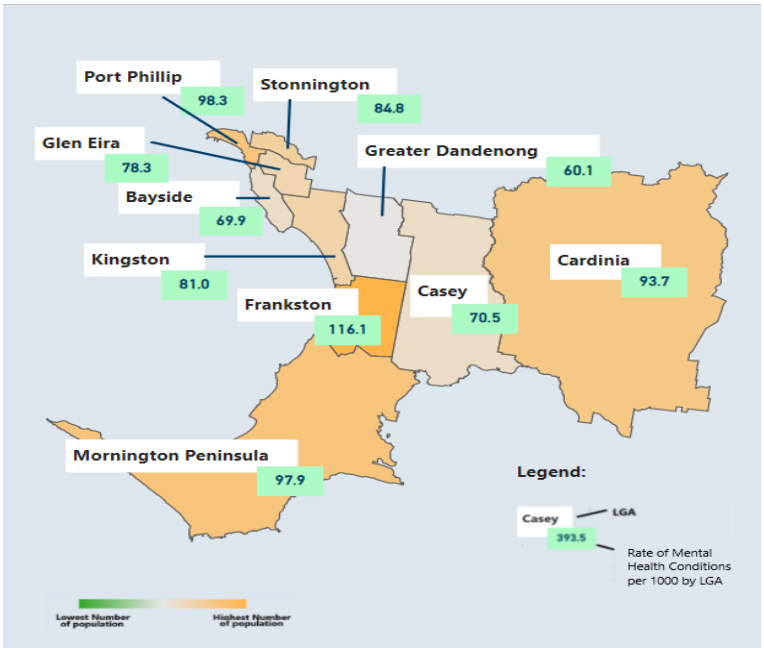
LGA	Low (K10: < 16) (%)	Moderate (K10: 16–21) (%)	High (K10: 22–29) (%)	Very high (K10: 30+) (%)
Bayside	52.3	30.8	7.2	6.8
Cardinia	52.5	23.3	13.6	6.8
Casey	42.6	25.3	12.9	12.6
Frankston	42.9	27.2	12.2	12.2
Glen Eira	48.4	30.8	15.4	2.6
Greater Dandenong	47.1	21.5	16.4	7.6
Kingston	46.6	25.8	16.5	7.2
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
SEMPHN region	47.7	26.0	14.0	8.4
Victoria	44.9	26.4	15.2	8.3
Estimates may not add to 100% due to a proportion of 'don't know' or 'refused to say' responses, not reported here.				

Source: VPHS Dashboard, 2020; Estimates by LGA (MENTAL HEALTH and WELLBEING - Level of psychological distress)

Mental health conditions

As of 30 June 2021, nearly one in ten people (n=129,277, 82.7 per 1,000) in the SEMPHN region were experiencing a mental health condition (including depression or anxiety). These estimates are slightly lower in comparison to Victoria (n = 571,149; 87.8 per 1,000 people), and Australia (n = 2,231,546, 87.7 per 1000) estimates of people living with a mental health condition as identified in the 2021 Census. Higher rates of mental health conditions are 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 5.1). Age and gender profiles of people living with a mental health condition in the SEMPHN region 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).

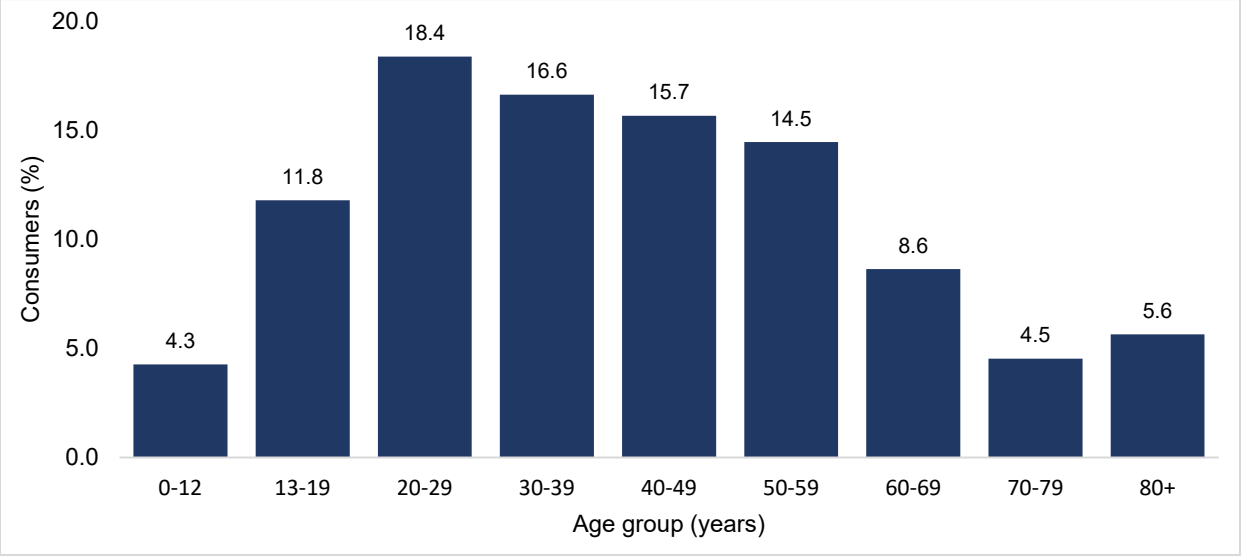
Figure 5.1 Prevalence of mental health conditions by LGA, 2021



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 region (4%).

Figure 5.2 describes the age distribution of consumers receiving Mental health services commissioned by SEMPHN. Consumers between the ages of 20-29 years account for almost 18.4%, followed by ages 30-39 years (16.6%) and 40-49 years (15.7%) of all consumers receiving support for mental health through SEMPHN commissioned services.

Figure 5.2 Age distribution of SEMPHN mental health service consumers, FY 2021/22

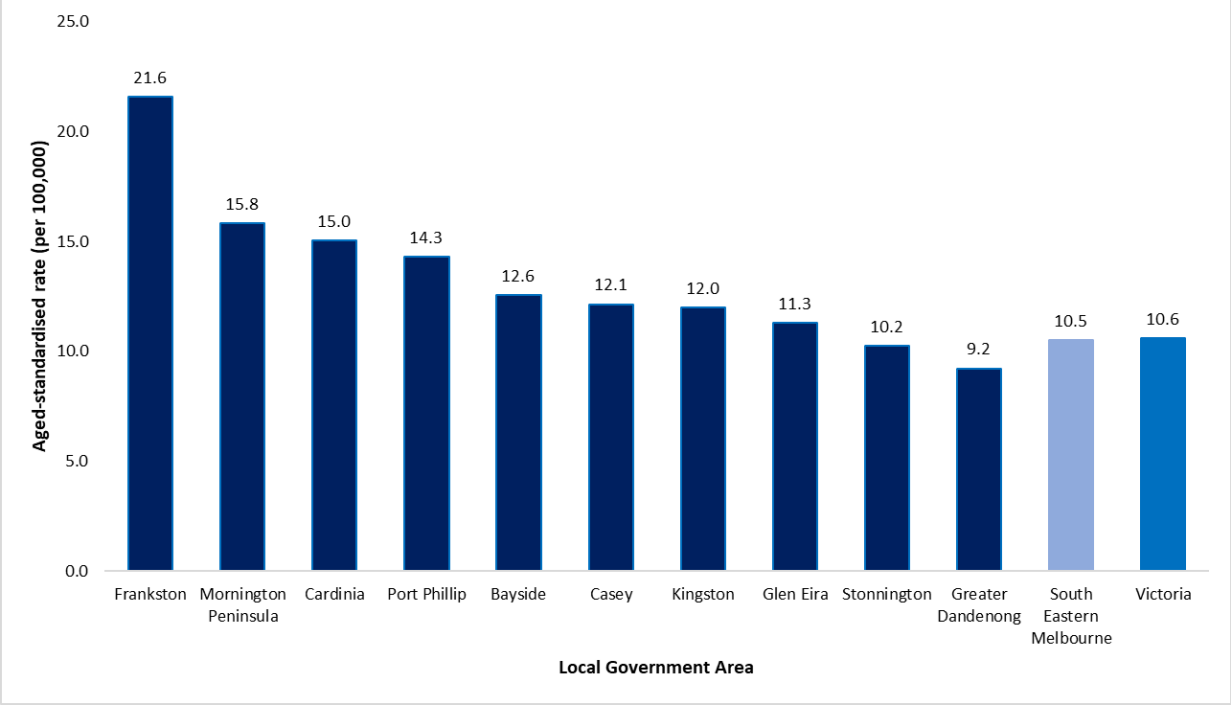


Source: rediCASE data, SEMPHN Mental Health Report (Data dumps: 01/07/2019 - 31/07/2022)

Suicide and self-harm

In 2021, 3,144 Australians died by suicide. Every day, eight to nine Australians take their life, three 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 FY 2021-22, 14% (n = 533) of SEMPHN-commissioned mental health referrals had consumers who had reason for referral cited as recent history of suicide attempt or at suicide risk (South Eastern Melbourne PHN, 2021b). The rate of death by suicide and self-inflicted injuries in the SEMPHN region (10.5 per 100,000) is just below the Victorian rate (10.6 per 100,000). Higher rates of death by suicide and self-inflicted injuries are observed in Frankston (21.6 per 100,000), Mornington Peninsula (15.8 per 100,000) and Cardinia (15.0 per 100,000) (Figure 5.3).

Figure 5.3 Deaths by suicide, (0-74 years) by LGA, 2016-2020



Source (Public Health Information Development Unit, 2021c).

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). Table 5.3 shows that comparative to Victoria, the SEMPHN region has higher rates of intentional self-harm hospitalisations for both men and women with the exception of females aged 0-24 years (AIHW, 2021e).

Table 5.3 Intentional self-harm hospitalisations by age and sex 2020–21

Age group (years)	Females			Males		
	SEMPHN region (n)	SEMPHN region (ASR per 100,000)	Victoria (ASR per 100,000)	SEMPHN region (n)	SEMPHN region (ASR per 100,000)	Victoria (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
Total	1,106	133.4	127.3	518	64	59.3

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

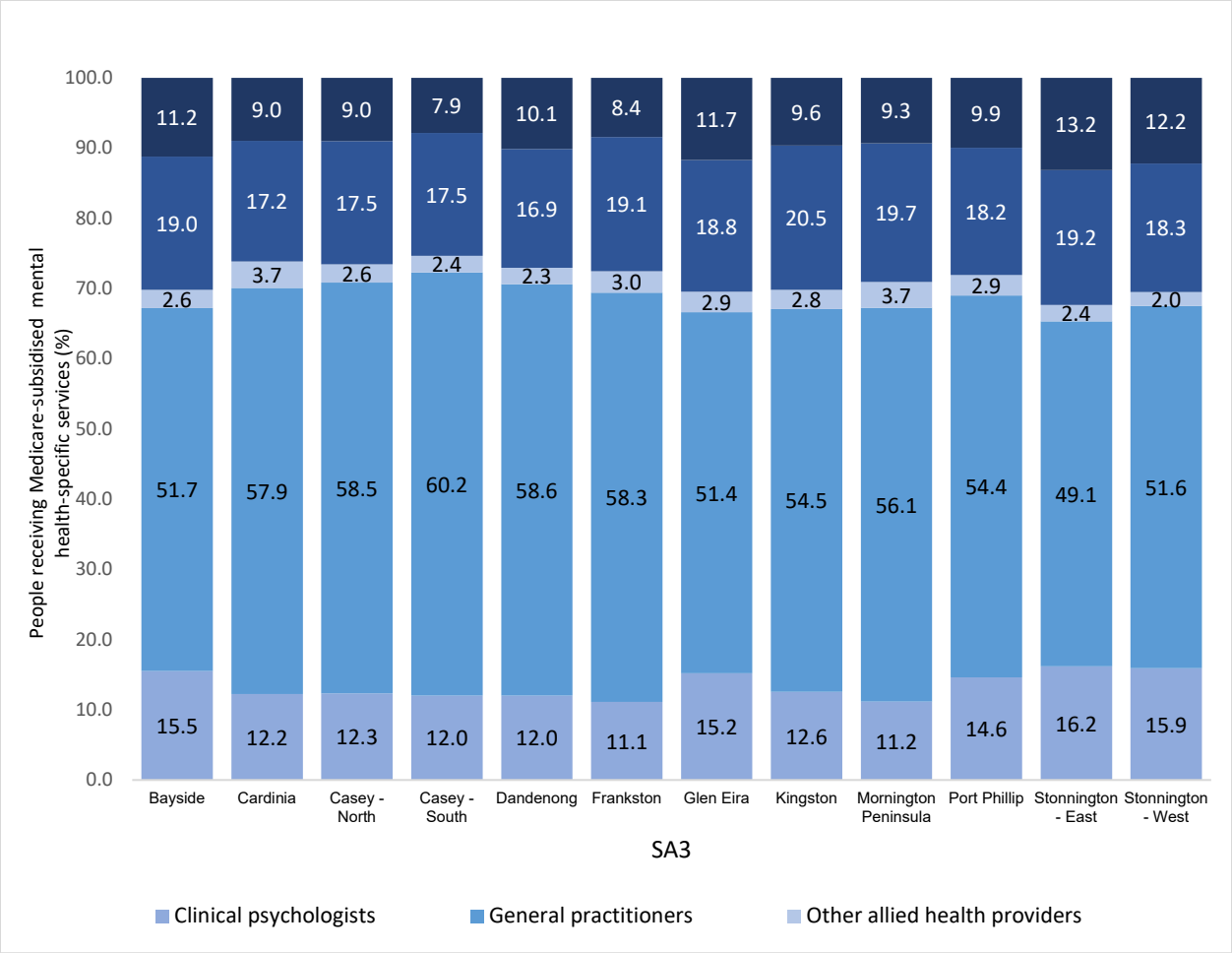
In 2020–21, 2.9 million Australians (11.2% of the population) received Medicare-subsidised mental health-specific services[17]. The number of people receiving Medicare-subsidised mental health-specific services increased from 1.5 million (6.9% of Australians) in 2010–11 to 2.9 million (11.2% of Australians) in 2020–21. Victoria and Queensland had the highest proportions of the population receiving services (11.7% of the population) (AIHW, 2022l). In 2020–21, patients in Victoria also reported the highest average number of Medicare-subsidised mental health-specific services per patient (5.4), compared to the national average of 4.9 services per patient.

Figure 5.4 shows high utilisation of MBS mental health-related services in general practice across the SEMPHN region. Across all SA3 levels[18], 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, 2020c).

[17] 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

[18] 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.

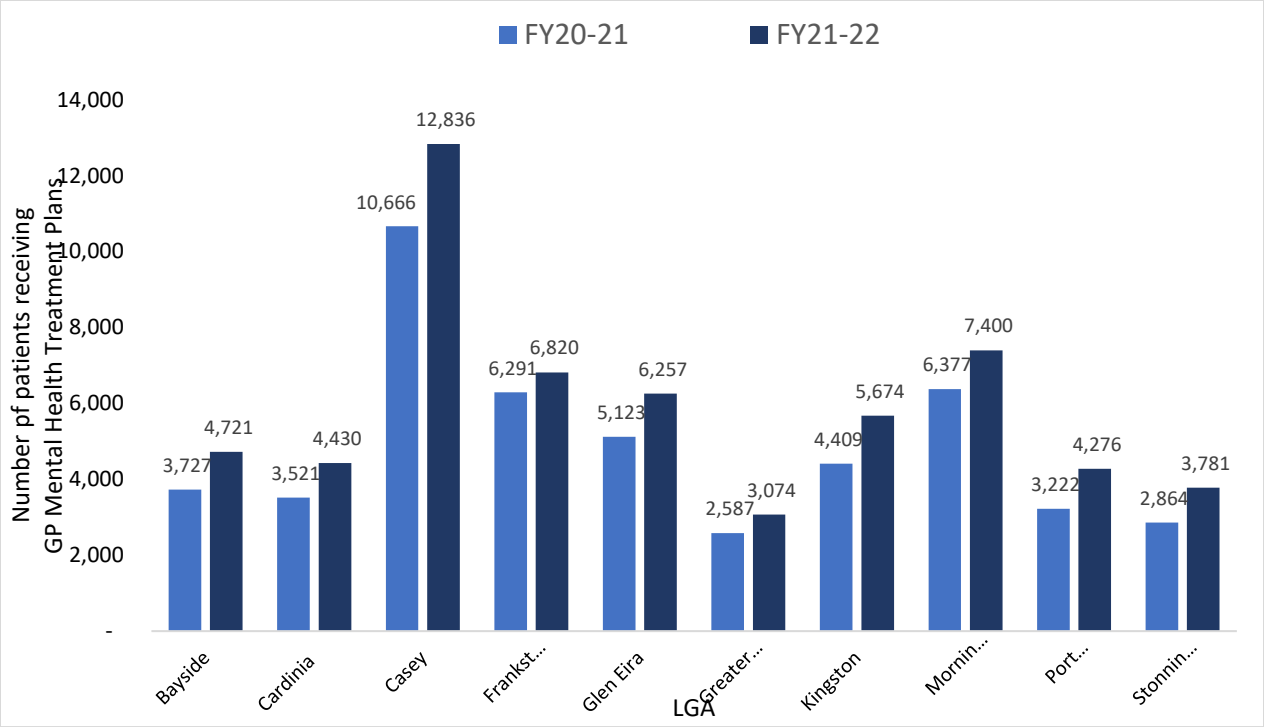
Figure 5.4 Distribution of people receiving Medicare-subsidised mental health-specific services, by SA3 area and provider, 2020–21



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 from a GP to a mental health professional (e.g., psychologist or psychiatrist). In 2019-20, more than 160,000 people in the region accessed any MH-related MBS-subsidised service from a GP, which represents half of the expected number of people to experience mental health concerns (Australian Institute of Health and Welfare, 2021c). Figure 5.5 shows a higher number of patients receiving GP mental health treatment plans in FY 2021-22 compared to the previous financial year. This difference is especially visible in Casey with a 20.3% increase in patients with Mental Health Treatment Plans going from 10,666 in FY 2020-21 to 12,836 in FY 2021-22.

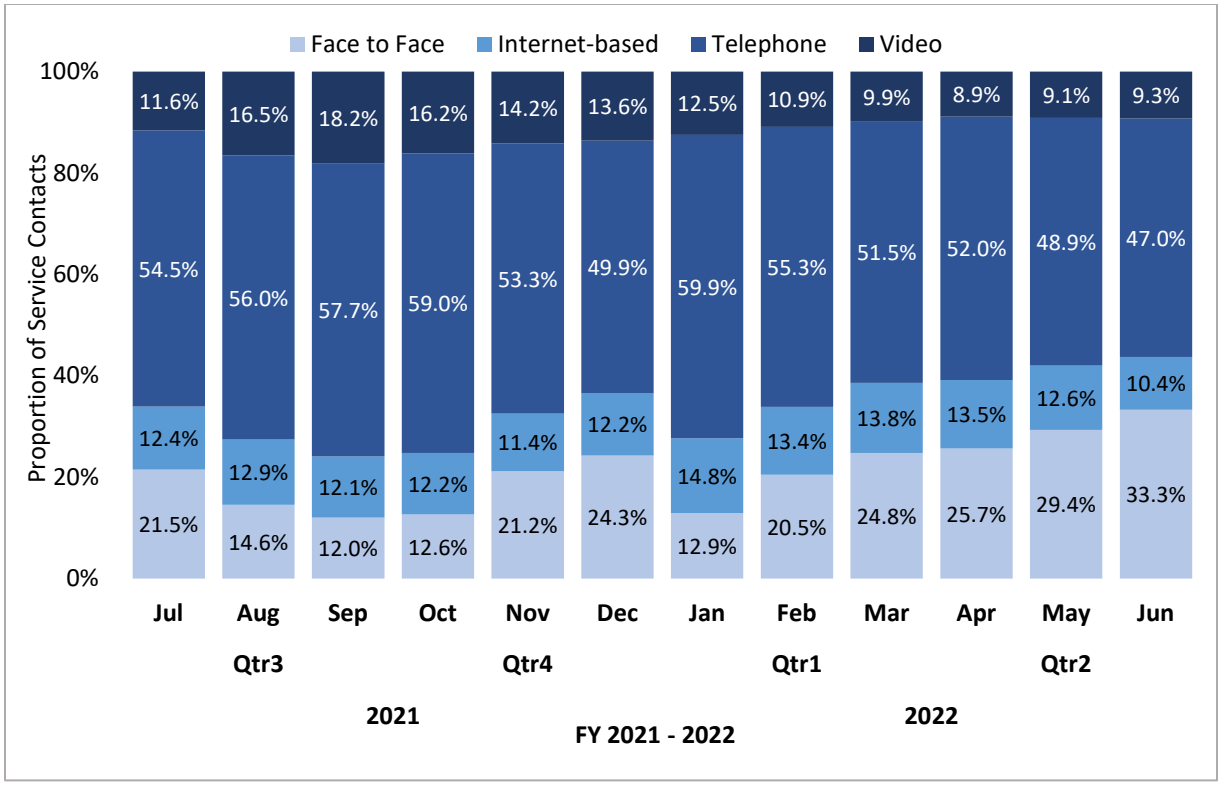
Figure 5.5 Distribution of count of patients receiving GP Mental Health Treatment Plans by LGA, FY20-21 and FY21-22.



Source: (Outcome Health, 2021)

Figure 5.6 shows a continued increase in uptake of delivery of mental health services using telehealth services aid via telephone, internet, or video-based services. Increase in Face-to-Face delivery was observed from 21.5% in July 2021 to 33.3% in June 2022. Telephone based delivery of mental health services remain the most popular mode of mental health service delivery for FY 2021-22.

Figure 5.6 Modes of mental health service delivery from July 2021 to June 2022 in Australia



Source: rediCASE data (episode and service contact data dumps); FY 2019/20 – 2021/22

Emergency departments and hospitals

Table 5.4 shows the number and rate of emergency department presentations and hospital admissions for mental health and self-harm. Frankston (1,479 per 100,000), Greater Dandenong (1,363.9 per 100,000) and Casey (1,029.9 per 100,000) had higher mental health-related emergency department presentations compared to the Victorian rate in 2018-2019. However, rates of admissions into hospitals for persons with mental health related conditions did not mirror this geographically. Higher rates of mental health related hospital admissions were observed in Glen Eira (3,098.5 per 100,000), Bayside (2,233.3 per 100,000) and Frankston (2,212.3 per 100,000). Substantially higher rates of hospital admissions related to intentional self-harm were observed in Frankston (192 per 100,000), Mornington Peninsula (147 per 100,000) and Port Phillip (139 per 100,000).

Table 5.4 Mental health-related emergency department presentations and hospital admissions by LGA, 2018-2019

LGA	Emergency department presentations for mental and behavioural disorders		Admissions for mental health related conditions - All hospitals		Admissions for intentional self-harm, - Public hospitals	
	(n)	ASR per 100,000	(n)	ASR per 100,000	(n)	ASR per 100,000
Bayside	758	733.5	2,400	2,233.3	84	82
Cardinia	1,076	998.0	2,021	1,955.1	68	62
Casey	3,592	1,029.9	5,725	1,737.7	264	74
Frankston	2,085	1,479.0	3,146	2,212.3	268	192
Glen Eira	927	580.8	4,868	3,098.5	144	90
Greater Dandenong	2,351	1,363.9	3,364	2,007.0	170	98
Kingston	1,458	882.5	3,191	1,898.3	132	82
Mornington Peninsula	1,538	978.2	2,639	1,550.5	221	147
Port Phillip	1,111	885.3	2,686	2,168.9	169	139
Stonnington	697	540.4	2,719	2,166.1	107	83
Victoria	61,088	924.3	109,561	1,673.2	6,184	93

Source: PHIDU data, 2018-2019

Head to Health

In the SEMPHN region, Head to Health received 4,916 calls across 1,720 clients between 1st September 2020 and 30 September 2022, with an average of 6.6 calls per day (NWPHN, 2021).

GPs were the main (49.6%, n = 895) referrers to Head to Help, while self-referrals and walk-ins accounted for 25.8% and 2.6%, respectively. More than half of Intake and Referrals were completed with a suicide risk (59%). Of 1,556 referrals where the level of care was assessed via an Intake and Referral, 82.9% required moderate-intensity support, 7.7% required low-intensity support and 8.4% required high-intensity support (NWPHN, 2021).

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 FY 2020-21, 5,848 referrals were made to a SEMPHN-commissioned mental health service, which resulted in commencement of 3,797 episodes of care (South Eastern Melbourne PHN, 2021b). Highest proportions of mental health referrals were for clients from Casey (17.5%), Frankston (15.3%) and Greater Dandenong (13%) (Table 5.5).

Table 5.5 Consumers of SEMPHN-commissioned mental health services by LGA, FY 2020-21

LGA	Consumers (n)	Proportion in LGA (%)
Bayside	265	4.5
Cardinia	456	7.8
Casey	1023	17.5
Frankston	893	15.3
Glen Eira	455	7.8
Greater Dandenong	758	13.0
Kingston	439	7.5
Mornington Peninsula	664	11.4
Port Phillip	625	10.7
Stonnington	270	4.6
SEMPHN region[19]	5,848[20]	100

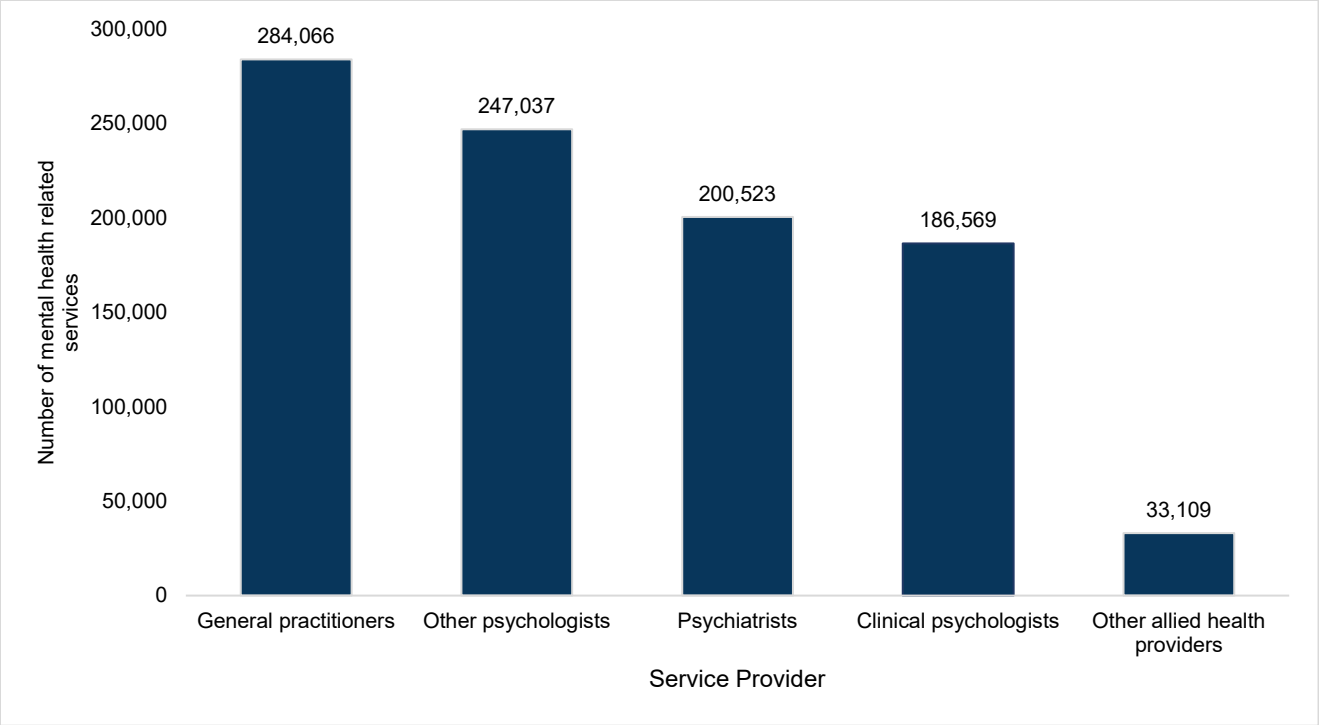
Source: PMHC MDS SVI dashboard, 2020-21

Figure 5.7 shows that General Practitioners provided the largest number of mental health-related funded services compared to mental health professionals. As a profession, GPs provided the highest number of mental health related MBS-funded services in the SEMPHN catchment in 2019-20, followed by other psychologists, psychiatrists (Figure 5.7).

[19] 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.

[20] Includes proportion of consumers who have not stated LGA.

Figure 5.7 Number of mental health-related funded services, by provider type, 2019-20



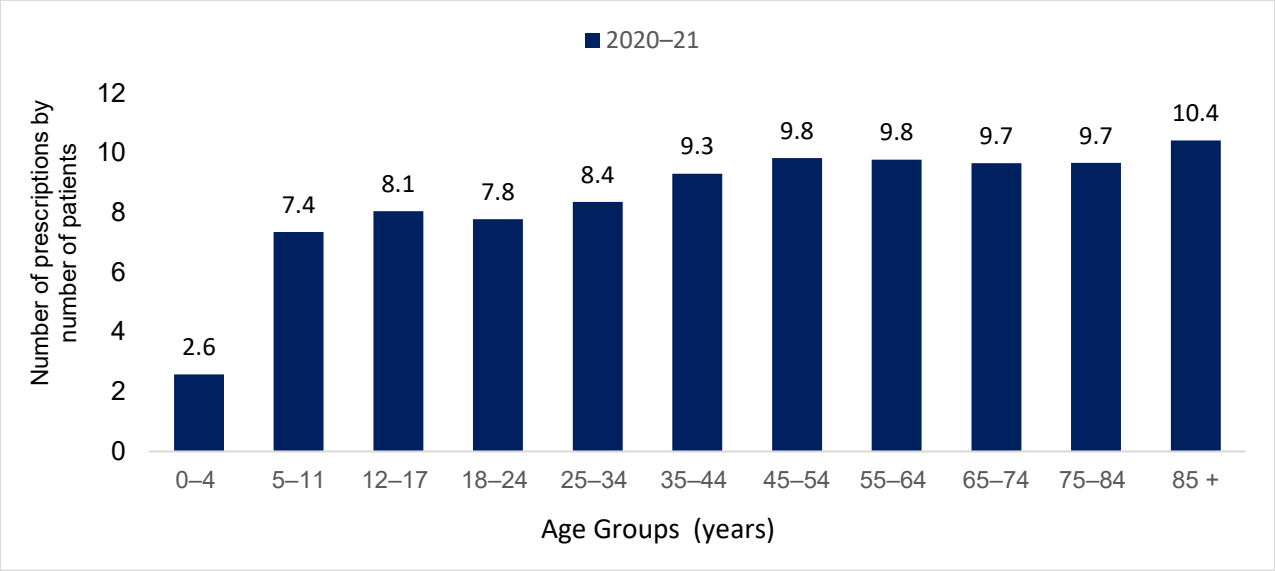
Source: (Australian Institute of Health and Welfare, 2021c)

Mental health-related prescriptions

In 2020-21, 4.5 million patients (17.7% 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 5.8 include Psycholeptics, Antipsychotics, Anxiolytics, Hypnotics, and sedatives, Psychoanaleptics, Antidepressants, and Psychostimulants, agents used for ADHD and nootropics (AIHW, 2021f)[21]. Figure 5.8 below indicates a spike in the proportions of mental health related prescriptions dispensed by patient across all age groups (with the exception of patients between 0-4 years of age) in the year 2020-21. For those above the age of 35 years, the average prescriptions per patient in the SEMPHN region higher than the national average of 9.4 prescriptions per patient, in 2020-21 (AIHW, 2021f).

[21] Table PBS.1: Drug groups defined for this report as mental health-related medications in the PBS and RPBS data

Figure 5.8 Number of mental health related prescriptions dispensed by number of patients across various age groups (SEMPHN region), FY 2020–21



Source: AIHW, Table PBS.23: Patients and mental health-related prescriptions dispensed (subsidised and under co-payment), by PHN and demographic variables, 2016-17 to 2020–21

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.

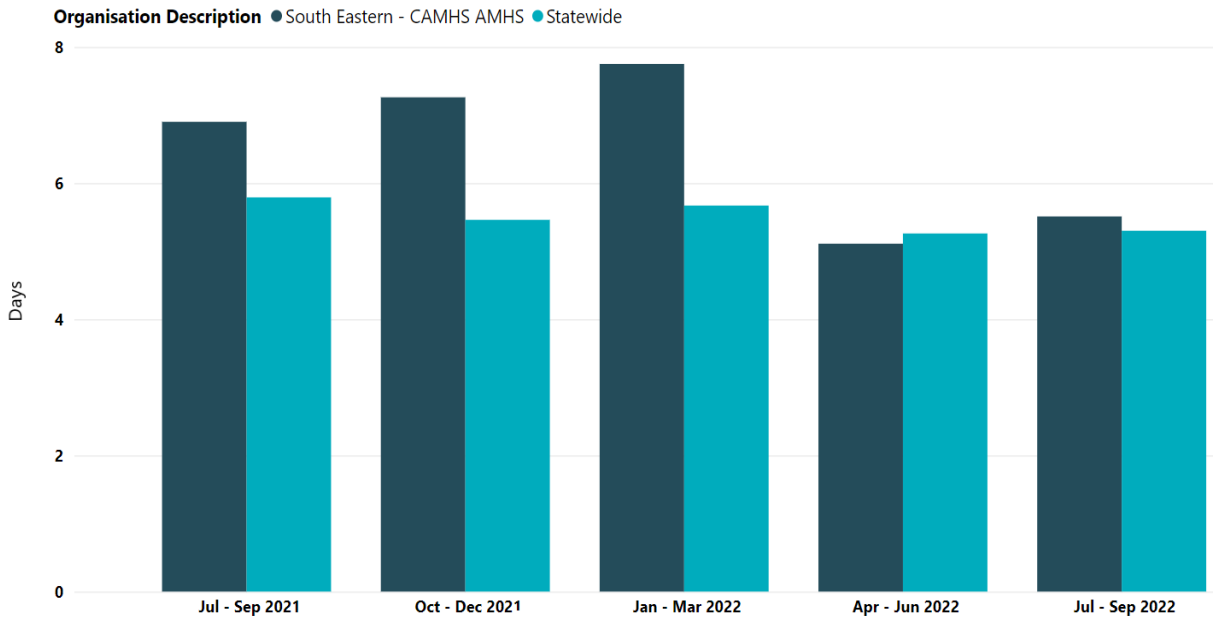
These services are usually delivered by a range of non-clinical providers including peer support workers with lived experience of mental illness (PMHC MDS, 2019). Between FY 2020/21 and FY 2021/22, 3.41% of reported episodes among SEMPHN commissioned services had the principal focus of treatment coded 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 CAMHS but is also 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, 2021b). Child and Adolescent Mental Health Services (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 5.9 below shows that in the FY 2021-22, 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 5.9 The average number of days that the consumer was admitted into a mental health inpatient unit, 2020-21.



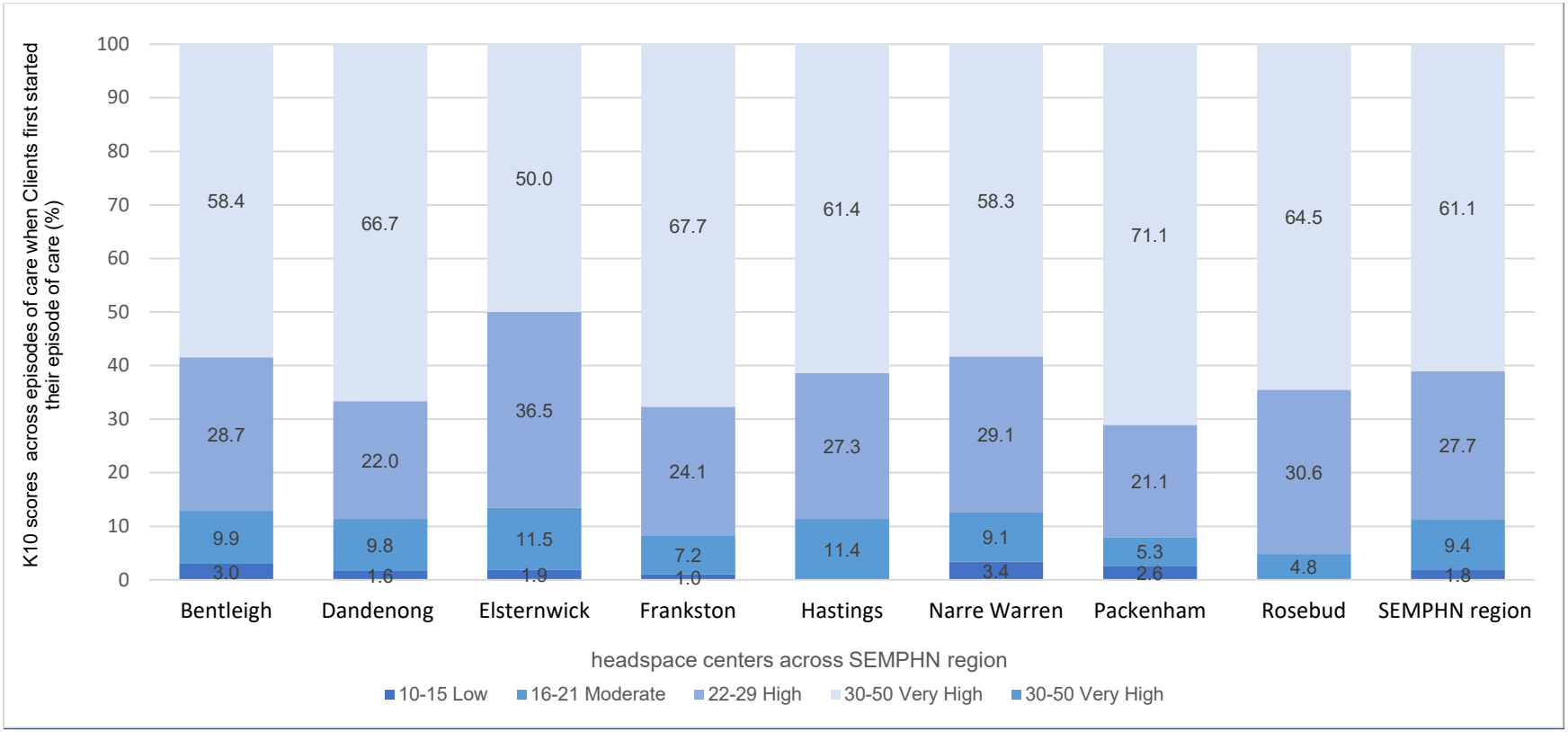
Source: https://vahi.vic.gov.au/visualisation/12/9b44f0c7-6d11-44a4-89d0-f95aae11c565(Victorian Agency for Health Information, 2021)

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 – 25 years) with mental and substance use disorders. Services provided include telehealth mental health consultations, sexual health services, Alcohol and Drug Services, work and study services, and an early psychosis intervention program to improve the lives of young people, and their families, who are affected by psychosis (headspace, 2020). There are nine headspace centres across the South East Melbourne region, Bentleigh, Dandenong, Elsternwick, Frankston, Hastings, Narre Warren, Packenham, Malvern[22] and Rosebud (headspace, 2021). Psychological Distress (as measured by the K10 score) at time of commencement of episode of care, was compared across various centres to determine prevalence of distress among young people in the catchment accessing mental health services through headspace (Figure 5.10).

[22] In compliance with headspace reporting rules, Malvern headspace centre is not reported in Figure 5.10, as it showed <10 episodes commenced with valid K10 scores (all with moderate K10 scores).

Figure 5.10 : K10 scores across episodes of care when clients first started their episode of care (%) across headspace centres in SEMPHN region, FY 2021-22.



Source: headspace Dashboard, Table: headspace Centres – Outcomes, K10 Pathways

Wait times are defined by headspace centres 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 FY 2021-22, across all centres, 96% (n = 3,262) of episodes that commenced with an intake/access session, 40.3% (n = 1,313) commenced within 0-1 days, 17.6% (n = 575) commenced between 2-7 days, 18.4% (n = 599) commenced between 8-22 days and 23.8% (n = 775) commenced after 22 days.

In FY 2021-22, average Wait time to intake/access by headspace centres was an average of 13 days across all headspace centres (n = 3,262) (Table 5.6), with wait times being highest in July and August 2021 (15.8 days), followed by January 2022 (15.6 days).

Table 5.6 Wait times (in days) by headspace centre in the SEMPHN region, FY 2021-22

Centre Name	Number of episodes	Wait times (days)
Bentleigh	920	12.5
Dandenong	384	11.7
Elsternwick	782	13.6
Frankston	768	11.6
Hastings	90	10.7
Malvern	81	3.0
Narre Warren	464	19.7
Packenham	121	23.1
Rosebud	201	8.1
SEMPHN region	3,262	13.2

Data: Headspace, 2021, https://reporting.headspace.org.au/#/views/headspaceCentre-WaitTimes/WaitTime1-Overview?:iid=2

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 in regard to 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

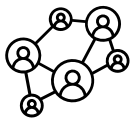
Opportunities exist to improve mental health and psychosocial support services in the region. Consultations with service providers, consumers and carers identified areas for improvement (Table 5.7) and highlighted essential elements for the delivery of psychosocial support services in the community.

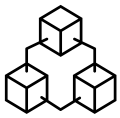
- Assertive outreach
- Patient navigation/support facilitation
- Personalised assistance
- Decision-making support, and
- Peer support services.

Table 5.7 Stakeholder perspectives for mental health service delivery improvement in the SEMPHN region

Service provider 	• Continue funding to create stability in service delivery. • Co-located, integrated services. • Intake processes tailored to the circumstances of people accessing service (e.g., no phone, no permanent address, limited or no proficiency in English). • Increase efforts to allow same worker/service/care team to support consumers throughout their journey. • Increase focus on the functional needs of consumers (e.g., social skills, finance, physical health) alongside addressing mental health needs. • Provide activities to increase social connections. • Access to services for communities or demographic groups identified by service providers as having unmet needs.
Consumer and carers 	• Individual and group therapies that are consumer centred. • Provision of supported long-term, permanent accommodation that includes clinical care. • Strategies to facilitate low turnover of staff. • Improve the competency and skills of the workforce. • Availability of a 24/7 telephone helpline.

Table 5.8 Mental health service market analysis across the SEMPHN region

Workforce and provider capability 	The shortage of mental health professionals (in the south-eastern Melbourne region) is having significant effects on 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: • shortage of qualified Mental Health professionals in south-eastern Melbourne • lack of secured continuity of funding for some programs • increased state-funded services with increased salary opportunities • lower reporting burden for state-funded services. Consultation with service providers and ongoing market analysis identified an increased capability among service providers and prospective service providers in the SEMPHN commissioning process. Key improvements include: • 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. • 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.
Service quality 	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.

Diversification of providers 	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.
Uncertainty in market 	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. In addition, service provider uncertainty of funding. Service providers are increasingly confused and uncertain about the recent inquests and Royal Commission recommendations.
Increasing real estate and operational costs 	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. 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. Growth of services becomes challenging without appropriate venues to accommodate increasing numbers of consumers and overall demand for services. 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.

Chapter 6 Alcohol and other drugs

In Victoria, 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 have a significant impact on a person's quality of life, impacting not only the individual, but also their family, social connections, and the community. The National Drug Strategy 2017-2026 aims 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). This approach works across three pillars: (1) demand reduction, (2) supply reduction and (3) harm reduction. The strategy has also identified key priority populations:

- Aboriginal and Torres Strait Islander people
- People with mental health conditions
- Young people
- Older people
- People in contact with the criminal justice system
- Culturally and linguistically diverse populations
- LGBTQIA+ community

Alcohol

There is no safe level of alcohol consumption, and 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 in order 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 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. This included 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).

Data also suggests that during the 2020 and 2021 COVID-19 lockdowns, alcohol consumption varied for different population groups. An evidence review investigating the changes in alcohol consumption during this period reported that the key factors influencing consumption during this time include gender and carer status, employment status and income, age and mental health (Farrugia and Hinkley, 2021). The review identified key population groups who either decreased or increased their alcohol consumption (Table 6.1).

Table 6.1 Alcohol consumption during COVID-19

Decreased alcohol consumption during COVID-19	Increased alcohol consumption during COVID-19
• Young people aged between 18-25 years • Young women aged 26-35 years • Men aged 51-65 years	• Women aged 36-50 years • People experiencing high levels of stress • Men with a decrease in hours worked

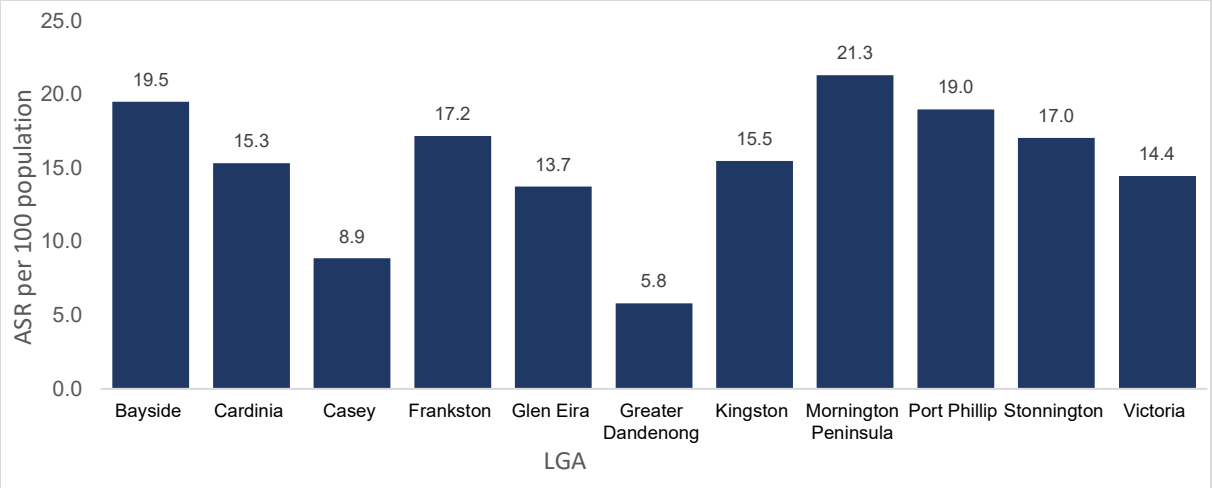
Source: Farrugia and Hinkley (2021), Australian Institute of Family Studies

Data from the ANUPoll (Biddle et al., 2020), conducted by the Australian National University, showed that the most common reason given for increased alcohol consumption during the pandemic was that the person was spending more time at home (67% for men and 64% for women). The next most common response for men was 'Boredom, nothing else to do' (49%), while for women it was 'Increased stress' (42%) (Biddle, 2020).

While a state-wide breakdown of the latest the National Health Survey 2020-21 has not yet been released, 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. Research published on the relationship between adolescent drinking patterns and parental attitudes to drinking, parental modelling of alcohol use and parental supply of alcohol to adolescents recommends 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).

Rates of alcohol consumption among people aged 18 years and over in the SEMPHN region are higher than Victoria (ASR 14.4 per 100). Figure 6.1 shows that there are 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 Stonnington (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



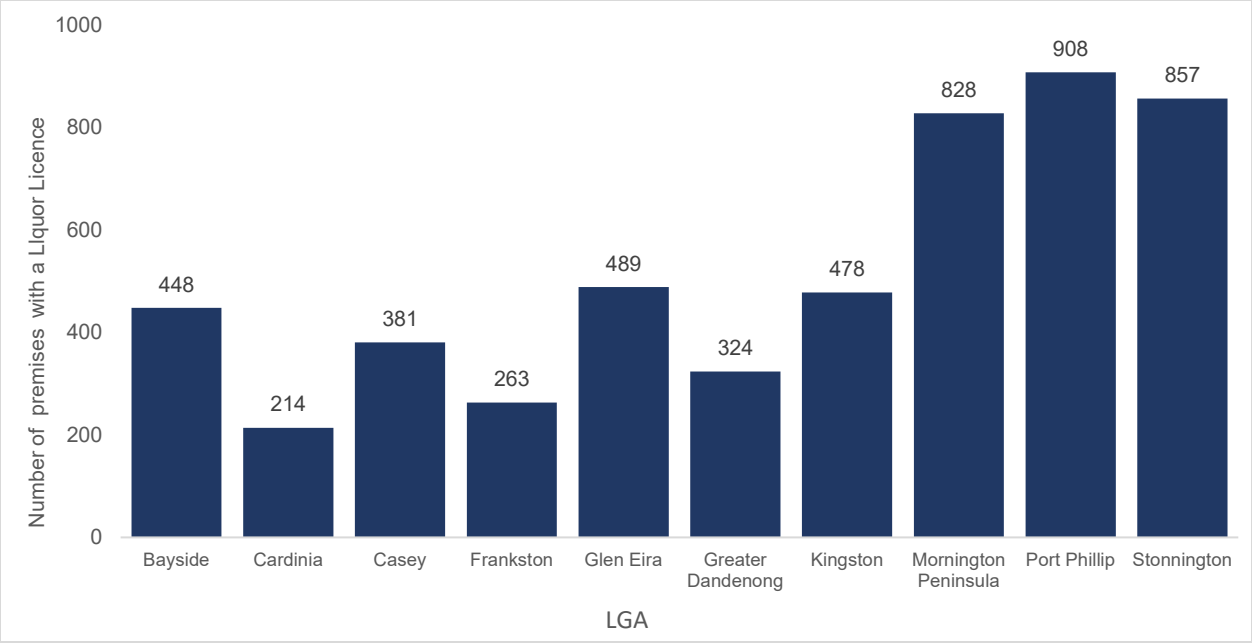
Source: PHIDU, Social Health Atlas of Australia (June 2022), Table: Prevalence of selected health risk factors (modelled estimates), accessed phidu.torrens.edu.au/social-health-atlases/graphs

Monitoring alcohol consumption is also undertaken using the National Wastewater Drug Monitoring Program (NWMP). While alcohol consumption overall has remained consistent across time in the capital regions across Victoria, there were peaks 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

The density of alcohol outlets can be an indicator of excessive alcohol consumption and related harms in the region (Campbell et al., 2009). Research shows that a higher outlet density is associated with increased alcohol consumption and related harms, including medical harms, injury, crime, and violence in the community. In FY 2021-22, Victoria has a total of 25,105 premises with a liquor license. Figure 6.2 shows the number of premises with a liquor license across LGAs in SEMPHN region.

Figure 6.2 Number of premises with a liquor license by LGA, FY 2021-22

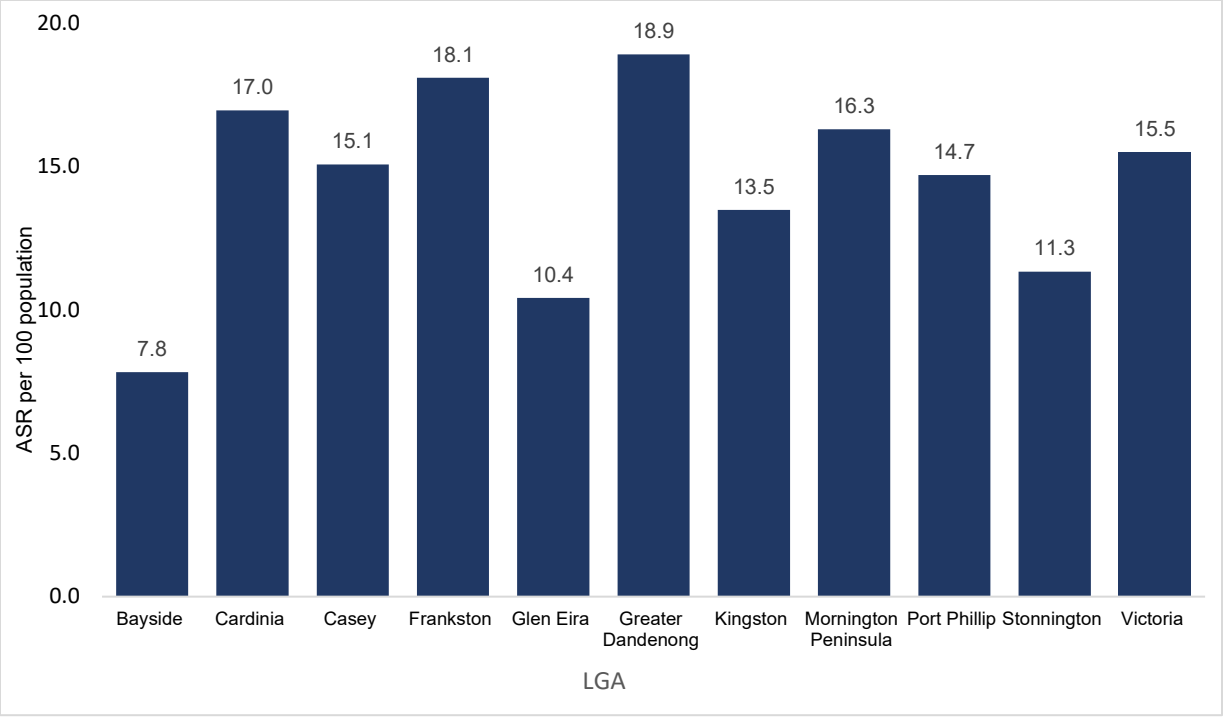


Source: AODStats, Table: Liquor Licences in Victoria (LGA), 2021-22; accessed https://aodstats.org.au/explore-data/liquor/

Tobacco and nicotine

Data from 2019 National Drug Strategy Household Survey (NDSHS) shows a sharp decline in the number of smokers across the country with number of people aged 14 and over, who identified as a daily smoker declined 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" increased by 25.7% in 2019 compared to 2010 (n = 10,500,000). Figure 6.3 describes the estimated rates of people aged 18 years and above who identify as current smokers by LGA, 2017-18, benchmarked against Victorian rates.

Figure 6.3 Current adult smokers 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

E-cigarettes

Data from the National Drug Strategy Household Survey (2019) reports a statistically significant increase in the proportion of non-smokers using e-cigarettes in the age groups 18-24 years (6% increase in 2019 from 2016) and a 7.9% increase in proportion of non-smokers using e-cigarettes in the age group 25-39 years (AIHW, 2020d). Data from VicHealth shows 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).*

Concerns have been raised by members of peak body organisations about the easy availability of illegal e-cigarettes likely to undo decades of success in tobacco control, with calls to Quitline already showing people struggling with quitting vaping (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) in 2019 shows the proportion of people aged 14 years and over who reported recent illicit use of any drug. Table 6.2 shows the change in proportion of use of illicit drugs between 2016 and 2019 across the SEMPHN region, state and nationally.

Table 6.2 Illicit drug use in Australia, 2016 and 2019

Illicit drug	2016 (%)	2019 (%)	Change (%)
SEMPHN	15.5	17.5	+2
Victoria	15.2	17.2	+2
Australia	16	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)

The National Waterways Drug Program found that average methylamphetamine consumption, average cocaine, fentanyl, and ketamine consumption increased in both capital city and regional sites in December 2021 and February 2022. The patterns in geographical differences in consumption is also observed for Ketamine however like Methylamphetamine consumption, the gap between capital city and regional consumption appear to be closing. Data from the National Waterways Drug Program (The Australian Criminal Intelligence Commission, 2022), shows that in December 2021, Victoria had:

- the second highest average regional consumption of methylamphetamine just behind New South Wales (NSW)
- the second highest average capital city consumption of cocaine (capital city of NSW ranked highest)
- the highest average capital city consumption and second highest regional consumption of heroin, and
- the highest average regional and capital city excretion of ketamine.

According to 2019 National Drug Strategy Household Survey (NDSHS), the most commonly used illicit drugs in Australia are cannabis (11.6%), cocaine (4.2%) and ecstasy (3.0%) (Table 6.3).

Table 6.3 Summary of recent drug use, people aged 14 and over for Victoria, 2016 and 2019

Illicit drug	Victoria			Australia		
	2016	2019	% Change	2016	2019	% Change
Illicit (excluding pharmaceuticals)						
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[23] excluding pharmaceuticals	12.2	14.6*	2.4	12.6	14.1*	1.5
Illicit use of any drug						
Any opioid[24]	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 (per cent)

Patterns of use

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

When looking at drug use among younger Australians, Ecstasy use among 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 use returning to a similar level reported in 2001 (10.4%) (Australian Institute of Health and Welfare, 2021b). 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.

[23] 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.

[24] Includes use of heroin, non-medical use of painkillers/pain-relievers and opioids or non-medical use of methadone/buprenorphine.

According to 2020 Victorian data[25], use of heroin has remained stable in recent years. More than eight in ten participants reported heroin use in past six months (85.0%). This was significantly higher compared to heroin use across Australia (63.0%). Similarly, frequency of heroin use (88.0% reported weekly use of heroin) remained stable over the years in Victoria but significantly higher than national average. The changes were observed in heroin availability, with significantly fewer participants (51.0%) perceiving heroin to be 'very easy' to obtain in 2020 compared to 68.0% in 2019 (National Drug and Alcohol Research Centre, 2020). Different trends were observed for the pharmaceutical opioids, prescribed and non-prescribed (sourced illicitly). In Victoria, the most common 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 or methylenedioxymethamphetamine (MDMA), related stimulants and other illicit drugs have remained stable or decreased in Australia since COVID-19-related restrictions were introduced in 2020, primarily due to impediments to socialization. Reductions in use may be reversed with lifting of restrictions, although heterogeneity in patterns of drug use during COVID-19 suggest a probable diversity of responses, particularly with economic, social, and other stressors associated with COVID-19 (Price, 2022) .

AOD related harms

Road injuries

Each year in Victoria, approximately 17% of drivers killed in road crashes had a Blood Alcohol Concentration (BAC) of .05 g/100 mL or above and in the last five years, 41% of all driver and motorcyclist fatalities had illicit drugs in their system (vicroads, 2022).

Data shows that serious road injuries during alcohol hours[26] are higher than the Victorian rates (13.7 per 100,000, n = 1,809) in some LGAs across the SEMPHN catchment (Table 6.4). In FY 2019-2020, LGAs with highest rates are 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).

[25] 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 Straight Islanders (a significant decrease compared to 2019, 24%).

[26] 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

Table 6.4 Serious Road injuries during alcohol hours by LGA, FY 2019/2020

LGA	Serious road injuries (n)	Rate of serious road injuries (per 100,000 population)
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
Victoria	1,809	13.7

Source: AODStats, Serious Road Injuries, 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 -involved 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 significant number of job losses, additional caring responsibilities, home schooling, and other situational stresses which in combination with social isolation, increased financial stress and increased consumption of alcohol 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 4 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 Police), identified several LGAs of concern in the SEMPHN region. Most recent family violence data for FY 2019-2020 shows Frankston had the highest rate of alcohol-related family violence incidents (Table 6.5). This table also shows number and rates of assaults that occurred during high alcohol hours. 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 have rates higher than the Victorian average (80.6 per 100,000).

Table 6.5 Family violence and assaults where alcohol might have been involved by LGA (FY 2019-2020).

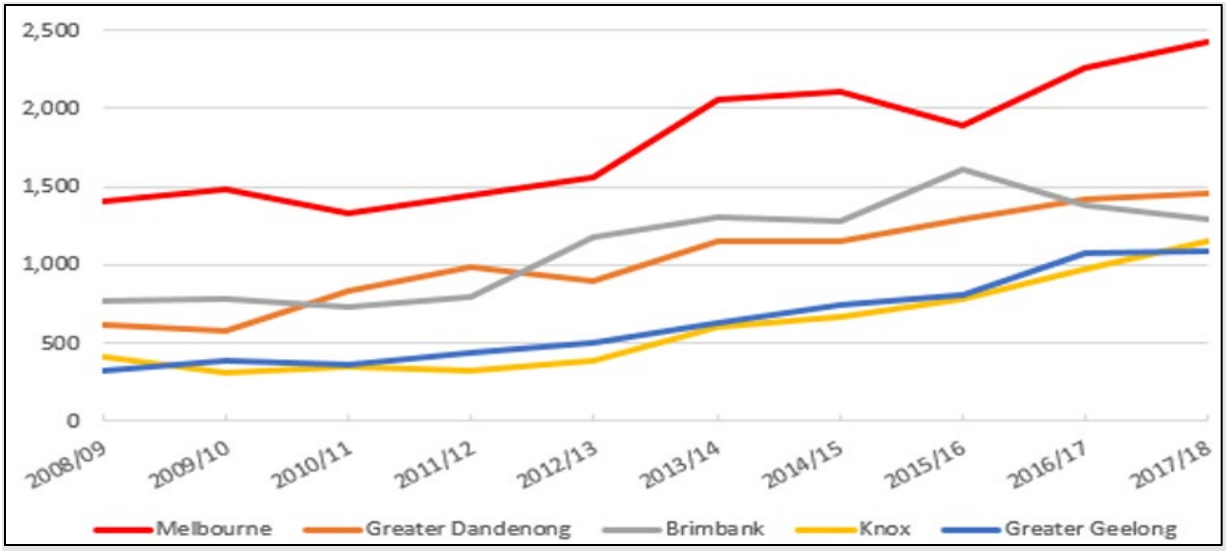
LGA	Family Violence incidents where alcohol was definitely or possibly involved		Incidents of assault during high alcohol hours (2019/20)	
	(n)	Rate (per 100,000)	(n)	Rate (per 100,000)
Bayside	80	74.4	39	36.3
Cardinia	121	104.1	77	66.3
Casey	334	91.6	269	73.8
Frankston	319	222.6	154	107.4
Glen Eira	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
Victoria	8580	128.1	5396	80.6

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

Drug-related crime

Victoria Police data shows that between April 2017 and March 2018, Greater Dandenong had the second highest number of drug-related offences (including drug dealing, trafficking, possession, or cultivation) of any LGA in Victoria (n=1,453). These numbers steadily increased over the 10 years leading up to 2017-18. Greater Dandenong Port Phillip, Frankston and Stonnington all represent the SEMPHN region in the top 20 LGAs in Victoria when drug offences are presented as rates per 100,000 population (Parliament of Victoria, 2018).

Figure 6.4 Top five local government areas for drug offences in Victoria, April 2008 to March 2018.



Source: (Parliament of Victoria, 2018).

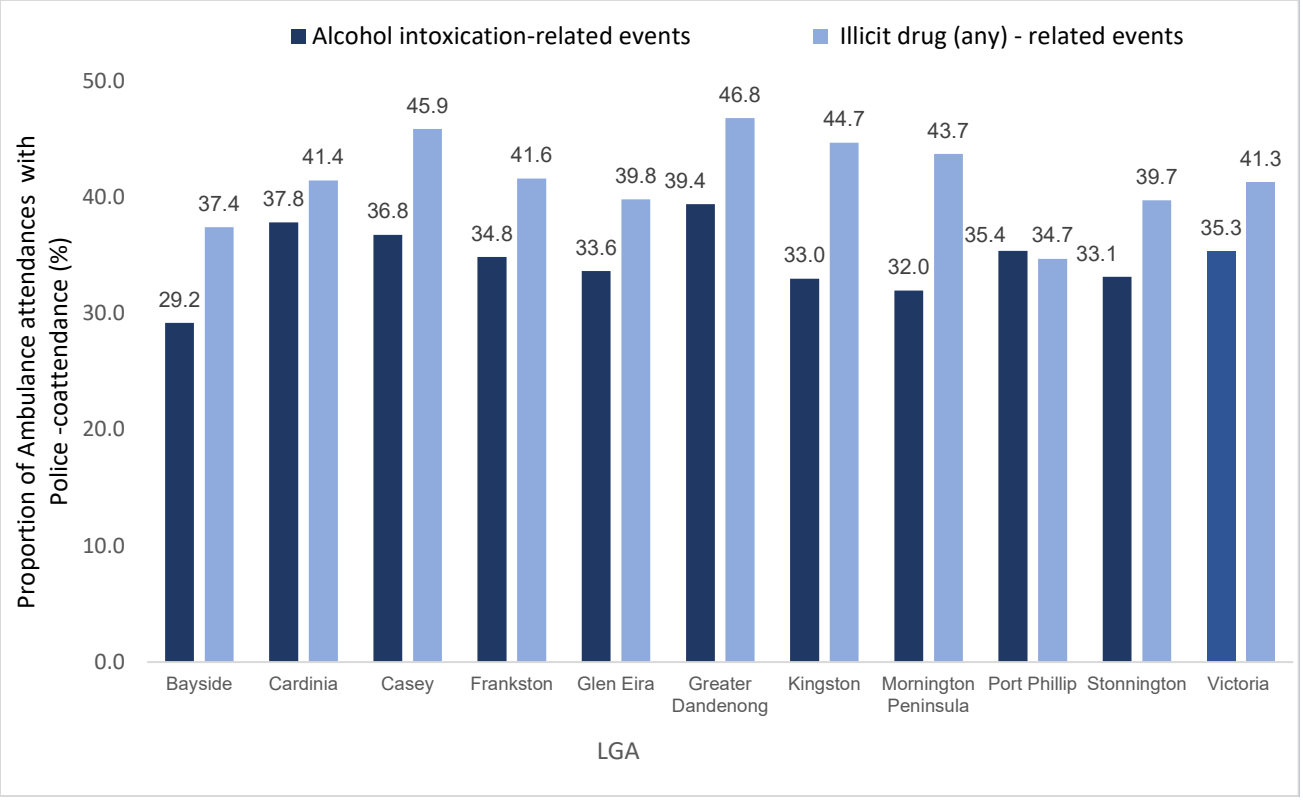
Emergency service use

Ambulance attendances

In Victoria, there were 53,541 drug-related ambulance attendances recorded on June 30 2021 for the previous 12 months. Alcohol accounted for the largest proportion of attendances (46.1%), followed by illicit drugs (29.5%) and pharmaceutical drugs (24.5%). The number of drug-related ambulance attendances has more than doubled in Victoria since 2011-12.

The rate of AOD-related ambulance attendances provides an indication of the AOD care needs that are currently not being met within the community. Figure 6.5 below highlights the proportion of ambulance attendances for Alcohol and illicit drug related events that had police co-attendances. The number of police and ambulance co-attendances for AOD-related events is higher than the Victorian rates across several LGAs. This is especially true for Illicit drug related events, where more than 40% of ambulance attendances were co-attended by the police. This demonstrates the complexity, safety concerns for health professionals and the increased burden on community and financial resources alcohol and other drugs issues have in the region.

Figure 6.5 Proportion of ambulance attendances that were co-attended by the Police for any alcohol and illicit drug related events, FY 2020-2021.



Source: AODStats, Table: Alcohol and drug-related ambulance attendances in Victoria (LGA), 2021-22; https://aodstats.org.au/explore-data/ambulance-attendances/

Hospitalisations

An increasing number of people are being transported to hospital from ambulance attendances for AOD incidents. This is likely due to the severity and complexity of AOD-related attendances. The sharpest increase in AOD-related ambulance attendances in the region in 2018-19 was related to cannabis, heroin, and amphetamines. The rate of AOD hospital admissions or hospitalisations provides an indication of the AOD care needs that are currently not being met within the community. Table 6.6 and Table 6.7 reports on the alcohol and illicit drugs related events across SEMPHN region.

AOD-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 region, the rate of AOD-related deaths is mapped across LGAs as an indication of the AOD care needs that are currently not being met within the community. As illustrated in Table 6.6, the highest rate of Alcohol induced deaths was found 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). 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 (<5 or 0 in most LGAs). Victoria has 78 drug induced deaths in FY 2020-21, with an ASR of 1.16 per 100,000 (Table 6.7).

Table 6.6 Number and rate (per 100,000) of alcohol related Emergency Department service utilisation and deaths

LGA	Ambulance attendances (2020/2021)		Hospitalisations (2019/2020)		Alcohol induced deaths (2020/2021)	
	Number	Rate (per 100,000)	Number	Rate (per 100,000)	Number	Rate (per 100,000)
Bayside	228	212.0	863	807.6	193	179.5
Cardinia	321	276.3	507	452.0	111	95.5
Casey	899	246.6	1,510	426.7	311	85.3
Frankston	834	581.8	1,221	856.0	211	147.2
Glen Eira	349	220.6	1,279	817.2	192	121.4
Greater Dandenong	688	408.6	1,048	623.1	231	137.2
Kingston	540	322.8	960	579.1	240	143.5
Mornington Peninsula	830	491.5	1,223	729.6	313	185.4
Port Phillip	731	627.6	1,362	1,178.2	111	95.3
Stonnington	668	563.2	1,115	946.8	155	130.7
Victoria	24,672	368.4	34,610	524.7	8,747	130.6
n.p. Not calculated due to small numbers						

Source: AODStats, https://aodstats.org.au/explore-data

Table 6.7 Number and rate (per 100,000) of Illicit drug related Emergency service utilisation and deaths

LGA	Ambulance attendances (2020/2021)		Hospitalisations (2019/2020)		Drug induced deaths (2020-21)	
	Number	Rate (per 100,000)	Number	Rate (per 100,000)	Number	Rate (per 100,000)
Illicit Drugs (Any)[27]						
Bayside	147	136.7	376	351.9	<5	n.p.
Cardinia	210	180.7	307	273.7	0	n.p.
Casey	665	182.4	768	217.0	<5	n.p.
Frankston	529	369.1	687	481.6	<5	n.p.
Glen Eira	216	136.5	713	455.6	<5	n.p.
Greater Dandenong	577	342.7	728	432.8	0	n.p.
Kingston	282	168.6	567	342.0	<5	n.p.
Mornington Peninsula	382	226.2	501	298.9	0	n.p.
Port Phillip	663	569.2	849	734.4	<5	n.p.
Stonnington	413	348.2	551	467.9	<5	n.p.
Victoria	15,770	235.5	18,611	282.2	78	1.16
n.p. Not calculated due to small numbers						

Source: AODStats, https://aodstats.org.au/explore-data

[27] 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 2020–21, 354 AOD treatment agencies in Victoria provided over 90,000 treatment episodes to around 37,100 people. Victoria reported more clients using AOD services in 2020–21 than 2013–14, after adjusting for population growth (634 clients per 100,000 population compared with 580 per 100,000, respectively (AIHW, 2022a). Alcohol was the most common drug of concern in 2020–21, accounting for 31% (23,039) of treatment episodes, followed by amphetamines (26% or 19,255). Three in five (56%) of all clients were aged 20–39 years (AIHW, 2022a). 8.8% of all clients identified as First Nations Australians, which is lower than the national proportion (17%) (AIHW, 2022a).

Treatment services

Alcohol and other drug (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. These services include counselling, rehabilitation, information provision and education programs, and support and case management programs. 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)[28]. The smallest level of geography available is at PHN level though not always available. The data are presented at the lowest geography available, i.e., Australia, Victoria, or PHN level (SEMPHN region).

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, where in Victoria more than 77% of treatment episodes in FY2019/20 involved either treatment types. Similar proportions were observed nationally as well as at the PHN level. National figures show that the most common type of treatment was counselling, with 37.2% of treatment episodes reporting counselling as the main treatment type. Psycho-social counselling refers to evidence-informed talking therapies, aimed at helping the person develop skills (whether that be psychological skills, and/or practical skills) to reduce alcohol or other drug consumption and/or harms, in line with the person's own goals. Within Victoria, the proportion of episodes recording counselling as the main treatment type was lower than the national proportion, with SEMPHN region (21.6%) recording lower proportions of counselling services than the state average (25%). At the PHN level, SEMPHN recorded support and case management with the highest proportion of treatment type (31.8%) which was higher than the state proportion (24.4%) and almost double the national proportion (16%) (Table 6.8)

[28] For details, refer to Alcohol and other drug treatment services NMDS 2018-19 (aihw.gov.au)

Table 6.8 Proportion of treatment episodes by treatment type and region, 2019-20

Type of Treatment	SEMPHN region (%)	Victoria (%)	Australia (%)
Counselling	21.6	25.0	37.2
Assessment only	25.7	27.7	18.7
Support and case management	31.8	24.4	16.0
Withdrawal management	8.6	10.4	9.2
Information and education	0.9	0.5	6.7
Rehabilitation	4.4	4.4	6.2
Pharmacotherapy	0.7	0.6	1.4
Other	6.4	7.0	4.5
Total	100.0	100.0	100.0

Source: AIHW, 2019-2020

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 FY2019/20, which may highlight a gap in service delivery.

Episodes of care

To measure the supply of existing AOD services, the rate of AOD-related episodes of care, as captured by the Victorian Alcohol and Drug Collection database, was analysed (Table 6.9). The highest rate 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). The highest rate of Illicit Drugs-related episodes of care (553.1 per 100,000 population), Port Phillip (301.9 per 100,000 population), and Greater Dandenong (182.5 per 100,000).

Table 6.9 Episodes of Care for alcohol, illicit drugs, and pharmaceutical drugs by LGA, 2021-22

LGA	Alcohol		Illicit Drugs (Any)[29]		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
Victoria	13,990	212.1	21,573	327.1	1,402	21.3
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/

Pharmacotherapy

Pharmacotherapy is the use of prescribed medication to assist in the treatment of addition. Also known as opioid replacement therapy, 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. From 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 NOPSAD collection, on a snapshot day in 2020, over 53,000 clients received pharmacotherapy treatment for their opioid dependence at 3,084 dosing points across Australia (Table 6.10). Of this, Victoria accounted for over 14,000 clients who received pharmacotherapy treatment for their opioid dependence at 734 dosing points. Since 2010, there has been a 55.0% increase in dosing points in Australia and a 65.0% increase in Victoria. There were 3,422 authorised prescribers of opioid

[29] 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.

pharmacotherapy drugs across Australia, including 1,585 (46.3%) in Victoria (NOPSAD, 2020). 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, the majority of prescribers were private (99.0%), with less than 1.0% being correctional facilities. There is no data for Victoria for public prescribers (AIHW, 2021g).

While there was a small increase in the ratio of clients to prescribers in Victoria from 2019 to 2020, the estimates are almost half of what is observed nationally (15.6 clients per prescriber). The ratio of clients to dosing points has remained constant in Victoria between 2019 and 2020 (20.4 clients per dosing site) which is higher than the national estimate of 17.3 clients per dosing site (see Table 6.10).

Table 6.10 Frequency and ratio of clients, prescribers, and dosing points, by year and region, 2019 and 2020

Opioid drug of dependence	Victoria		Australia
	2019	2020	2020
Total number of clients, n	14,085	14,968	53,316
Total number of prescribers, n	1,700	1,585	3,422
Total number of dosing points, n	689	734	3,084
Ratio of clients to prescribers	8.3	9.4	15.6
Ratio of clients to dosing points	20.4	20.4	17.3

Source: (NOPSAD, 2020)

Prescribers and dispensers

Analysis of distribution of patients being prescribed pharmacotherapy treatments by postcode show that the highest number of individuals were in the suburb of Frankston and area (postcode 3199, n=373), Dandenong area (postcode 3175, n=353), followed by the Cranbourne area (postcode 3977, n=268), St Kilda area (postcode 3182, n=227) and Noble Park area (postcode 3174, n=207). The highest number of authorised prescribers and dispensers were in the Frankston area (postcode 3199) with a good balance of 8 prescribers and 7 pharmacies. The Dandenong area (postcode 3175) has 8 pharmacies and 5 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.

Some postcodes shine light on not just the imbalance in the ratio of prescribers to pharmacies, but a strong disparity in the proportion of residents receiving pharmacotherapy treatment and the stark dearth of any prescribers and/or dispensers in the region. For example, a large proportion of residents of Noble Park area are receiving pharmacotherapy treatment (n = 207), however, the postcode only has 4 pharmacies and zero prescribers. Similar oddities are observed in the Pakenham region (postcode 3810) with about 150 patients being prescribed pharmacotherapy treatments, but only 2 authorised prescribers and 1 pharmacy. This imbalance between limited authorised dispensers and prescribers, and a large number of 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 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. The following key determinants were identified:

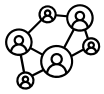
Consultation with AOD service providers (n = 19), consumers and the AOD community (n = 12) identified key risk factors for harm related to AOD use in the region including:

- 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 below:

Table 6.11 Summary of findings from the workshop

Family and carers 	• Lack of an intentional and structured approach to intersectionality • Need to focus on connection and engagement • Limited family integration across the system
Lived experience 	• Identifying appropriate services for an individual's needs. • Some marginalised groups lack access to technology to support identifying and accessing pathways to care or available services • Lack of affordable services and limitation in accessing care (e.g., transport) • Over-servicing (significant time spent going between AOD and MH services) • Lack of cultural and gender diverse representation • Lack of safe housing options while receiving treatment • Individualised assertive outreach • Holistic approach to after-care (e.g., social supports) • Long waitlists in the public system • Limited family integration in the treatment process • Disconnect between mental health and AOD services • Safe housing options after exiting a service • Lack of after-care services (e.g., the allocation of an exit support worker)
Service providers 	• Lack of knowledge of pathways even when they do exist • Lack of awareness of existing pathways to support non-English speaking communities • Lack of understanding regarding the separate intake systems (e.g., state versus PHN) • Ensuring there are access pathways for transient populations

Chapter 7 First Nations peoples

The traditional custodians of the lands and waterways of the SEMPHN region 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 Narrm (Melbourne). Over the past 50 years, Aboriginal Community Controlled Health Organisations (ACCHO) have provided a wide range of health, social and emotional wellbeing services. There are currently two ACCHOs within the SEMPHN region: Dandenong & District Aborigines Co-Operative Limited (DDACL) and Ngwala Willumbong Co-operative Limited. 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 region.

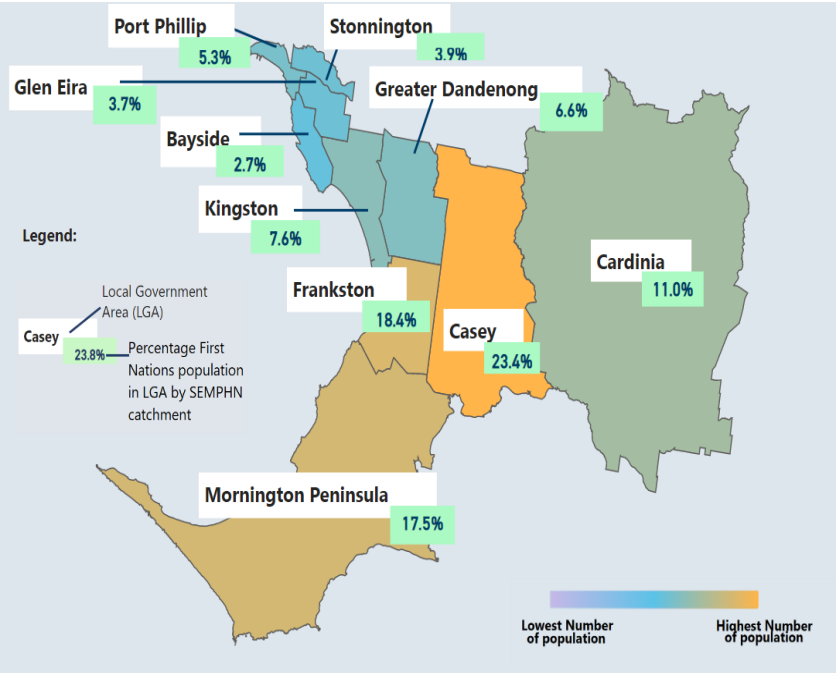
Population

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, which is 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 in the catchment 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[30] (n = 1,308; 13%). The largest proportion of First Nations peoples in the SEMPHN region are aged between 5 and 14 years of age, accounting for 19.8% of the total First Nations population (n = 1,959).

[30] 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 Distribution of First Nations population 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 region (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. 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). 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 of 10.0 per 100 (Table 7.1).

Table 7.1 Core activity need for assistance for First Nations population by LGA, 2021

LGA	People who need assistance (n)	First Nations Population (URP) 2021 (n)	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
SEMPHN region	980	9,996	9.8
Victoria	6,570	65,639	10.0

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 region (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)[31] 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 7.2 shows First Nations peoples living in the SEMPHN region are relatively more advantaged than First Nations peoples across the State (SEMPHN region score: 12 and Victoria score: 25), [32] with the exception of Greater Dandenong (IRSOI score of 53).

[31] Indigenous Areas (IARE) are geographical units to provide a balance between spatial resolution and population size.

[32] Indigenous Relative Socioeconomic Outcomes Index is expected to be updated in the 2023 release of census data by ABS.

pTable 7.2 Indigenous Relative Socioeconomic Outcomes Index by IARE by LGA (2016)

IARE	Indigenous Relative Socioeconomic Outcomes Index score	First Nations population (2016 URP) (n)
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
SEMPHN region	12	7,280
Victoria	25	47,788
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 region (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. Table 7.3 highlights higher participation rates in vocational education and training among First Nations peoples compared to non- First Nations People. In 2020, these rates are especially higher in the City of Glen Eira (ASR of 50.1 per 100 First Nations peoples), city of Bayside (ASR of 38.3 per 100 First Nations peoples), and City of 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 region has a lower rate of participation in vocational education and training for both First Nations peoples and Non – First Nations peoples.

Table 7.3 Participation rates in vocational education and training for the First Nations Population, 2020 data

LGA	Participation in vocational education and training (2020)			
	First Nations		Non–First Nations	
	(n)	ASR per 100	(n)	ASR per 100
Bayside	125	38.3	8,300	12.8
Casey	230	25.9	16,021	18.2
Cardinia	465	22.9	45,950	16.1
Frankston	355	19.4	18,160	18.1
Glen Eira	190	50.1	13,200	10.9
Greater Dandenong	120	18.0	18,180	13.8
Kingston	175	25.2	16,365	14.0
Mornington Peninsula	410	24.1	18,255	19.3
Port Phillip	130	15.0	9,998	9.6
Stonnington	100	18.9	7,950	7.5
SEMPHN region	2,305	23.2	173,135	14.2
Victoria	17,080	26.9	782,540	15.7

Source: PHIDU (June 2022 release), accessed on 20 August 2022, 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 region (4%)

Table 7.4 reports on the proportion of First Nations population and non - First Nations populations attending various levels of educational institutions across SEMPHN region. Due to the difference in age cut offs to attend different educational institutions, only numbers and percentages are reported across various LGAs. In the 2021 Census, there were 402 First Nations children attending preschool (children under 5 years) across all LGA's in the SEMPHN region 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 SEMPHN region (see Table 7.4).

Rate ratio are calculated as per ABS guidelines comparing rates for Frist Nations peoples against the non-First Nations groups in SEMPHN region. Rate ratios greater than 1 was observed in LGAs, 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 the same LGAs[33].

[33] These are not a comparison of age standardised rates.

Table 7.4 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
	n (%)	n (%)		n (%)	n (%)		n (%)	n (%)		n (%)	n (%)	
Bayside	9 (2.2)	2124 (6.3)	0.3	21 (1.6)	8,432 (6.8)	0.2	43 (4.4)	8346 (8.2)	0.5	22 (2.8)	7,225 (6.4)	0.4
Casey	53 (13.2)	3270 (9.6)	1.4	227 (17.1)	11,510 (9.2)	1.9	107 (10.9)	8,082 (8.0)	1.4	62 (8.0)	7,198 (6.4)	1.3
Cardinia	115 (28.6)	9083 (26.8)	1.1	347 (26.1)	35,997 (28.9)	0.9	256 (26.0)	26,959 (26.6)	0.97	149 (19.3)	25,289 (22.6)	0.9
Frankston	78 (19.4)	3285 (9.7)	2	265 (19.9)	10,962 (8.8)	2.3	190 (19.3)	8,490 (8.4)	2.3	147 (19.0)	7,947 (7.1)	2.7
Glen Eira	12 (3)	3433 (10.1)	0.3	38 (2.9)	12003 (9.6)	0.3	27 (2.7)	10,413 (10.3)	0.3	55 (7.1)	13,149 (11.7)	0.6
Greater Dandenong	22 (5.5)	2796 (8.2)	0.6	64 (4.8)	11,234 (9.0)	0.5	52 (5.3)	9,604 (9.5)	0.6	36 (4.7)	12,624 (11.3)	0.4
Kingston	26 (6.5)	3586 (10.6)	0.6	71 (5.3)	12,268 (9.8)	0.5	76 (7.7)	10,217 (10.1)	0.8	59 (7.6)	10,786 (9.6)	0.8
Mornington Peninsula	77 (19.2)	3170 (9.3)	2.1	247 (18.6)	12,288 (9.9)	1.9	188 (19.1)	10,489 (10.3)	1.9	103 (13.3)	7,736 (6.9)	1.9
Port Phillip	7 (1.7)	1,556 (4.6)	0.4	32 (2.4)	4,829 (3.9)	0.7	19 (1.9)	3841 (3.8)	0.5	78 (10.1)	9,052 (8.1)	1.2
Stonnington	3 (0.7)	1,612 (4.8)	0.1	17 (1.3)	5,153 (4.1)	0.3	26 (2.6)	5,000 (4.9)	0.5	63 (8.1)	11055 (9.9)	0.28
SEMPHN region	402 (100)	33,915 (100)	1.0	1,329 (100)	124,676 (100)	1.0	984 (100)	101,441 (100)	1.0	774 (100)	112,061 (100)	1.0

Tertiary Education includes vocational education (including TAFE and private training providers), and university or other higher education
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), 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 region (4%)

Employment

In 2016, the unemployment rate of First Nations Australians was 18.4% which is almost three times higher than the rate for non-First Nations Australians at 6.8% (OECD, 2019). In 2016[34], the proportion of First Nations peoples aged 15 to 24 years engaged in school, work or further education/training were lowest in Greater Dandenong (IARE: 64.9%), Cardinia (IARE: 78.0%) and Cranbourne/Narre Warren in Casey (IARE 78.0%), which are lower than the catchment average (IARE: 78.9%) and similar to the Victorian average (IARE:75.7%) (Table 7.5).

Table 7.5 Employment status in the labour force for First Nations peoples, 2016

IARE of residence	First Nations persons learning or earning at ages 15 to 24 (2016)		First Nations unemployment (2016)	
	(n)	%	(n)	%
Cardinia	103	78.0	32	10.6
Cranbourne – Narre Warren	248	78.0	85	13.2
Frankston	280	78.4	90	11.2
Greater Dandenong	61	64.9	38	21.2
Melbourne - East (part b)	135	86.9	32	8.0
Melbourne - Port Phillip	74	88.5	21	10.7
Mornington Peninsula	203	82.5	54	10.3
SEMPHN region	1,072	78.9	360	11.6
Victoria	6,874	75.7	2,508	14.0
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: 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 region (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.

[34] Data on employment for the First Nations Population is scheduled to be updated in the 2023 Needs Assessment as per release by ABS.

When comparing median household income across SEMPHN region, First Nations households have lower median personal income (weekly) 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 Table 7.6).

Table 7.6 Personal and household income (weekly) for First Nations populations by LGA, 2021

LGA	First Nations		Non – First Nations	
	Median personal income ($) (weekly)	Median household income ($) (weekly)	Median personal income ($) (weekly)	Median household income ($) (weekly)
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
SEMPHN region	**753**	**1,847**	**855**	**1,917**
Victoria	**619**	**1,565**	**805**	**1,762**

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 region (4%)

Housing

Housing status is a determinant of health and wellbeing. For individuals, living situations and environment add to the complexities of health determinants, for example socioeconomic determinants such as income and employment, and impact on safety. Homelessness increases a person's vulnerability and diminishes their personal security.

People living in crowded dwellings represent a continuum within the scope of those who are marginally housed. In the context of the elements developed for the ABS definition of homelessness, people living in severe overcrowding are considered to be homeless because they do not have control of, or access to space for social relations (ABS, 2012).

Overcrowding is experienced by 12% of First Nations Victorians compared with 6% of non-First Nations Victorians (Australian Institute of Health and Welfare, 2017). First Nations Victorians are four times more

likely to be homeless than non-First Nations Victorians (Australian Bureau of Statistics, 2017b; Department of Health, 2020).

The average size for First Nations households, across SEMPHN region 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.

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. 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:

- Greater Dandenong, 10.5%
- Cardinia, 7.9%
- Frankston, 6.8%
- SEMPHN region: 6.4%; Victoria: 6.8%

In crowded dwellings inhabitants are generally unable to pursue social relations, or have personal (i.e. family or small group) living space, nor do different members within the dwelling have exclusive access to kitchen facilities and a bathroom. In such circumstances, if people had accommodation alternatives it would be expected that they would have exercised them (ABS, 2012).

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)[35] 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, 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 & congenital conditions (9%) (Australian Institute of Health and Welfare, 2018b).

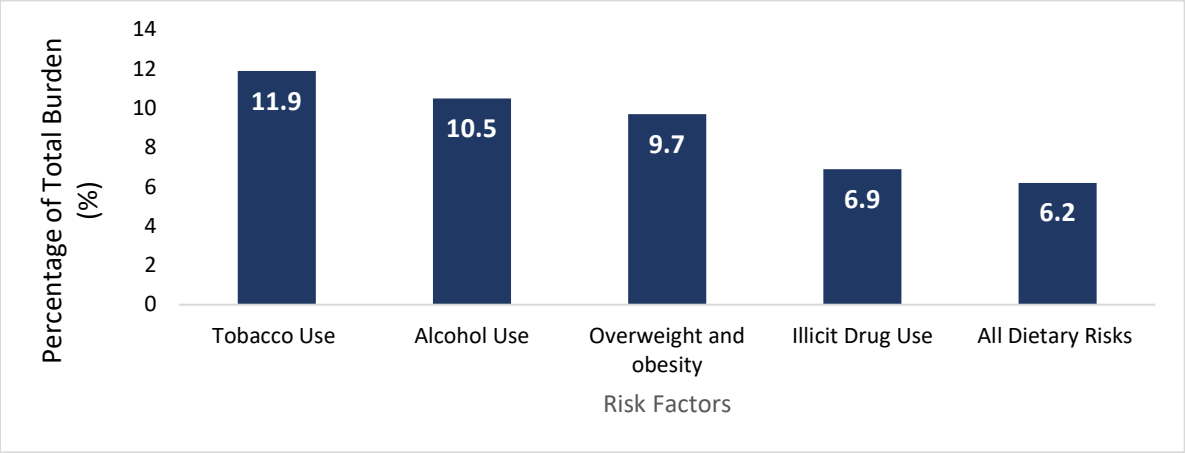
Health risk factors

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.

[35] 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.

Figure 7.2 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 7.2 Risk factors and their contribution to the total burden of disease among 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, 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 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 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 region are similar to Victorian averages. Higher proportions are observed in two LGAs, Greater Dandenong and Port Phillip (Australian Bureau of Statistics, 2017a; Public Health Information Development Unit, 2021c) (Table 7.7). The data show the percentage of First Nations women who reported that they smoked during a pregnancy, out of the number of pregnancies of First Nations women (2018-19). Data are aggregated over three years and may include women who gave birth more than once during the time.

Table 7.7 Prevalence of smoking during pregnancy among First Nations peoples across different age groups and sex, 2018-19

IARE of residence	First Nations mothers		
	Smoking during pregnancy (n)	Pregnancies (n)	Smoking 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
SEMPHN region	145	403	36.0
Victoria	1,183	2,914	40.6
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 region (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 Victorians present at emergency departments for alcohol-related causes at more than four times the rate of other Victorians (Department of Health, 2020).

Physical inactivity

Proportionally, fewer First Nations Victorians meet physical activity guidelines; First Nations women meet guidelines significantly less than all other adult women. Recent data from the Victorian Population Health Survey 2019 shows 43.7% of First Nations peoples met with physical activity guidelines compared with 51.1% of all other 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 & self-inflicted injuries (4.6%), alcohol use disorders (4.4%) and depressive disorders (4.3%) (Australian Institute of Health and Welfare, 2018b).

Chronic diseases

Recent 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) (Table 7.8).

Table 7.8 Chronic conditions in First Nations population 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
ASR per 100										
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
Victoria	7.3	16.2	1.9	0.4	4.9	3.6	87.5	2.5	18.3	1.1

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. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN region (4%)

Immunisation

Immunisation rates for First Nations children in the region are marginally lower for one-year and two-year cohorts compared with non-First Nations children (Table 7.9). Childhood immunisation rates for the five-year cohort are higher in First Nations children compared with non-First Nations children both within the SEMPHN region and Victoria-wide. However, rates are marginally lower for the remaining cohorts (one-year and two-year groups).

Table 7.9 Immunisation among First Nations children (1-5 years), by IARE (2018)

IARE	First Nations children fully immunised at 1 year of age		First Nations children fully immunised at 2 years of age		First Nations children fully immunised at 5 years of age	
	n	(%)	n	(%)	n	(%)
Cardinia	19	100.0	16	89.0	23	100.0
Cranbourne - Narre Warren	57	96.6	31	88.6	36	100.0
Frankston	26	96.3	35	87.5	27	96.4
Greater Dandenong	13	86.7	n.p.	-	13	100.0
Melbourne - East (part b)	10	93.8	12	94.4	10	100.0
Melbourne - Port Phillip	6	100.0	5	85.7	n.p.	-
Mornington Peninsula	30	93.8	29	93.5	20	100.0
SEMPHN region	157	95.2	142	89.9	134	95.5
Victoria	1,245	92.8	1,119	88.8	1,037	96.7
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: 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 region (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). The data show 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) (Table 7.10). The data are aggregated over three years, and they may include women who gave birth more than once during the time period.

Table 7.10 First Nations who did not attend antenatal care, by IARE, 2018

INDIGENOUS AREA (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	19	100.0	16
Cranbourne - Narre Warren	57	96.6	31
Frankston	26	96.3	35
Greater Dandenong	13	86.7	n.p.
Melbourne - East (part b)	10	93.8	12
Melbourne - Port Phillip	6	100.0	5
Mornington Peninsula	30	93.8	29
SEMPHN region	157	95.2	142
Victoria	1,245	92.8	1,119
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 region (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. Table 7.11 below shows the distribution of live births against birth weight for babies born to First Nations mothers across Victoria.

In 2020, the proportion of babies with birthweight under 2,500gms was higher in the First Nations population (10.6% in Victoria) compared to the non- First Nations population (6.3%). Almost 2% of babies born to First Nations mothers were considered to be of very low birthweight (under 1,500 grams).

Table 7.11 Number of births for both First Nations mothers and General Population, by birthweight across Victoria, 2020

Birthweight (grams)	First Nations		Non- First Nations	
	(n)	(%)	(n)	(%)
Mean (grams)	3,249		3,330.0	
Less than 1,500	22	1.9	733	1.0
1,500 – 2,499	99	8.7	4,123	5.4
2,500 – 2,999	215	18.8	13,020	17.0
3,000 – 3,499	382	33.4	28,976	37.8
3,599 – 4,000	303	26.5	22,338	29.1
4,000 – 4,499	105	9.2	6,556	8.5
4,500 and over	17	1.5	962	1.3
Total	1,143	100.0	76,710[36]	100.0

Source: AIHW analysis of National Perinatal Data Collection, 2020. Table 3.12: Live births of Aboriginal and Torres Strait Islander mothers, by birthweight and state and territory, 2020, Table 3.9: Live births, by birthweight and state and territory, 2020

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).

Data from Table 7.8 at the start of the chapter, shows higher rates of self-reported mental health conditions compared to all other chronic conditions for First Nations populations in SEMPHN region. Higher rates were observed in Mornington Peninsula (n = 291, 39.9 per 100) and Greater Dandenong (n = 127, 31.3 per 100) compared to Victorian rates (ASR of 18.3 per 100).

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

- One in two (45.9%) of 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 ever diagnosed with anxiety or depression, compared with 29.5% of all other adults

[36] Total includes 2 cases where birth weight was not captured.

- One third (32.9%) of First Nations peoples were diagnosed with anxiety or depression in the last year, compared to one in seven (14.8%) Non - First Nations peoples

Table 7.12 Prevalence of suicides among First Nations peoples by age and sex, Victoria, 2009-2020

Age Group (years)	First Nations		Non-First Nations	
	(n)	(%)	(n)	(%)
Under 18	3	2.6	187	2.7
18 – 24 years	28	23.9	696	10.0
25 – 34 years	31	26.5	1,260	18.1
35 – 44 years	24	20.5	1,342	19.3
45 – 54 years	23	19.7	1,386	19.9
55 – 64 years	6	5.1	1,015	14.6
65 and over	2	1.7	1,064	15.3
Total	117	100.0	6950	100.0

Source: Coroners Court of Victoria. Victorian suicides of Aboriginal and Torres Strait Islander people (June 2020), Table 2a and 2b: Frequency and proportion of suicides among population by age and sex, Victoria 2009-2020*. Calculations from source table were adjusted to calculate the non – First Nations Population Estimates.

Between 1st January 2020 and 30th April 2020, there were eleven suicides reported among the First Nations people living in Victoria. Additional data states that between 2009 and 2020, 59.8% (n = 70) of all suicides reported among First Nations occurred in Regional Victoria compared to the general population where 33.8% (n = 2,390) of all suicides occurred in Regional Victoria. When looking at mental health diagnosis among suicide deaths reported for First Nations population, 82.6% (n = 56) were either suspected or diagnosed with a mental health illness compares to 75.5% of suicide deaths among all Victorians for the same time period (Table 7.13).

Table 7.13 Number and proportion of suicides by mental ill health status, Victoria, 2009-2016

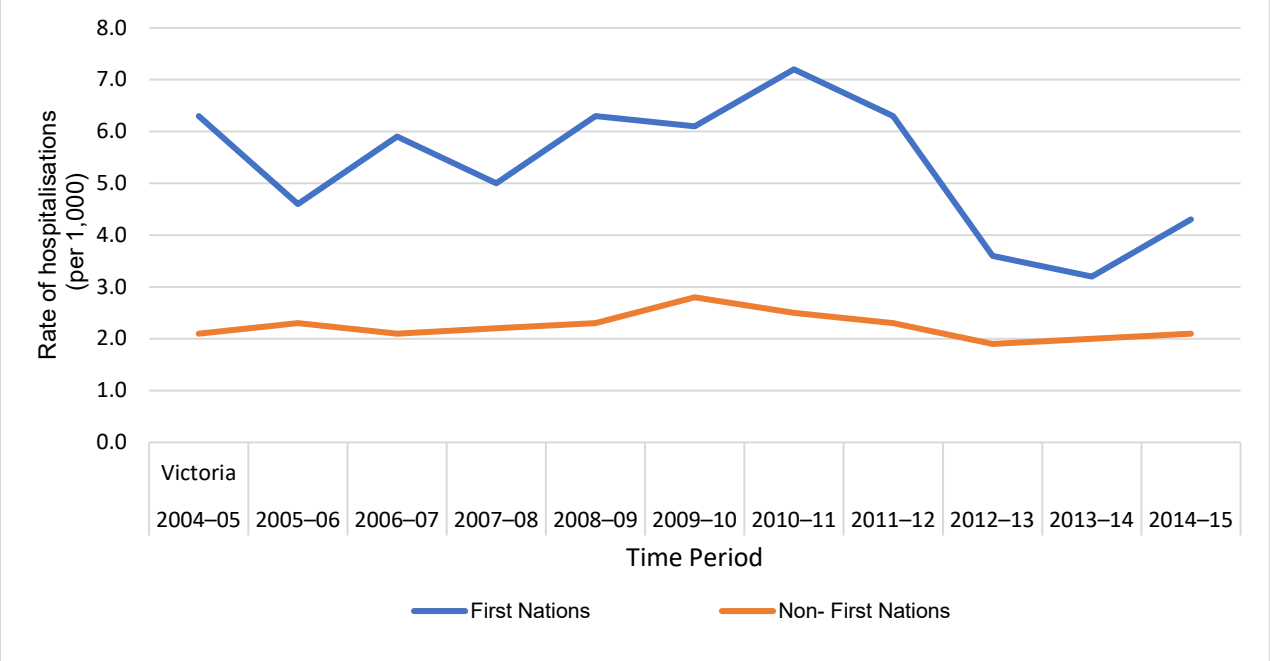
Mental Health Illness	Suicides			
	First Nations		Non-First Nations Population	
	(n)	(%)	(n)	(%)
Diagnosed	42	62.3	2,588	55.6
Suspected but not diagnosed	14	20.3	922	19.8
Neither diagnosed nor suspected	12	17.4	1,142	24.5
Total	68	100.0	4652	100.0

Source: Coroners Court of Victoria. Victorian suicides of Aboriginal and Torres Strait Islander people (June 2020), Table 4: Frequency and proportion of suicides by history of diagnosed or suspected mental ill health, Victoria 2009-2016. Calculations from source table were adjusted to calculate the non – First Nations Population Estimates.

Alcohol-related harms

Figure 7.3 describes the hospitalisation rates for both First Nations and non – First Nations Victorians for alcohol related adverse events, over 10 years between 2004-05 and 2014-15. The graph shows a significantly higher prevalence of alcohol related hospitalisations in Victoria, among the First Nations population over the entire 10 years. While the data presented is several years old, it is the most recent data that is available for alcohol related hospitalisation rates for Victoria by First Nations status.

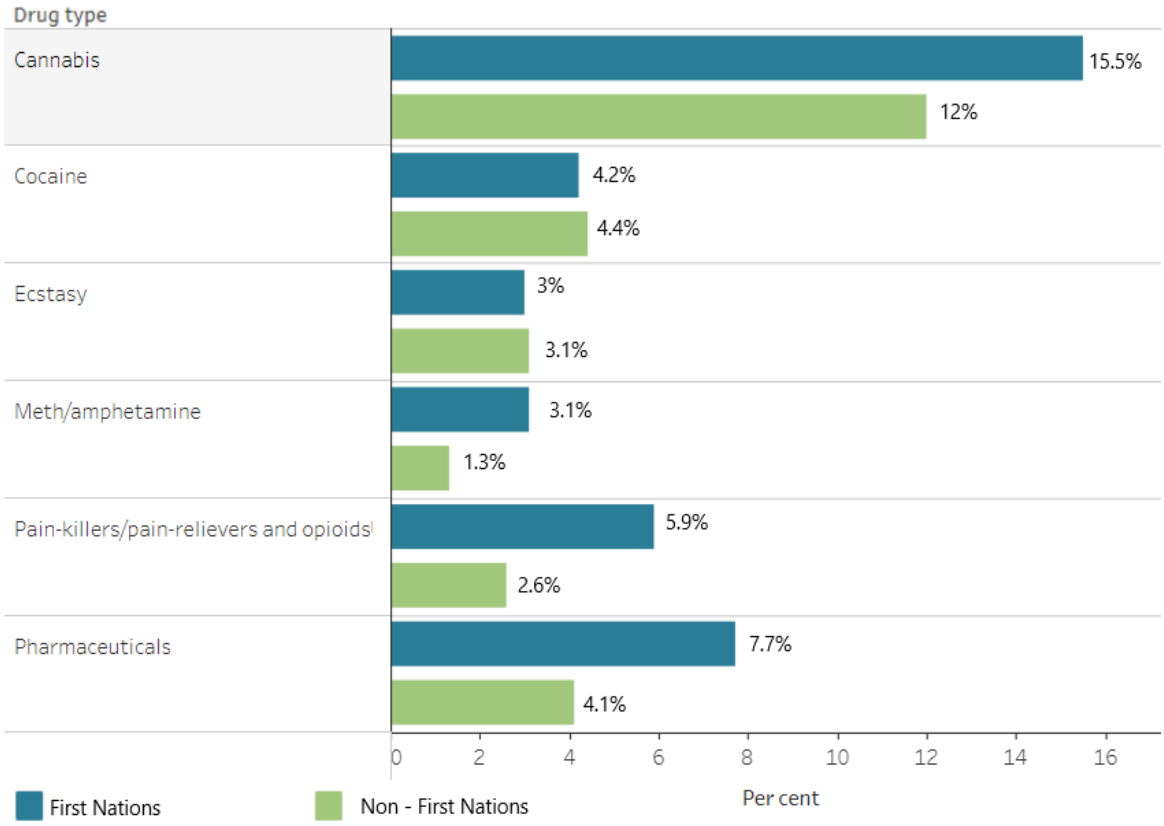
Figure 7.3 Age-standardised hospitalisations rates for a principal diagnosis related to alcohol use by First Nations status, 2004-05 to 2014-15.



Illicit drug use

The 2019 NDSHS data showed that a higher proportion of First Nations Australians aged 14 and over had recently used illicit drugs (other than ecstasy, cocaine and hallucinogens), compared with non-Indigenous Australians (Figure 7.4) (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 population. 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 7.4 Illicit drug use by Indigenous status, people aged 14 and over, 2019, Australia



Unplanned service needs

Emergency department presentations

The total emergency department presentations for mental and behavioural disorders for First Nations peoples are significantly higher in Greater Dandenong, almost three times higher than rates for Victoria overall. Data from Table 7.14 shows presentations to emergency departments (ED) between 1 July 2018 and 30 June 2019 (ASR per 100,000). The highest rates were in:

- Greater Dandenong (IARE[37]), 11,819.6 per 100,000
- Melbourne – Port Phillip (part b) (IARE), 5,552.0 per 100,000
- Frankston (IARE), 3,813.5 per 100,000
- Victoria: 3,973.8 per 100,000

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

- Greater Dandenong (IARE), 3,209.7 per 100,000
- Melbourne – Port Phillip (part b) (IARE), 2,253.9 per 100,000
- Cranbourne/Narre Warren (Casey) (IARE), 1,301.2 per 100,000
- Victoria: 1,926 per 100,000

[37] 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[37]), Melbourne - Port Phillip (City of Port Phillip), Mornington Peninsula (Mornington Peninsula Shire)

Table 7.14 Emergency department presentations - resuscitation, emergency and urgent, by principal diagnosis by IARE, FY 2018-2019

INDIGENOUS AREA (IARE)	Total urgent presentations			Total semi-urgent presentations		Total non-urgent presentations		Urgent presentations for diseases of the respiratory system		Emergency department presentations for mental and behavioural disorders		
	(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	(n)	ASR per 100,000
Cardinia	50	6,069.0	175	18,225.6	120	10,906.3	19	1,929.3	16	2,882.0	29	3,397.5
Cranbourne - Narre Warren	173	10,063.6	440	22,092.8	275	12,156.0	35	1,676.7	34	3,042.7	69	3,615.6
Frankston	208	9,676.0	488	20,524.9	330	12,580.6	45	1,803.7	44	3,070.2	91	3,813.5
Greater Dandenong	104	16,819.4	276	40,969.0	125	17,087.6	20	2,914.2	27	6,449.2	76	11,819.6
Melbourne – East	57	4,834.6	161	12,294.2	136	9,515.4	23	1,601.2	15	1,299.8	36	2,348.0
Melbourne - Port Phillip	177	11,443.7	410	24,035.8	338	18,344.6	82	4,213.9	31	4,334.8	127	5,552.0
Mornington Peninsula	132	8,661.1	283	16,784.3	211	11,387.8	28	1,623.0	35	3,169.0	39	2,462.8
Victoria	74,370	10,424.9	193,132	23,847.0	223,218	24,479.8	58,475	6,819.5	1,473	3,695.7	31,992	3,973.8
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 Boroondara38), 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 2022 release), accessed on 20 August 2022, 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 region (4%)

[38] Data for Melbourne – East should be interpreted with Caution as the City of Boroondara lies outside SEMPHN LGA boundaries.

Hospitalisations

Admissions[39] for mental health-related conditions for First Nations peoples (ASR per 100,000, 2018-19) in Victoria are similar to the rest of Australia. However, Greater Dandenong observed rates almost three times higher than both the state and nationally (Australian Institute of Health and Welfare, 2017; Public Health Information Development Unit, 2021b) (Table 7.15).

- Greater Dandenong (IARE), 9,965.6 per 100,000
- Melbourne (Port Phillip) (part b) (IARE), 5629.7 per 100,000
- Cranbourne/Narre Warren (Casey) (IARE): 2896.8 per 100,000
- Victoria: 3267.5 per 100,000

The data show admissions for circulatory system diseases for First Nations peoples, highest rates are in (Australian Bureau of Statistics, 2017b; Public Health Information Development Unit, 2021b):

- Greater Dandenong (IARE), 5802.6 per 100,000
- Cranbourne/Narre Warren (Casey) (IARE), 3650.9 per 100,000
- Melbourne – Port Phillip (part b) (IARE), 4642.7 per 100,000
- Victoria: 3538.9 per 100,000

The data show admissions for respiratory system diseases for First Nations peoples, highest rates are in (Australian Bureau of Statistics, 2017b; Public Health Information Development Unit, 2021b):

- Greater Dandenong (IARE), 4511.6 per 100,000
- Melbourne – Port Phillip (part b) (IARE), 3978.6 per 100,000
- Frankston – 2430.7 per 100,000
- Victoria: 3139.4 per 100,000

[39] 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 2018-19.

Table 7.15 First Nations peoples hospital admissions by IARE, FY2018/19

INDIGENOUS AREA (IARE)	Admissions for mental health related conditions		Admissions for circulatory system diseases		Admissions for respiratory system diseases		Admissions for potentially preventable conditions		Same-day admissions for dialysis for kidney disease	
	(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
Cardinia	54	3,852.3	14	1,996.5	38	2,084.2	74	5,404.0	No data	-
Cranbourne - Narre Warren	90	2,896.8	63	3,650.9	81	2,198.3	153	5,197.1	286	15,837.5
Frankston	107	2,600.8	58	2,223.1	106	2,430.7	178	4,769.9	466	16,749.6
Greater Dandenong	112	9,965.6	48	5,802.6	58	4,511.6	113	10,335.9	43	5,016.1
Melbourne - East	84	3,216.4	35	2,493.0	42	1,957.3	67	3,367.4	166	10,995.4
Melbourne - Port Phillip	219	5,629.7	76	4,642.7	98	3,978.6	138	5,705.0	824	43,450.6
Mornington Peninsula	41	1,511.6	41	2,086.0	68	2,101.7	130	4,790.7	No data	-
Victoria	3,179	3,267.5	1,961	3,538.9	3,436	3,139.4	5,520	6,193.6	12,557	21,085.6

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 Boroondara40), 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 2022 release), accessed on 20 August 2022, 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 region (4%)

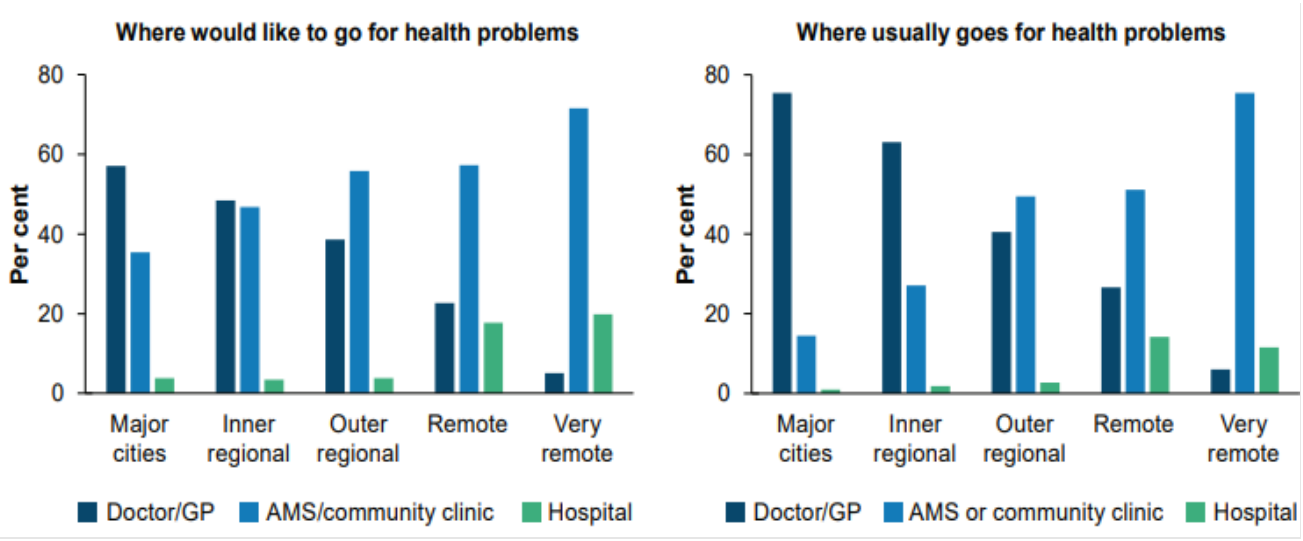
[40] Data for Melbourne – East should be interpreted with Caution as the City of Boroondara lies outside SEMPHN LGA boundaries.

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) (Australian Bureau of Statistics, 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 7.5).

Figure 7.5 First Nations peoples access to primary healthcare services



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 (Australian Bureau of Statistics, 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 2015-16, the average amount of money per person spent on health for First Nations Australians was $8,949, or 1.3 times that of non-First Nations Australians ($6,657) (Australian Institute of Health and Welfare - National Indigenous Australian Agency, 2020) (Table 7.16).

Table 7.16 Average health spending for First Nations and non-First Nations health needs, 2015-16.

	First Nations Expenditure ($)	Non-First Nations Expenditure ($)	Rate Ratio
Hospitals	4,436	2,718	1.6
Medicare services	1,157	1,074	1.1
Community health services	998	331	3.0
Medications	558	890	0.6
Dental services	414	416	1.0
Patient transport services	283	152	1.0
Total health expenditure	8,949	6,657	1.3

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

Annual Health Checks

First Nations peoples can receive an annual health check, designed specifically for First Nations Australians, 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).

Table 7.17 First Nations health check rates by modality, 2020–21

	Telehealth status	(n)	Total Number of First Nations peoples [41]	Percent
SEMPHN region	Face-to-face	790	10,085	7.8
	Telehealth	98	10,085	1.0
	Total	880	10,085	8.7
Victoria	Face-to-face	8,287	64,501	12.8
	Telehealth	1,040	64,501	1.6
	Total	9,297	64,501	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). 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 (Table 7.18) (AIHW, 2022i).

Table 7.18 First Nations health check patients who received a follow-up service within 12 months, 2019–20

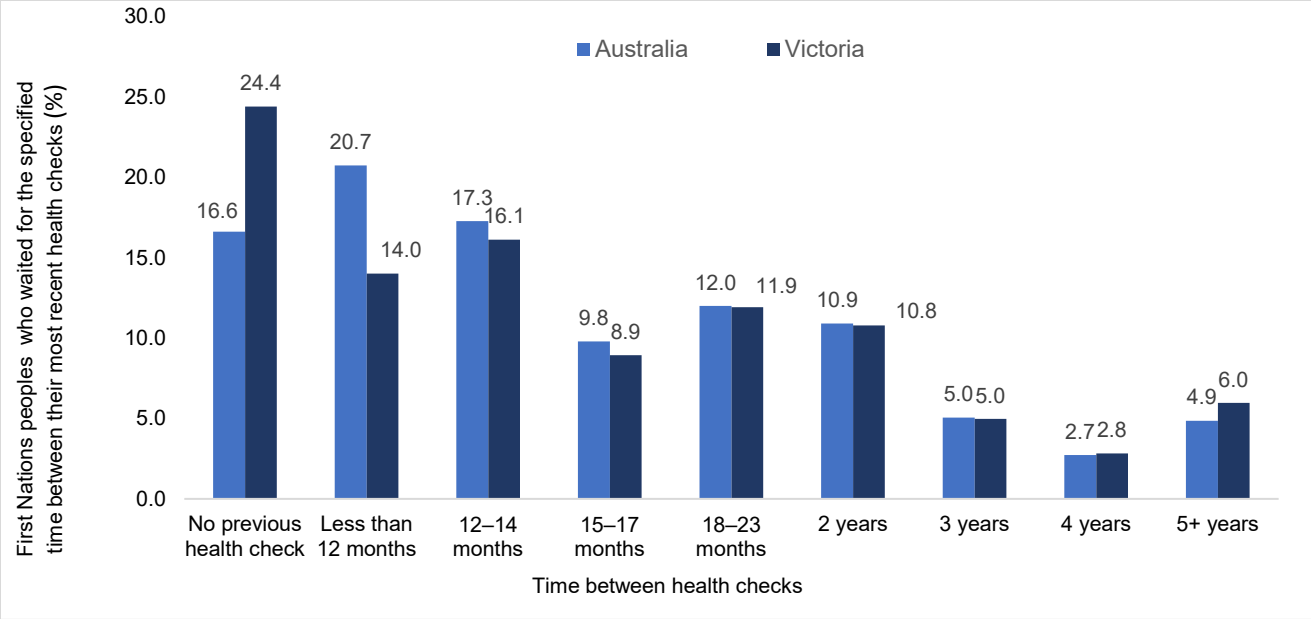
	Number of follow-up patients (n)	Number of health check patients (n)	Rate of follow-up (%)
SEMPHN region	296	826	35.8
Victoria	3,480	9,245	37.6

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

Among the 9,297 First Nations peoples in Victoria who had a First Nations-specific health check in 2020-21, one in four (n=2,270, 24.4%) had no previous health check. One in seven (n=1,303, 14.0%) had a follow up check within 12 months and one in ten (n=1,003, 10.8%) had a follow up check within two years. Figure 7.6 below compares the national rates against Victorian estimates.

[41] 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 7.6 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 aged over 65 is increasing at a faster pace than all other age groups (Abud et al., 2022). In Victoria, 1 in 6 Australians are aged 65 years and older[42] (n = 1,092,833) which accounts for 16.8% of the state's population as of 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 (Victoran 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

One in six (16.2%, n= 255,020) residents in the SEMPHN region are aged 65 years and older, and 2.1% (n = 34,166) are aged 85 years and older. Mornington Peninsula has the largest older population (27.2%), followed by Bayside (21.2%) and Kingston (18.5%). Cardinia has the smallest older population (12.5%); however, this is 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) have the largest population of persons aged 85 years and older. Population projections shown in Table 8.1 indicate that the older population in the SEMPHN region is expected to grow by 29.7% (n = 330,719) by 2030. 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).

[42] First Nations older people are aged 50 years and older

Table 8.1 Population aged 65 and over by LGA, 2021

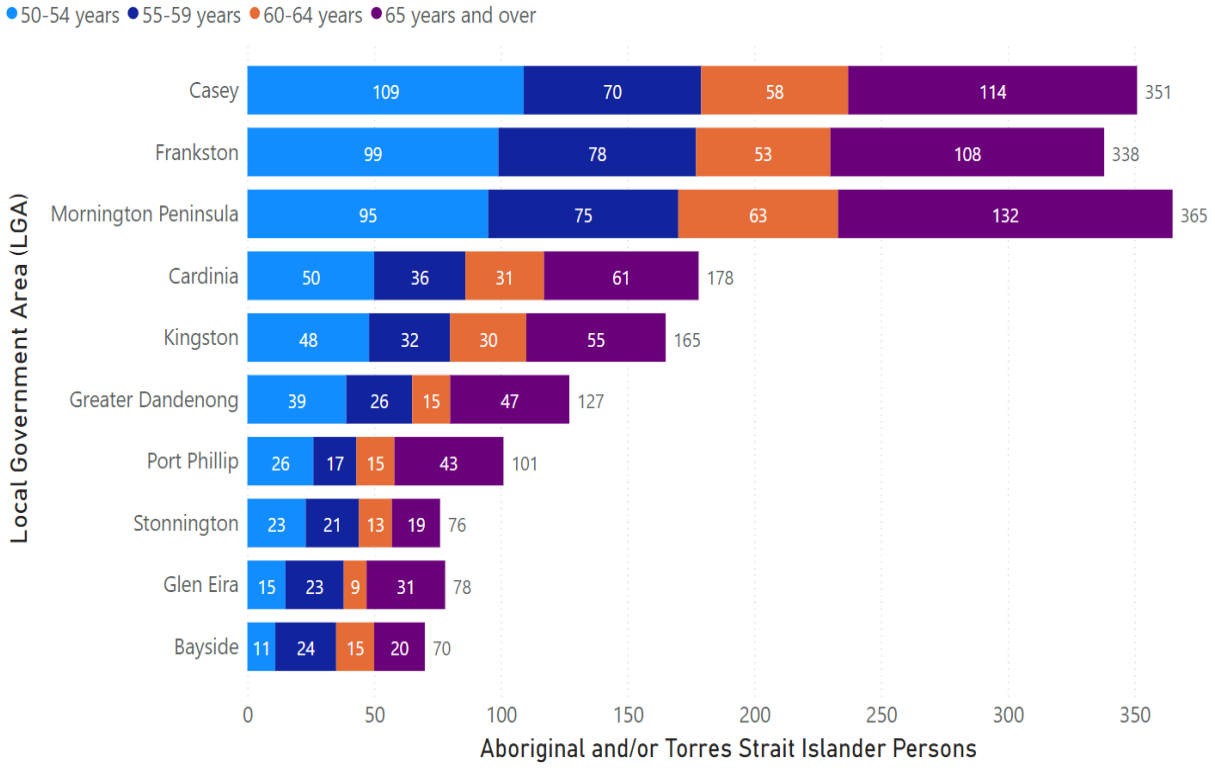
LGA	Total population aged 65 and over	Proportion aged 65 and older	2030 Estimated Resident Population growth rate, 65 years and over
	(n)	(%)	(%)
Bayside	21,439	21.2	20.2
Cardinia	14,841	12.6	50.6
Casey	39,583	10.8	45.9
Frankston	23,173	16.6	29.1
Glen Eira	24,218	16.3	21.1
Greater Dandenong	24,856	15.7	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
SEMPHN region	255,020	16.3	29.7
Victoria	1,580,104	24.2	25.8

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

First Nations

At the 2021 Census, 9,970 persons within the SEMPHN region 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 8.1).

Figure 8.1 First Nations older population by age and LGA



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 region.

Culturally and Linguistically Diverse (CALD)

At the 2021 Census, almost as many people aged 65 and over living in the SEMPHN region were born overseas (46.6%, n=112,230) as were born in Australia (53.4%, n=128,429) (Table 8.2). Of those born overseas, approximately 27% were born in primarily English-speaking countries (e.g., England, New Zealand, Canada). Approximately 21% were born in other European countries (e.g., Greece, Italy, and Netherlands), spread fairly consistently across LGAs (varying between 15% in Casey and 29% in Stonnington). Notably, there are 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 has 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) reside 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 are 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' are Glen Eira (n=3,657), Casey (n= 3,119) and Greater Dandenong (n= 2,134). In Glen Eira, those 'born elsewhere' make up 46% of the local overseas-born population. This suggests a gap in the data, as we are unable to make a definitive determination around country of birth, although these numbers should not be excluded as they may indicate a barrier to access. Low proficiency in English is defined as the person either does not understand English or does not understand English very well. The majority of older persons with low proficiency in English reside in Greater Dandenong (n=7,190), Casey (n=4,799), Kingston (n=2,908), and Glen Eira (n=2,338).

Table 8.2 Number and proportion of older people by country of birth and LGA

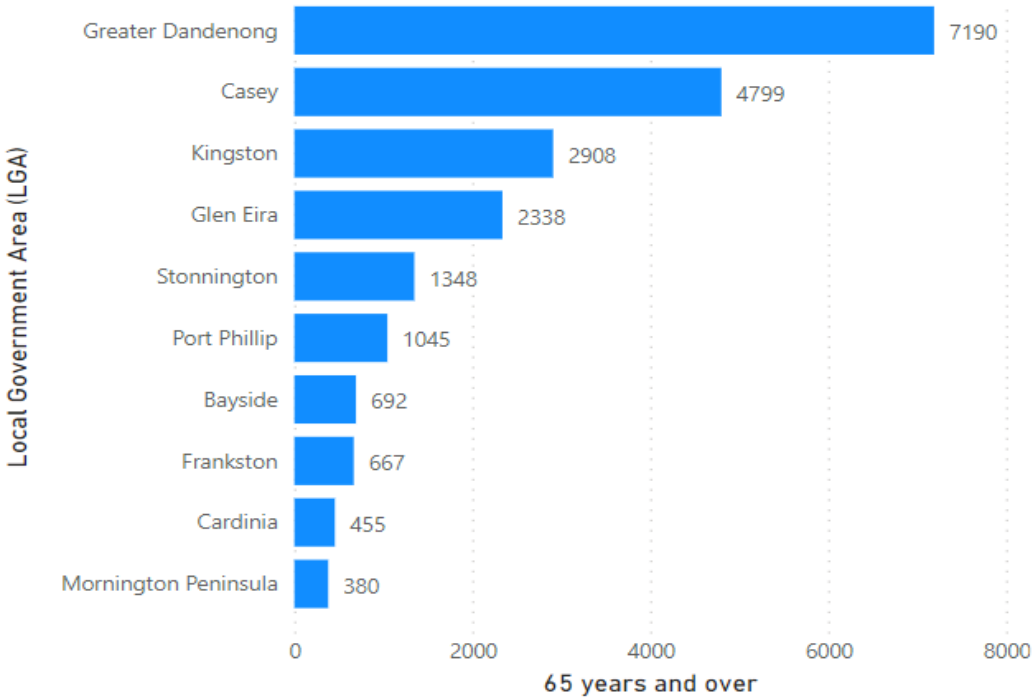
Country of birth	Bayside	Cardinia	Casey	Frankston	Glen Eira	Kingston	Mornington Peninsula	Port Phillip	Stonnington	Greater Dandenong	SEMPHN region
Australia	13,382	8,785	15,652	13,196	10,418	14,367	29,559	7,363	10,025	5,682	128,429
Overseas	7,096	5,030	21,882	8,705	12,694	13,642	13,138	5,410	6,735	17,898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

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 region (4%).

Focus group consultations held in July and August 2022 highlighted the need for service planning to include the needs of older CALD communities. The focus groups reported that the CALD community bring strengths to the catchment, but often services are inaccessible due to cultural and language barriers.

Low proficiency in English is defined as the person either does not understand English or does not understand English very well. The majority of older persons with low proficiency in English reside in Greater Dandenong (n=7,190), Casey (n=4,799), Kingston (n=2,908), and Glen Eira (n=2,338). This is reflective of the larger CALD populations in these LGAs (Figure 8.2).

Figure 8.2 Older persons with low proficiency in English, by LGA

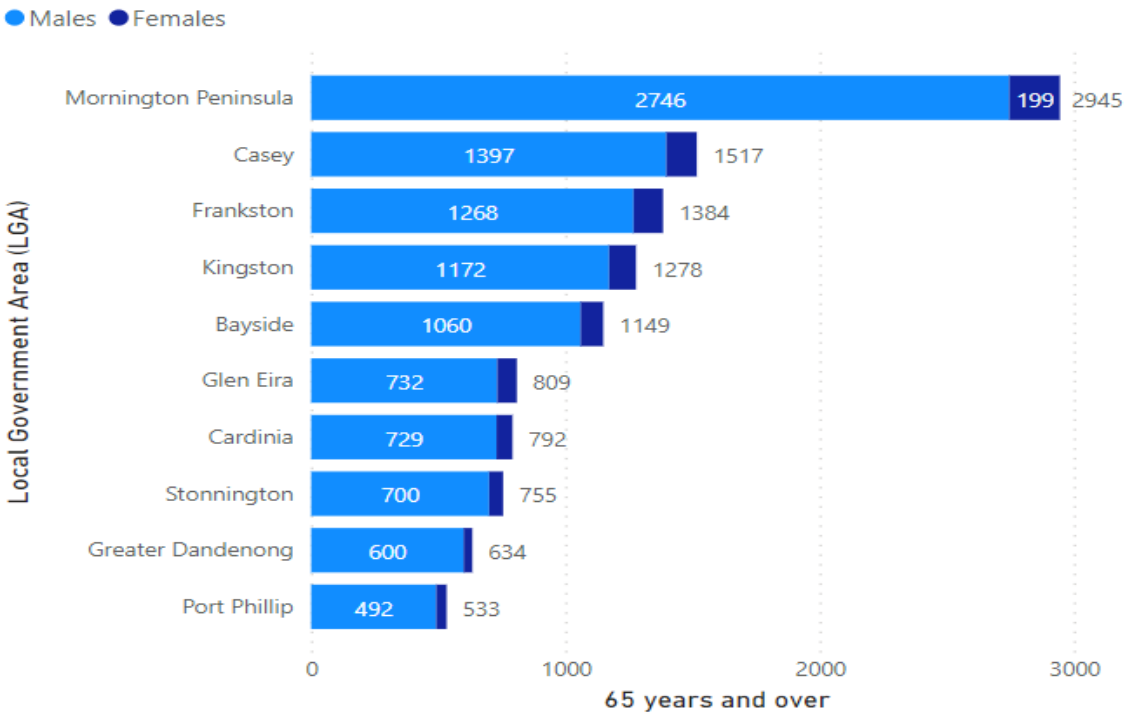


Source: Census 2021, Australian Bureau of Statistics (June 2022 release) Table G11: Proficiency in spoken English by year of arrival in Australia by age, Victoria, accessed on 20 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN region (4%).

Veterans

The largest group of veterans in Australia are now aged 65-74 years of age. In Victoria, there are approximately 54,000 DVA Pensioners and Treatment Card Holders (Department of Veterans' Affairs, 2022). Figure 8.3 shows that the largest number of older veterans live in Mornington Peninsula (25.0%, n=2,945).

Figure 8.3 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 for males in south eastern Melbourne was 80.6 years (Victoria: 79.8 years) and 85.7 years for females (Victoria: 85.3 years)(Australian Institute of Health and Welfare, 2021e). Table 8.3 presents the median age at death across the SEMPHN region. Bayside reported the highest median age of death (87.5 years), and Casey reported the lowest median age of death (79.4 years).

Table 8.3 Median age at death by LGA, 2016-2020

LGA	Median age at death (years)
Bayside	87.5
Cardinia	80.5
Casey	79.4
Frankston	81.2
Glen Eira	85.6
Greater Dandenong	82.2
Kingston	83.6
Mornington Peninsula	83.9
Port Phillip	80.4
Stonington	85.0
SEMPHN region	83.0
Victoria	82.6

Source: Mortality Over Regions and Time (MORT) books (2016-2020), AIHW (accessed on 20 August 2022). Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN region (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 South east Melbourne region (448 per 100,000) is lower than Victorian estimates (479.2 per 100,000); certain LGAs within south eastern Melbourne report 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) (Australian Institute of Health and Welfare, 2021e).

Chronic and progressive illnesses are the leading contributor to death among older Australians. Between 2018 and 2020, 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 8.4 shows, these diseases impact a range of older people across the age profile (Australian Institute of Health and Welfare, 2021e).

Table 8.4 Leading causes of death in Australians aged over 65 years (ASR per 100,000), 2016-2020

Age group (years)	Top five causes of death among older Australians				
	1	2	3	4	5
65–74	Lung cancer	Coronary heart disease	COPD	Colorectal cancer	Cerebrovascular disease
	ASR: 8,047 per 100,000	ASR: 7,521 per 100,000	ASR: 4,655 per 100,000	ASR: 3,602 per 100,000	ASR: 3,146 per 100,000
75–84	Coronary heart disease	Dementia including Alzheimer's	Lung cancer	Cerebrovascular disease	COPD
	ASR: 12,592 per 100,000	ASR: 10,466 per 100,000	ASR: 8,144 per 100,000	ASR: 7,792 per 100,000	ASR: 7,113 per 100,000
85-94	Dementia including Alzheimer's	Coronary heart disease	Cerebrovascular disease	COPD	Heart failure and heart disease
	ASR: 23,734 per 100,000	ASR: 19,534 per 100,000	ASR: 12,630 per 100,000	ASR: 6,127 per 100,000	ASR: 4,879 per 100,000
95+	Dementia including Alzheimer's	Coronary heart disease	Cerebrovascular disease	Influenza and pneumonia	Heart failure and heart disease
	ASR: 6,934 per 100,000	ASR: 5,460 per 100,000	ASR: 3,397 per 100,000	ASR: 1,823 per 100,000	ASR: 1,705 per 100,000

*Numbers reported are Age-specific rate (per 100,000) Source: Mortality Over Regions and Time (MORT) books (2016-2020), AIHW (accessed on 20 August 2022).

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 south eastern 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 the 65 and over age group across both genders. This equates to an ASR of 2,518.7 per 100,000 hospitalisations due to falls among males aged 65 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 health 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.[43] are ranked as the second leading cause of death in the 85 years and over cohort.

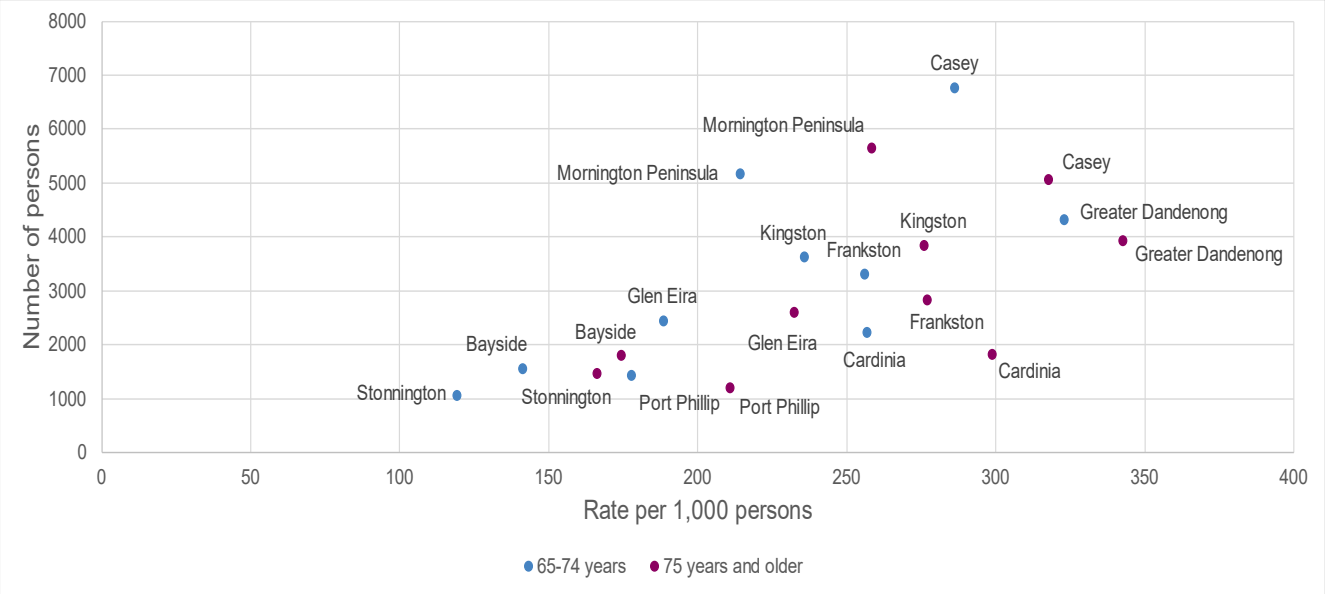
[43] Definition of Organic, including symptomatic, mental disorders: this classification comprises of a range of mental disorders grouped together on the basis of their having in common a demonstrable etiology in cerebral disease, brain injury, leading to cerebral dysfunction

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). Using the available ABS data, vulnerable persons have been identified using a threshold of $650 per week (i.e., under the low-income tax offset). Casey, Mornington Peninsula, Greater Dandenong, and Kingston LGAs reported the largest number of persons 65 years and older that earned less than $650 per week.

Figure 8.4 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 y-axis than the purple dot, indicating the 65–74 age bracket is as large as or larger than the 75 and older brackets. Using Casey as an example, there are significantly more low-income persons in the 65–74 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 8.4 Rate per 1,000 and number of older persons earning less than $650 per week, by LGA

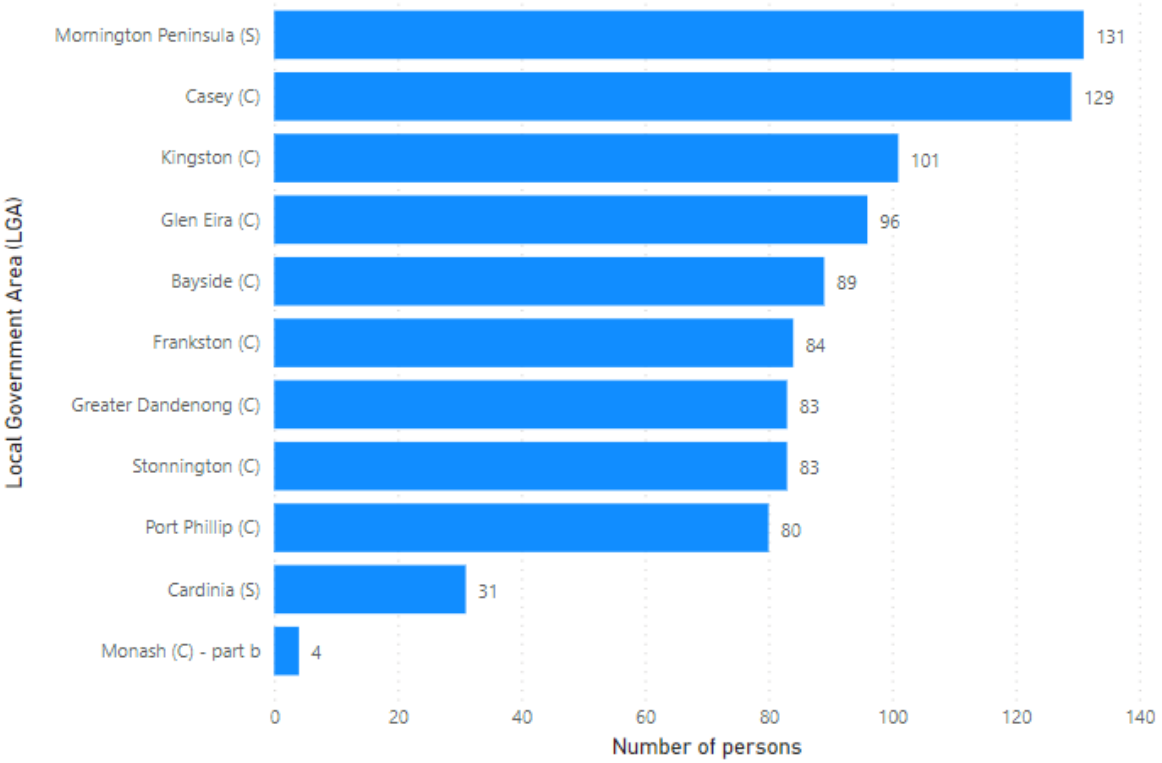


Source: Census 2021, Australian Bureau of Statistics (June 2022 release) Table G17: Total personal income (weekly) by age by sex, Victoria, accessed on 20 August 2022. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN region (4%).

Unemployment

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

Figure 8.5 Older persons unemployed and looking for work, by LGA

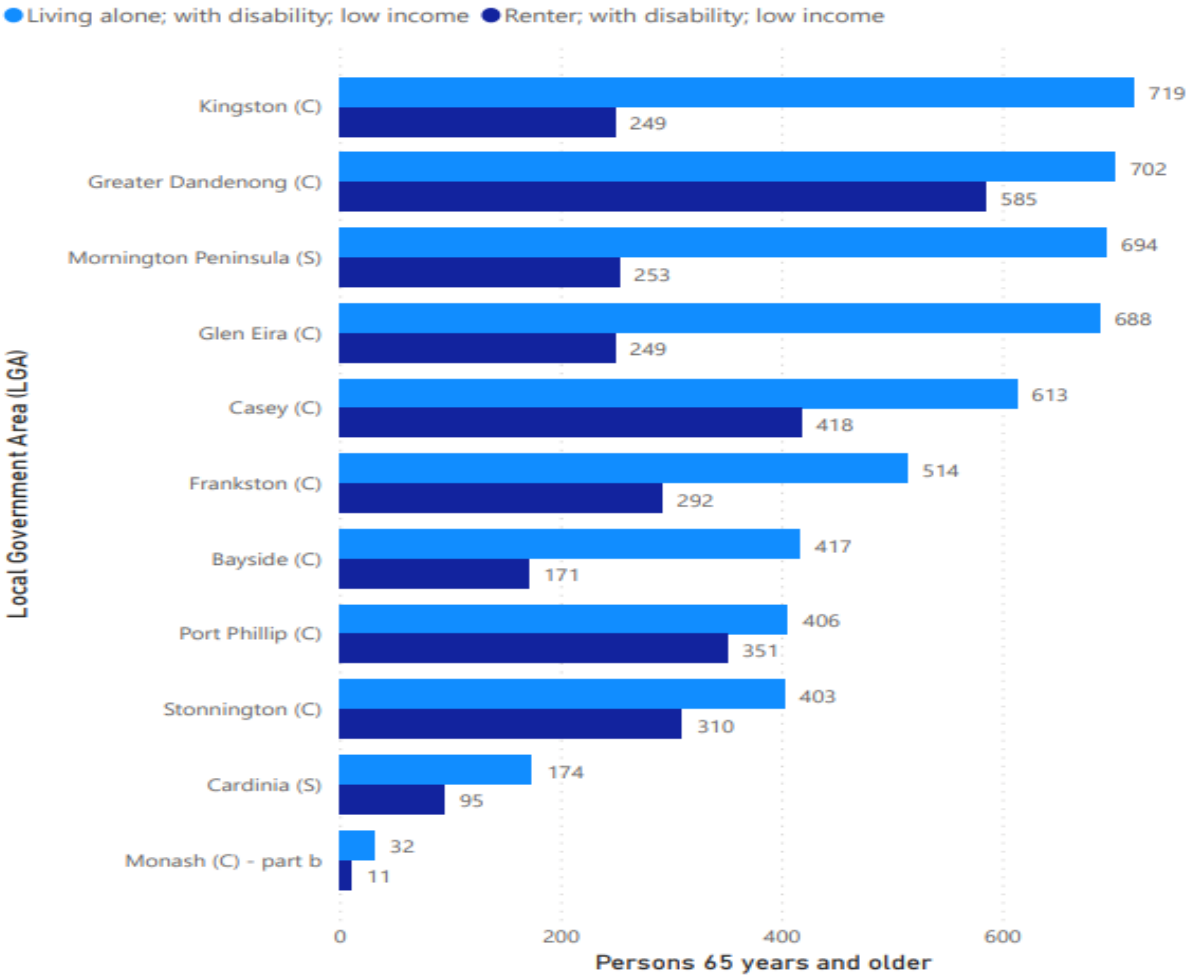


Source: Social Health Atlas of Older People in Australia Data by Primary Health Network (Published June 2021), 2016 Data.

Vulnerable older population

The Social Health Atlas includes a measure of vulnerable persons, defined as those who are renting, living alone, low income and those with a disability. The data presented in Figure 8.6 suggests the most vulnerable older persons live in the Greater Dandenong, Casey, Mornington Peninsula, Kingston, and Glen Eira LGAs.

Figure 8.6 Older persons with low income, living alone, renting, and living with a disability, by LGA



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, that when not dealt with, can further exacerbate this experience. Approximately 7% of the homeless population in Victoria are sleeping rough (n= 8,200) reported in the 2016 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).

Available data related to people experiencing homelessness are not broken down by age and therefore cannot be analysed in relation to the older population. Obtaining accurate estimates of homelessness is challenging, especially in relation to limitations around age and geographic specificity. Therefore, this section is intended only to be a guide. Data from 2016 ABS Census has been reported in Table 8.5. This data is expected to be updated with the release of Census data in mid-2023.

Table 8.5 Number of older people experiencing homelessness and rates by LGA, 2016

LGA	People experiencing homelessness (n)	Population Estimates in 2016 (n)	Rate 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
Victoria	24,817	5.93 million	41.9

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

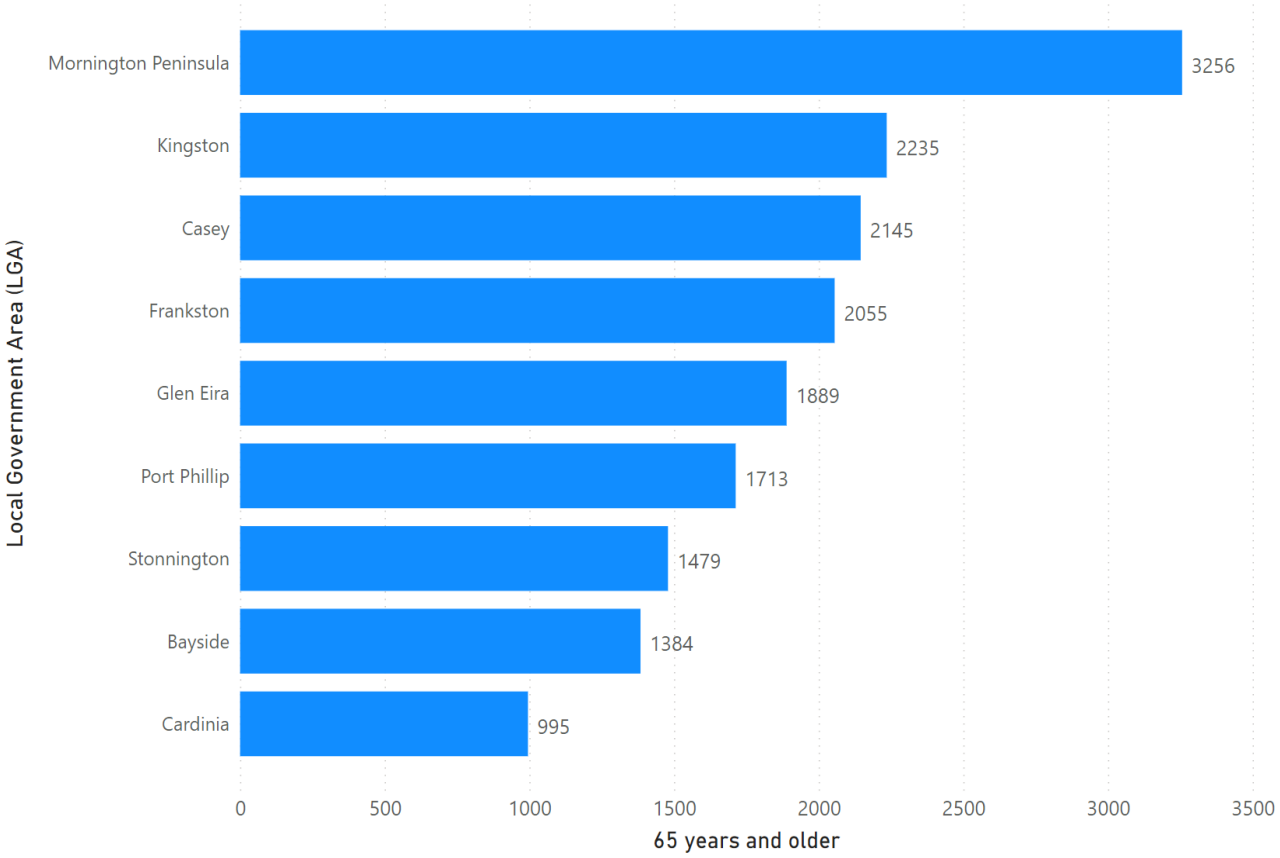
Social support

Living alone can be a determinant of social isolation and loneliness, especially for the older population. Figure 8.7 shows that Mornington Peninsula (n= 3,256), Kingston (n=2,235), Casey (n=2,145) and Frankston (n=2,055) have the largest number of persons 65 years and older that live alone. Proportionally, Frankston has the highest number of older people living alone (8.9%) followed by Stonnington (8.3%) and Glen Eira (7.8%).

Literature suggests that multiple factors (social, financial, health and sociodemographic) have significantly affected the psychological condition of older people during the COVID-19 pandemic, particularly the social isolation and fear of infection during lockdown public health orders (Richter & Heidinger, 2021).

This resilience was also found in a Sydney study (Strutt et al., 2022) which showed older adults were adaptable and resilient during lockdown. The study examined the impact of COVID-19 lockdown on health and lifestyle factors based on self-reported outcomes among 201 community-dwelling older adults (60-87 years) in Sydney, Australia, and demonstrated high uptake of new technologies to remain connected to others, while negative emotional health outcomes were linked to loneliness and unhelpful emotion regulation (Strutt et al., 2022).

Figure 8.7 Older persons who live alone by LGA, 2021



Source: 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 region (4%).

Physical health

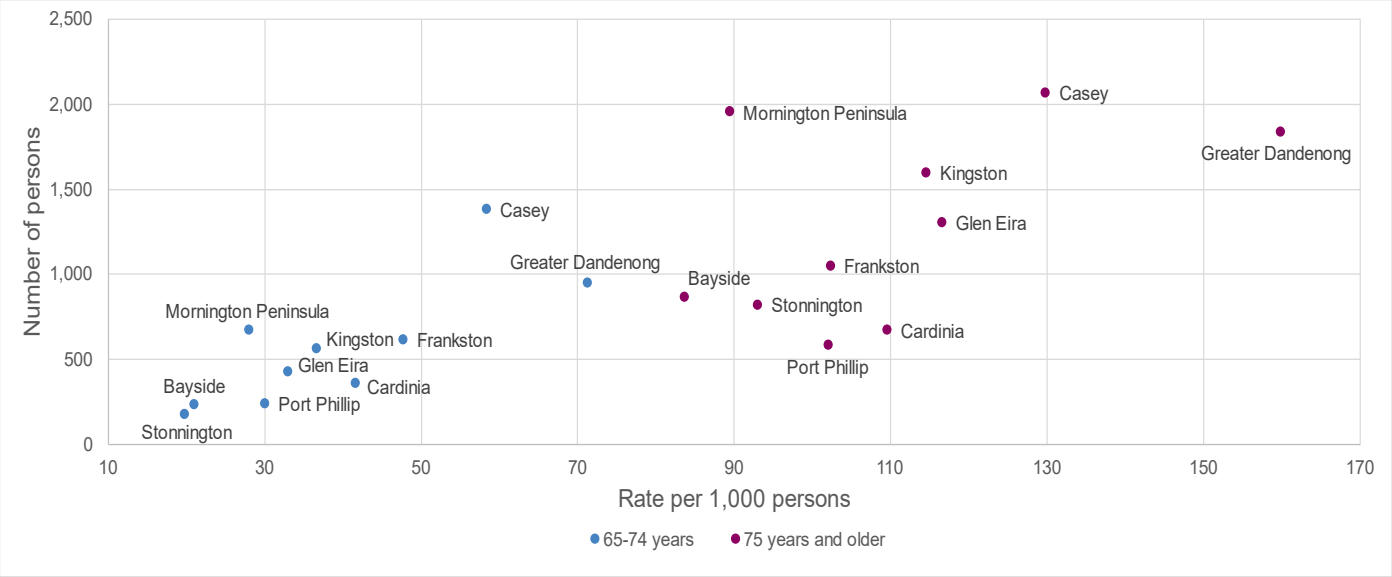
Physical health status of an individual can be estimated based on self-reported chronic conditions, self-rated health, and whether or not you need assistance for the activities of daily living.

People requiring assistance

Based on self-reported data, the majority of 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 8.8).

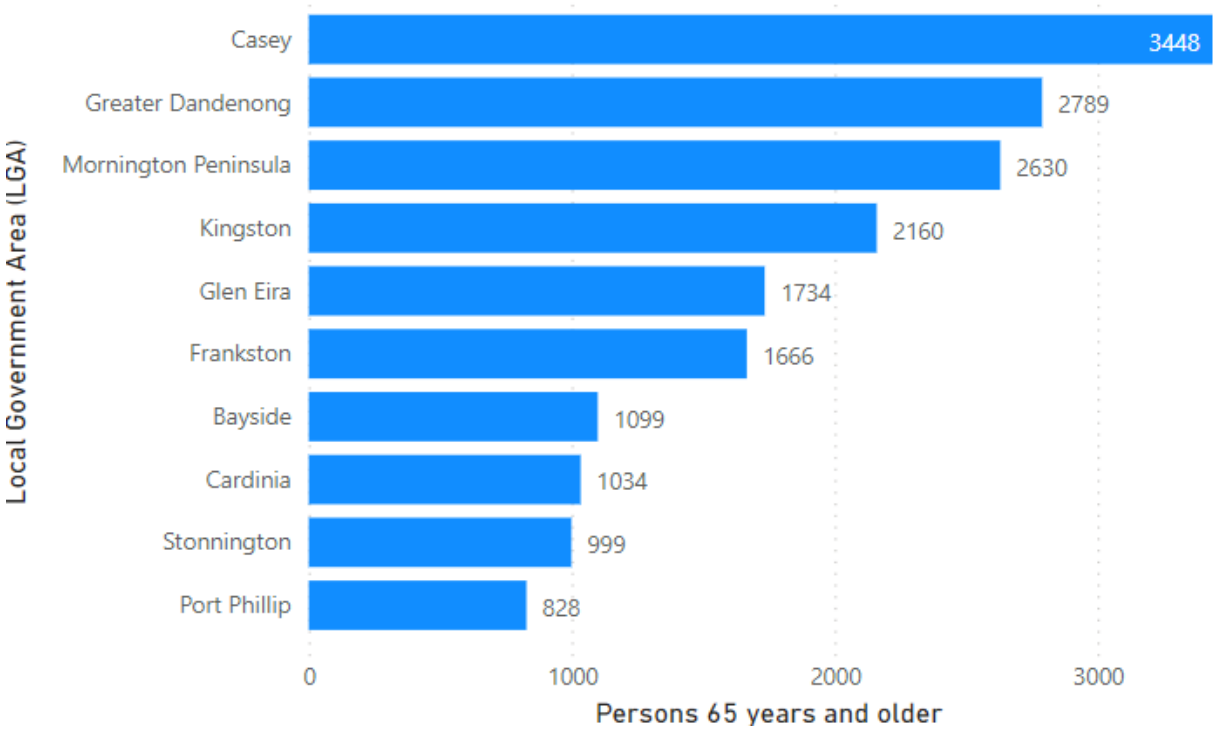
Figure 8.8 Number of older persons and rate per 100,000 that need assistance by LGA, 2021



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 region (4%).

Figure 8.9 also highlight the wave of need in the 65–74-year-old cohort in the Casey and Greater Dandenong LGAs. In particular there are almost 1,500 people in Casey within this age bracket requiring assistance, making up almost half of the total 65 years and older population that require assistance, and being significantly larger number than the other LGAs.

Figure 8.9 Has need for assistance, 65 years and older by LGA, 2021



Source: 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 region (4%).

Chronic conditions

Chronic conditions impact on quality of life and are a main cause of mortality for Australians (see Table 8.4). 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.

Table 8.6 shows the rate of chronic conditions among the older population 65 years and older, across all LGAs in SEMPHN region. Rate of chronic conditions is provided for Victoria to describe comparative need within the region. Chronic mental health conditions (including anxiety and depression) also stood out as having a high catchment-wide rate, followed closely by chronic lung conditions (including chronic obstructive pulmonary disease (COPD) and emphysema). The physical health lens therefore highlights Casey, Mornington Peninsula and Greater Dandenong as likely being the LGAs with the greatest unmet needs, although depending on the condition in question, Kingston and Frankston might be added to that list.

Table 8.6 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	
	(n)	Rate per 1,000	(n)	Rate per 1,000	(n)	Rate per 1,000	(n)	Rate per 1,000	(n)	Rate per 1,000	(n)	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
Victoria	171,699	157.1	35,623	32.6	64,333	58.9	42,291	38.7	92,497	84.6	43,130	39.5

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 region. 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). Mornington Peninsula and Casey have the highest numbers of 65-and-overs with self-reported mental health conditions (including anxiety and depression), with Kingston and Greater Dandenong also figuring more prominently when considering 75-and-overs (this may be due to delayed access by CALD communities in Kingston and Greater Dandenong given the diversity of the LGA's population). A similar pattern can be seen looking at dementia data. During 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, 2021b). This prevalence was significantly higher compared with younger people (6.8%) and adults (6.9%) (South Eastern Melbourne PHN, 2021b).

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, 2021b)[44]. 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).

At the 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

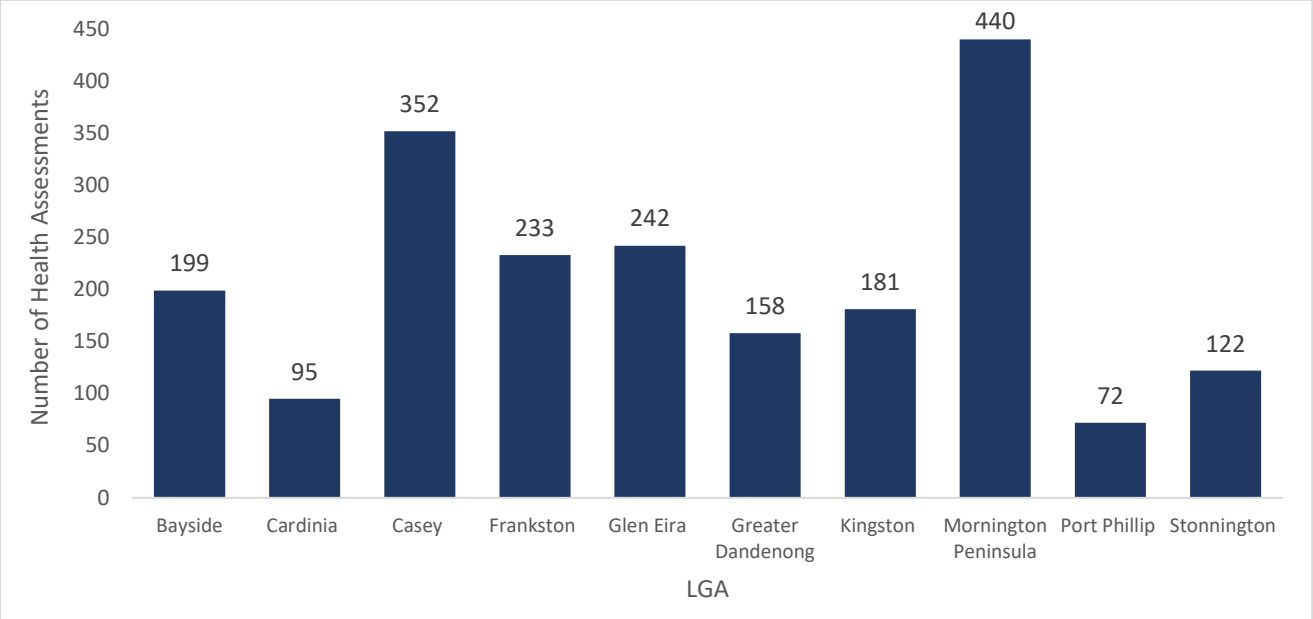
Dementia is a progressive disease without a cure, impacting close to half a million Australians; and almost 1.6 million Australians are involved in the care of people with dementia. The number of people living with dementia is estimated to double in the next 25 years (Dementia Australia, 2022). While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

At the 2021 Census, 10,388 persons in the SEMPHN region reported living with dementia. Mornington Peninsula (3.9%) and Casey (4%) LGAs had the largest number of persons with dementia. As of 30 June 2022, according to GP data accessed via POLAR, there were 2,131 persons with dementia accessing

[44] (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. (2021b). *Primary Mental Health Care Minimum Data Set FY20-21*.

primary care within the SEMPHN, the majority of those persons were female (n=1,248, 59%) (see Figure 8.10).

Figure 8.10 Older patients with dementia accessing primary care by LGA, 2022



Source: GP data accessed via POLAR on 13 October 2022, SEMPHN.

Palliative care

Palliative care services in Australia are considered among the best in the world. The Economist Intelligence Unit's Quality of Death Index valuates 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%, 13,137), and 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 the majority of 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 has been undertaken in recent years 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, the majority of 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 identified by Palliative Care South East, 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[45].

Table 8.7 Palliative care providers in the SEMPHN region by LGA (as of September 2022)

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 Palliative Care South East Cavalry Healthcare Bethlehem Cabrini (Private CPC)	Peninsula Health Monash Health 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)

[45] It should be noted that the organisation does not cover all South East LGA's, with no coverage in Mornington Peninsula or Bayside.

To understand the local GP perspective for palliative care delivery and collaboration with palliative care services in the SEMPHN region, a short survey was completed by GP Practices (n=29) in the SEMPHN catchment (SEMPHN, 2022b). Twenty one of the 29 GPs (72.4%) conducted home and/or RACF visits for palliative care patients, and 1 conducted telehealth consultations via video. 28 (96.6%) felt confident in assessing needs for palliative care patients. When asked about 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 5 patients per year to Community Palliative care services, with responses ranging from 1 – 15, greater numbers reported by GPs who work with patients in 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 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 streamlining anticipatory medications.

Residential aged care

As of 30 June 2021, there were 157 residential care services, 149 home care services and 126 home support services in the SEMPHN region. A minor decrease in the occupancy rate of residential aged care services was observed between 2019 and 2020. On 30 June 2021, the occupancy rate for residents in SEMPHN was 84.3%, with a 4.5% decrease from 30 June 2019-20 (88.8%). Of the residents using the Commonwealth Home Support Programme (CHSP) in South Eastern Melbourne in 2020–21, almost 1 in 2 people (47.6%) were born outside of Australia, and 2 in 5 people (39.5%) had disability status.

Utilisation of residential aged care facilities

As of 30 June 2021, there were 13,704 (53%) and 11,849 (46%) residents using home and residential aged care services, respectively. In 2021, a slightly lower rate of the region's residents aged 70 years and over had received residential aged care services (75.3%) compared with Victorian residents (76.4%); however, the region had a higher rate compared with Australia (72.9%).

In 2020-2021, the most commonly used home support service in the region was domestic assistance. In 2020-2021, more men than women were entering permanent residential aged care (55-84 years), however, from 85 years and on, more 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, 51.3& had a diagnosis of dementia (25.1% and 27.4% respectively).

Table 8.8 describes length of stay and movement of residents in residential aged care facilities in 2020-21. In 2020-21, the median length of stay for residents in permanent residential aged care facilities was a little over 2 years (26.6 months).

Table 8.8 Length of stay (months) and number of people exiting from permanent residential care, by discharge reason, 2020-21

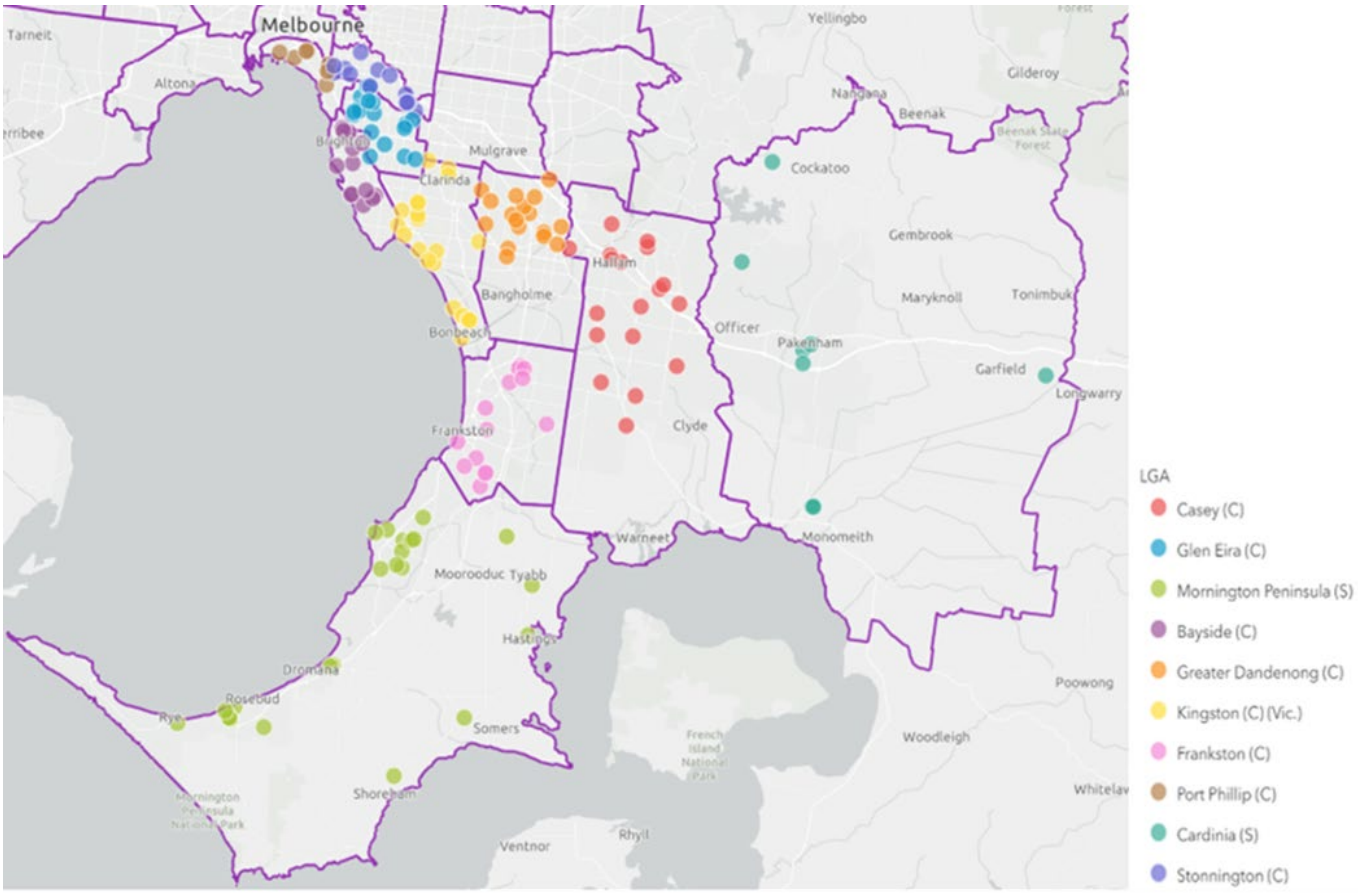
	Death	Return to community	To hospital	To residential care	Other
Mean length of stay (months)	35.1	10.6	16.5	25.3	24.2
Median length of stay (months)	26.6	4.9	8.5	15.9	10.9
Range of length of stay (months)	0.0-262.3	0.0-81.7	0.1-96.2	0.0-221.5	0.0-115.2
Total exits (n)	3,443	188	47	359	57

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, 2020-21. Accessed 14 October 2022.

Whilst there was limited available data that would shed light directly on unmet nursing and community care needs, focus groups[46] 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 the focus group participants, home care, carer support and care coordination are the most significant health needs of the aged population. Figure 8.11 provides a map of the Residential Aged Care Facilities (RACFs) across the SEMPHN region as of 31 July 2022.

[46] Qualitative input was taken from three focus groups (n=29) conducted with aged care service providers from across the SEMPHN region in August 2022.

Figure 8.11 Residential Aged Care Facilities in the south eastern Melbourne region (as on 14 June 2022)



Aged care services

In 2022, a survey (SEMPHN, 2022b) was conducted of aged care-related organisations in the SEMPHN region to aid in assessing 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 an undersupply of workforce in personal care and nursing, and many believed there was an undersupply of the workforce in health & 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 grassroot connections between General Practitioners and RACFs in the SEMPHN region. SEMPHN supports engagement between RACFs and their resident's 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 by SEMPHN within RACFs, alongside the COVID vaccination programs run with practice managers and GPs to support these relations and improve communication pathways.

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

The PHN 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 and reduce the effects of isolation resulting from COVID 19. 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[47], 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).

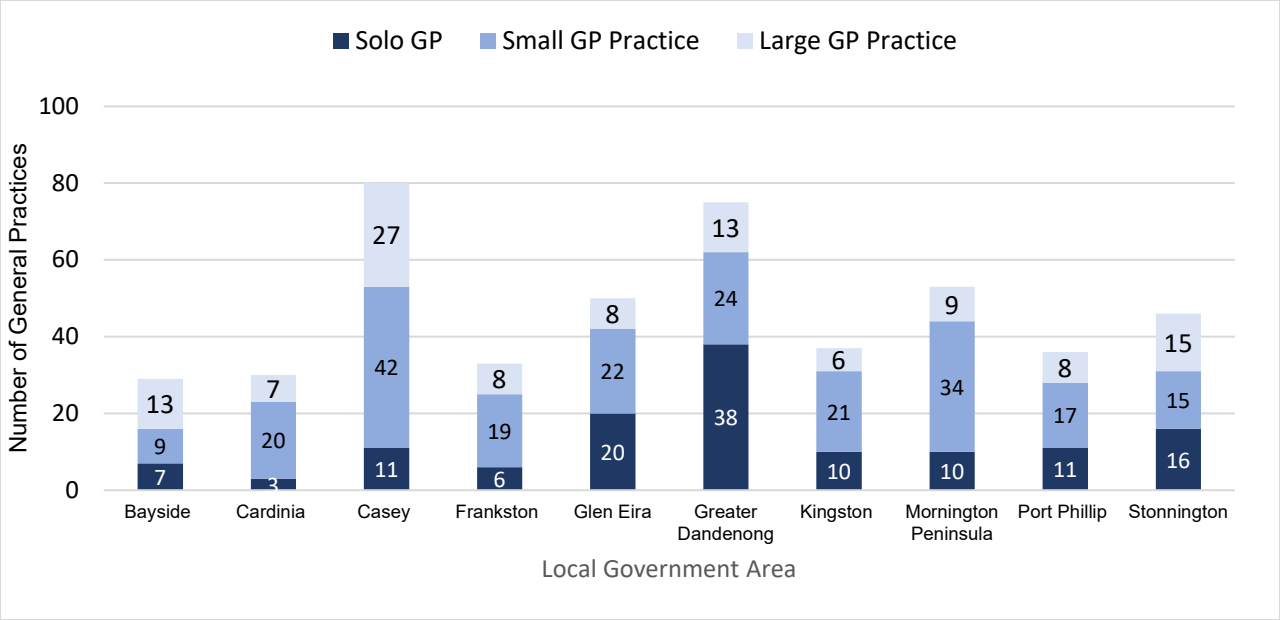
General practices

There are 499[48] general practices in the SEMPHN region. General practices can vary in size according to the number of GPs, which indicates capacity to service surrounding areas. Figure 9.1 shows that Casey has the highest number of GP practices (n=80), with the highest number of small practices (two to five GPs) (n = 42) and large practices (n=27), defined as practices with six or more GPs. Greater Dandenong has second highest number of practices and the highest number of solo practices (n=38) in the region. Mornington Peninsula has second highest number of small practices (n=34).

[47] 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.

[48] This includes three GP practices located in the 4% City of Monash region.

Figure 9.1 Number and size of general practices by LGA, 2022



Source: SEMPHN CRM data, 2022. Date of Extraction: 14 October 2022.

RACGP accreditation

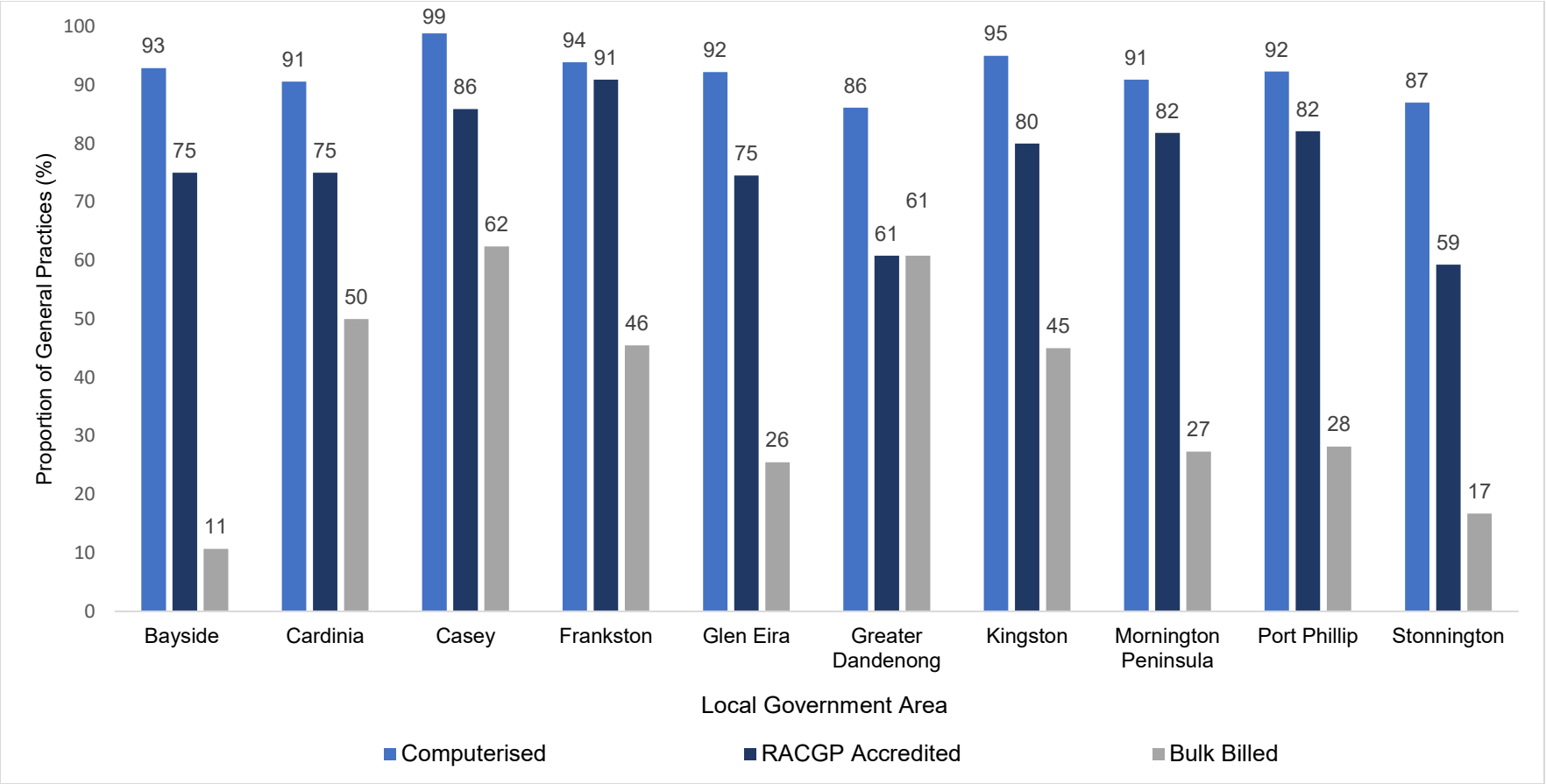
General practices can undertake assessment to gain accreditation to ensure safety, quality, and continuous improvement standards. If a general practice is accredited, they meet the standards set by the Royal Australian College of General Practitioners (RACGP). Stonnington has the lowest proportion of accredited practices (59%), and Frankston has the highest proportion of accredited practices (91%) (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 bulk-billed all their GP services and did not incur any out-of-pocket costs (Productivity Commission, 2022). Across the SEMPHN region, although more practices offer bulk billing for patients (no out-of-pocket expense) in areas of higher socioeconomic disadvantage, e.g. Casey (62.4%), Greater Dandenong (60.8%) and Cardinia (50.0%), one-third of practices or more across the region do not offer bulk billing.

Figure 9.2 Proportion (%) of general practices which are computerised, have RACGP accreditation and provide bulk billing services, 2022



Source: SEMPHN CRM Data, 2022. Date of Extraction: 11 October 2022.

General practitioners

There are 2,747 general practitioners (GPs) in the SEMPHN region (Table 9.1). Casey and Mornington Peninsula have the highest number of GPs (n=601 and n=366, respectively). Five of the 10 LGAs in the catchment have a higher number of GPs FTE per 1,000 population compared to Victoria (1.2 FTE per 1000). Glen Eira and Port Phillip (both with 1 GP FTE per 1,000 residents), and Bayside and Kingston (1.1 GP FTE per 1000 residents) have lower than state average rates.

Table 9.1 General practitioners by LGA, 2021

LGA	Number of General Practitioners (n)	GP Full-time Equivalent (FTE)	GP FTE per 1,000 people
Bayside	280	114.5	1.1
Cardinia	184	144.8	1.2
Casey	601	468.7	1.3
Frankston	273	185.7	1.3
Glen Eira	335	164.6	1.0
Greater Dandenong	319	263.3	1.4
Kingston	319	184.4	1.1
Mornington Peninsula	366	221.9	1.3
Port Phillip	291	122.1	1.0
Stonnington	343	161.6	1.4
SEMPHN region	2,747	2,011.3	1.4
Victoria	9,610	8,046.8	1.2

OFFICIAL: Commonwealth Department of Health and Aged Care, HeaDS UPP Tool, Needs Assessment Workforce Planning Product, extracted 11/10/2022" for the purpose of Needs Assessments. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN region (4%).

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 region, 67.1% of practices (n = 335) have at least one nurse employed in their care team (South Eastern Melbourne PHN, 2021a) compared to 63% nationally. Table 9.2 shows variability in the number of nurses and midwives working across different health care settings by LGA. Average hours worked per week are consistent with the Victorian average. Increases in FTE across the hospital setting is reflective of where hospitals are located in the region.

Table 9.2 Distribution of nurses and midwives across primary and community settings, hospitals, and aged care, by LGA, PHN and State, 2020

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 nurses	Full-time Equivalent of nurses	Average weekly hours
Bayside	215	142.5	25	572	430.1	28	276	237.3	32	23	14.3	23
Cardinia	147	102.8	26	76	61	30	172	144.3	31	21	8.2	14
Casey	538	396	27	1,314	1,056.3	30	481	409.4	32	72	38.1	20
Frankston	496	362.8	27	2,283	1,893.5	31	289	241.6	31	39	22.4	21
Glen Eira	363	291.9	30	777	695	33	386	343.6	33	27	13.7	19
Greater Dandenong	392	299.7	29	1,691	1,421.6	31	383	327.8	32	34	17.7	19
Kingston	298	228.9	29	749	637	32	350	293.5	31	24	10.8	17
Mornington Peninsula	401	289.6	27	710	5,42.3	29	494	420.1	32	24	11.8	18
Port Phillip	161	122.4	28	105	92.2	33	87	70.4	30	14	7.4	20
Stonnington	418	321.7	29	2155	1,859.5	32	250	211.5	32	22	9.9	17
SEMPHN region	3,435	2,561.6	28	10,435	8,689.7	31	3,178	2,707.9	32	300	154.9	19
Victoria	16728	12,435.6	28	58,106	48,009.5	31	16,757	14,075.2	31	1,689	875.6	19

OFFICIAL: Commonwealth Department of Health and Aged Care, HeaDS UPP Tool, Needs Assessment Workforce Planning Product, extracted 11/10/2022, for the purpose of Needs Assessments. Please note Monash LGA is excluded due to the small proportion of the LGA falling within SEMPHN region (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 incudes GPs providing mental health related services, psychiatrists, mental health nurses, psychologists, and mental health occupational therapists. Table 9.3 shows that there was a lower rate of mental health professionals compared to the Victorian rates. In particular, mental health nurses per 100,000 population was significantly lower in the region compared to Victoria.

Table 9.3 Mental health workforce in Australia, 2020

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 region	219	13.4	1,268	77.4	2,078	126.8	158	9.6
Victoria	1,044	15.6	6,844	102.2	8,890	132.8	793	11.8

Source: AIHW Data, 2020, Table WK.2: Psychiatrists, average hours worked per week, FTE and FTE per 100,000 population, geographical distribution, 2020; WK.5: Mental health nurses, average hours worked per week, FTE and FTE per 100,000 population, geographical distribution, 2020, WK.8: Psychologists, average hours worked per week, FTE and FTE per 100,000 population, geographical distribution, 2020; Table WK.11: Occupational therapists, average hours worked per week, FTE and FTE per 100,000 population, geographical distribution, 2020; accessed on 11 October 2022.

Consultations with mental health service providers in south-eastern 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 2016, First Nations people represented 1.8% (n = 11,161) of the total health workforce in Australia, despite representing 3.1% of the working population in Australia in 2016 (Department of Health, 2022b). In 2019, 4,926 nurses and midwives identified as Aboriginal or Torres Strait Islander, which is 1.4% of all employed and registered nurses and midwives (Australian Institute of Health and Welfare - National Indigenous Australian Agency, 2020). An estimated 0.7% 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 Organisations (ACCHO) and services

Aboriginal Community Controlled Health Organisation (ACCHO) have been providing a wide range of health, social and emotional wellbeing services for the last 50 years. There are currently two ACCHOs within the SEMPHN region: 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 Co-operative is an Aboriginal community-controlled health organisation that delivers primary health care to St Kilda and surrounding areas since 1977. They also have a number of several sites in which they deliver services located in Northcote and Toolamba.

First Peoples' Health and Wellbeing is an Aboriginal community-controlled health service 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.[49] First Peoples' Health and Wellbeing deliver trauma informed primary health care to First Nations communities in the SEMPHN region (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 FY 2021/22, 3,654 practitioners in the SEMPHN database had had First Nations Cultural training[50].

Alcohol and Other Drugs (AOD) workforce

The Alcohol and Other Drugs workforce includes GPs, addiction specialists, psychiatrists, nurses (specialising in drug and alcohol) and Aboriginal and Torres Strait Islander Health Practitioners. Table 9.4, reports on the rate of AOD-related health workforce per 10,000 population by LGA. Stonnington had the highest rate of AOD-related health workforce with 21.6 per 10,000 population, which was almost double the state average. This was followed by Bayside (17.3 per 10,000). In contrast, the lowest rates were found in Kingston (8.6 per 10,000) and Casey (9.1 per 10,000).

The challenges experienced by consumers across the treatment journey from awareness to exit were identified during the lived experience and service provider workshop, 2022 (SEMPHN, 2022c). Areas of improvement in the AOD workforce as identified by the participants in the workshop were, multi-partnership with a diverse workforce; cultural and gender diverse representation in the workforce; peer workforce being essential to the consumer journey; and a need to employ or train highly skilled,

[49] Thomastown is a suburb of Melbourne, located within the City of Whittlesea local government area which is outside the SEMPHN region boundaries.

[50] This data reflects data captured for AOD and Mental Health service contacts only.

qualified staff members. It was noted that an integrated approach to AOD can have a significant impact on the AOD workforce so this would need to be carefully monitored (SEMPHN, 2022c).

Table 9.4 Number and rate of AOD-related health workforce by LGA, 2020

LGA	(n)	Rate per 10,000 population
Bayside	186	17.3
Cardinia	107	9.2
Casey	332	9.1
Frankston	165	11.5
Glen Eira	210	13.3
Greater Dandenong	238	14.1
Kingston	144	8.6
Mornington Peninsula	197	11.7
Port Phillip	140	12.0
Stonnington	256	21.6
SEMPHN region	1,975	12.8
Victoria	7,724	11.5

Source: (Commonwealth Department of Health Workforce Data, 2020)

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, 2022a). 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 (Jonnagaddala 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 (AIFS, 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 (Australian Bureau of Statistics, 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 (n)	(%)
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
SEMPHN region	52,761	11.4
Victoria	287,506	13.6

Source: PHIDU, 2016

Digital health in general practice

There is variability across LGAs in the use of digital health technologies by general practices[51]. 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 region, 75.8% of all general practices are accredited by the Royal Australian College of General Practitioners (RACGP), i.e., 378 out of a total 499 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 has found that 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 72% in Greater Dandenong to 93% in Frankston).

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 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. Practices in only two of 10 LGAs use this technology. The rate of POLAR use is also notably lower, with two LGAs recording no use and a large proportion of LGAs with non-accredited practices having utilisation rates below 20%.

There is a need for a strategic approach to encourage and support non-accredited practices to become accredited. This, in turn, may build their capacity for quality improvement, access to digital health programs and enable them to apply for SEMPHN-commissioned service.

[51] 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.

Table 10.2 Use of digital health technologies in GP practices by LGA, 2021

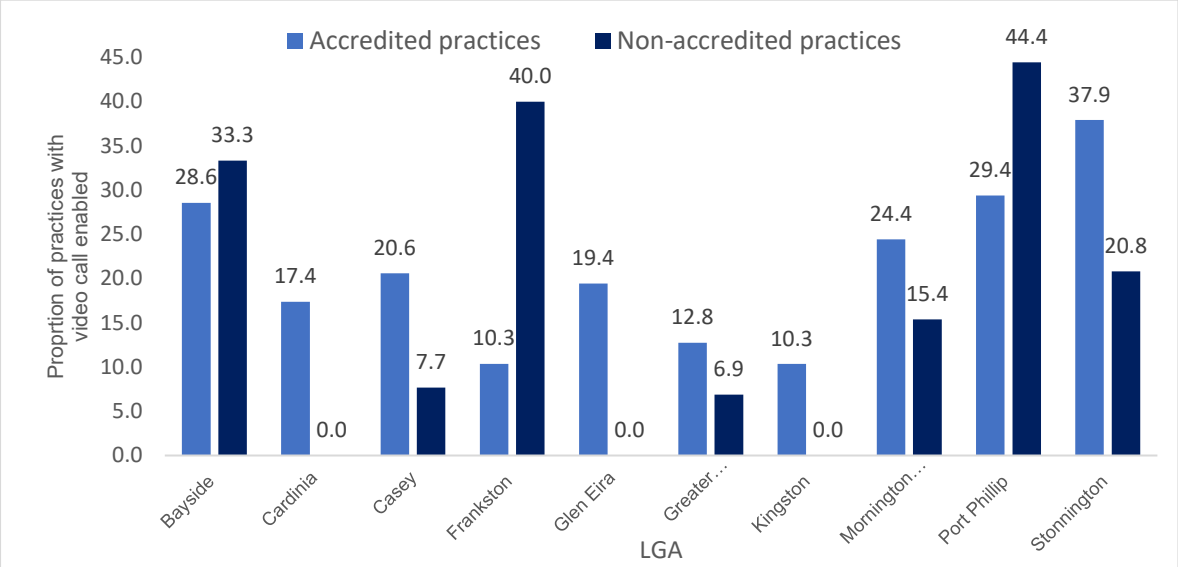
LGA	Types of Digital Health Technologies used in GP Practices across SEMPHN region								
	SmartForms use in GP (%)	Compliant Clinical software use in GP (%)	HealthLink Capability (%)	GP MyHR Registration (%)	Pharmacy MyHR Registration (%)	GP Nellie Use (%)	POLAR Capability (%)	Video Call in GP practices (%)	DH capability (%)
Bayside	29.6	85.2	77.8	85.2	87	14.8	66.7	29.6	59.5
Cardinia	40	90	83.3	80	94.1	13.3	70	13.3	60.5
Casey	49.4	97.5	81.5	82.7	72.9	9.9	75.3	18.5	61
Frankston	44.1	94.1	82.4	85.3	85.2	8.8	79.4	14.7	61.8
Glen Eira	21.6	82.4	78.4	76.5	76.2	11.8	58.8	13.7	52.4
Greater Dandenong	30.3	78.9	73.7	67.1	86.8	5.3	47.4	10.5	50
Kingston	36.6	92.7	78	78	79.4	12.2	73.2	7.3	57.2
Mornington Peninsula	29.3	89.7	81	84.5	93.3	20.7	67.2	22.4	61
Port Phillip	23.3	88.4	74.4	81.4	65.8	18.6	65.1	32.6	56.2
Stonnington	20.8	77.4	66	56.6	75	9.4	50.9	30.2	48.3
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 data, 2021.

Digital health platform utilisation

Video call utilisation is higher in general in accredited practices. Seven out of 10 LGAs within the SEMPHN region have higher video call use in accredited general practices compared with non-accredited practices (Figure 10.1). Frankston, however, has a 30-percentage point difference where utilisation is much higher in non-accredited practices. SEMPHN enquiries into Healthdirect Video Call usage during FY 21/22 identified that SEMPHN ranked fourth among all 31 PHNs in Australia with total calls for SEMPHN region FY21/22 was 27,661. Two of the Sydney PHNs had the highest numbers (total calls for Sydney PHNs were not stated).

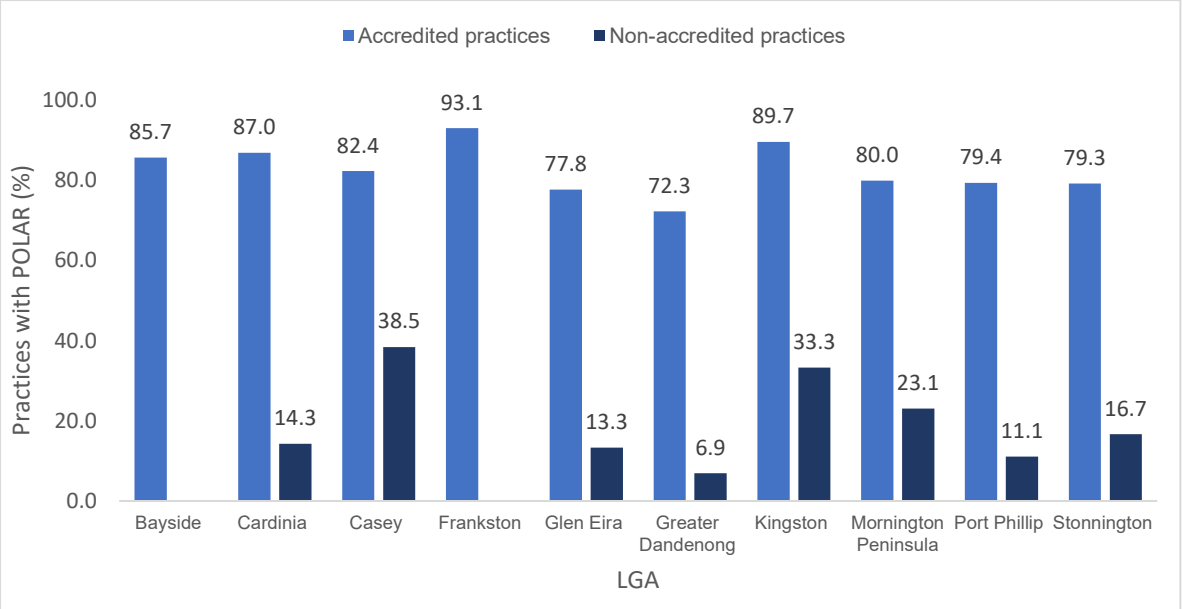
Figure 10.1 Practices with video call enabled by accreditation status and LGA, 2021



Source: GP data extracted from POLAR, 2021

POLAR use is much higher among accredited practices. Across all LGAs within the SEMPHN region, a higher proportion of accredited practices use POLAR compared with non-accredited practices. More than half of LGAs have utilisation rates above 80% (Figure 10.2).

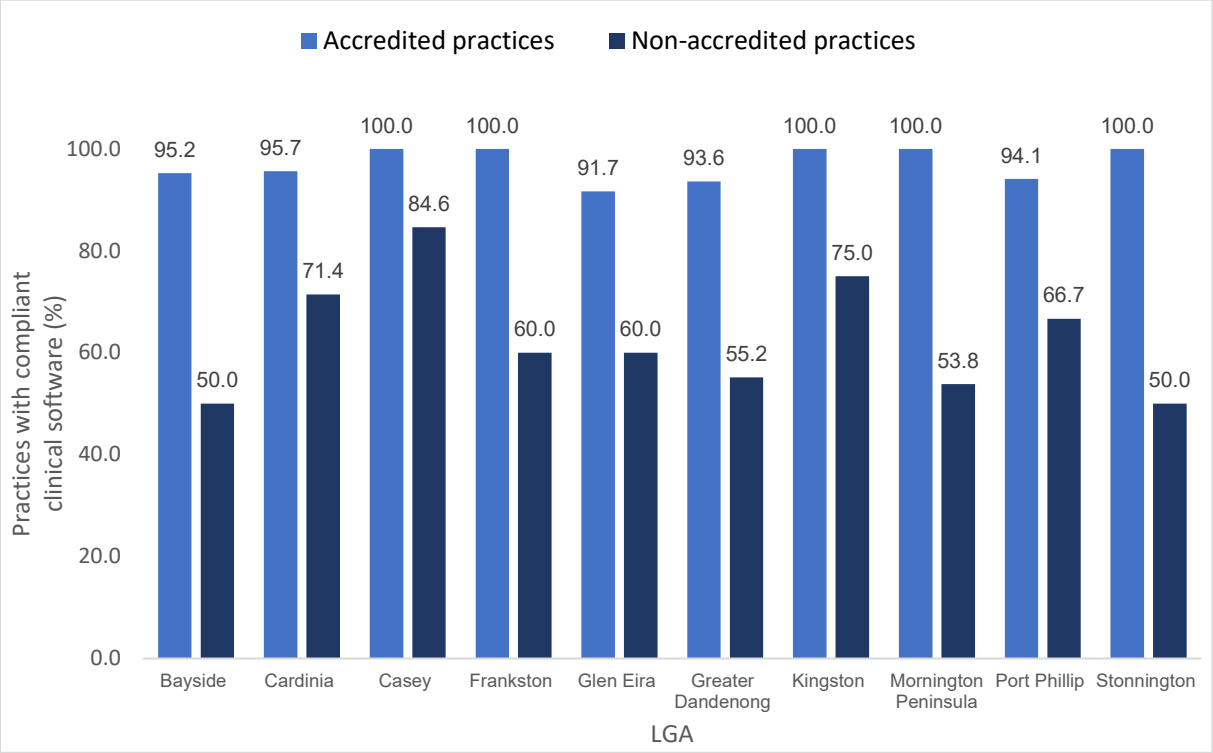
Figure 10.2 Practices using POLAR software by accreditation status and LGA, 2021



Source: POLAR, 2021

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 have a utilisation rate for compliant software of 100% (Figure 10.3). Non-accredited practices have a lower proportion of compliant software use, with Casey having the highest proportion (85%). Only 50% of Bayside and Stonnington non-accredited practices use compliant software.

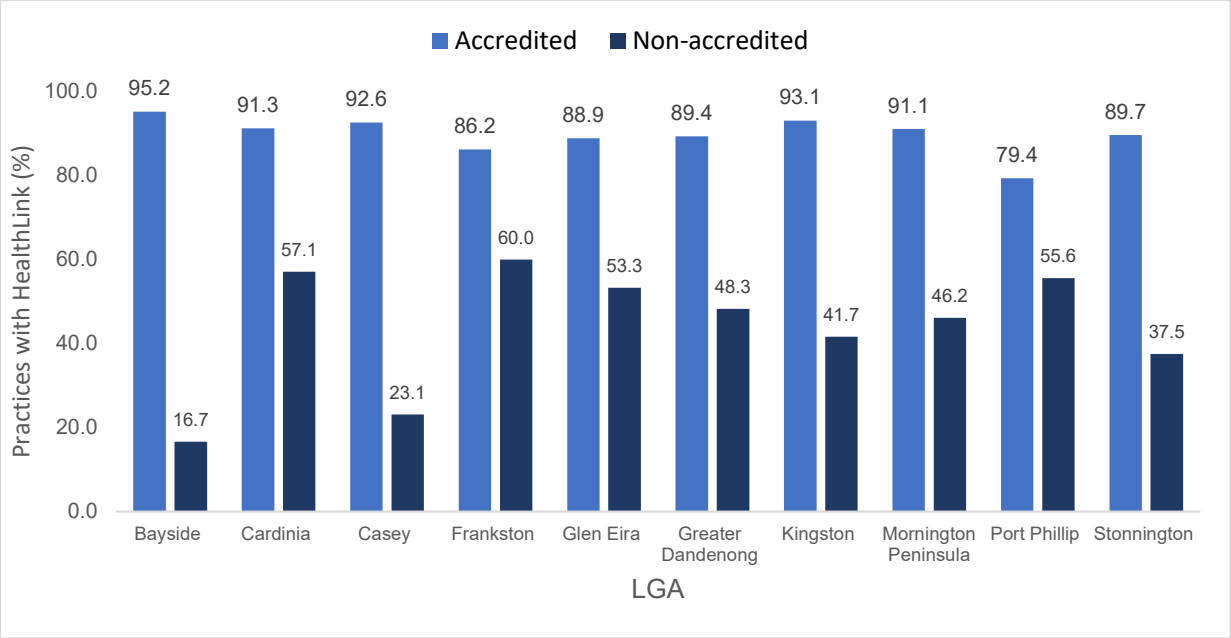
Figure 10.3 Practices using compliant software by accreditation status, 2021



Source: SEMPHN CRM data, 2021.

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). Bayside has the highest rates of HealthLink utilisation (95%) among its accredited practices, with the majority of practices having utilisation rates of 90% and above.

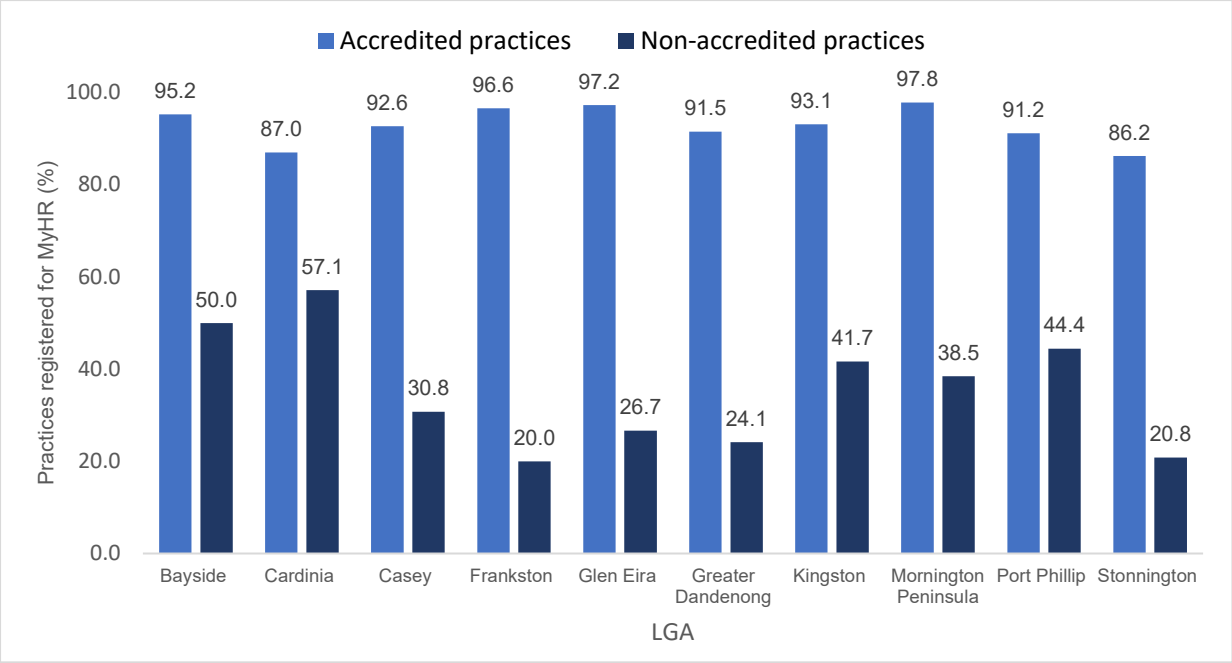
Figure 10.4 Practices using HealthLink by accreditation status, 2021



Source: SEMPHN CRM data, 2021.

My Health Record (MyHR) registration among accredited practices is high, with eight of 10 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. Frankston, Stonnington and Greater Dandenong all recorded proportions of registrations under one-quarter.

Figure 10.5 Practices registered for My Health Record by accreditation status, 2021



Source: SEMPHN CRM data, 2021

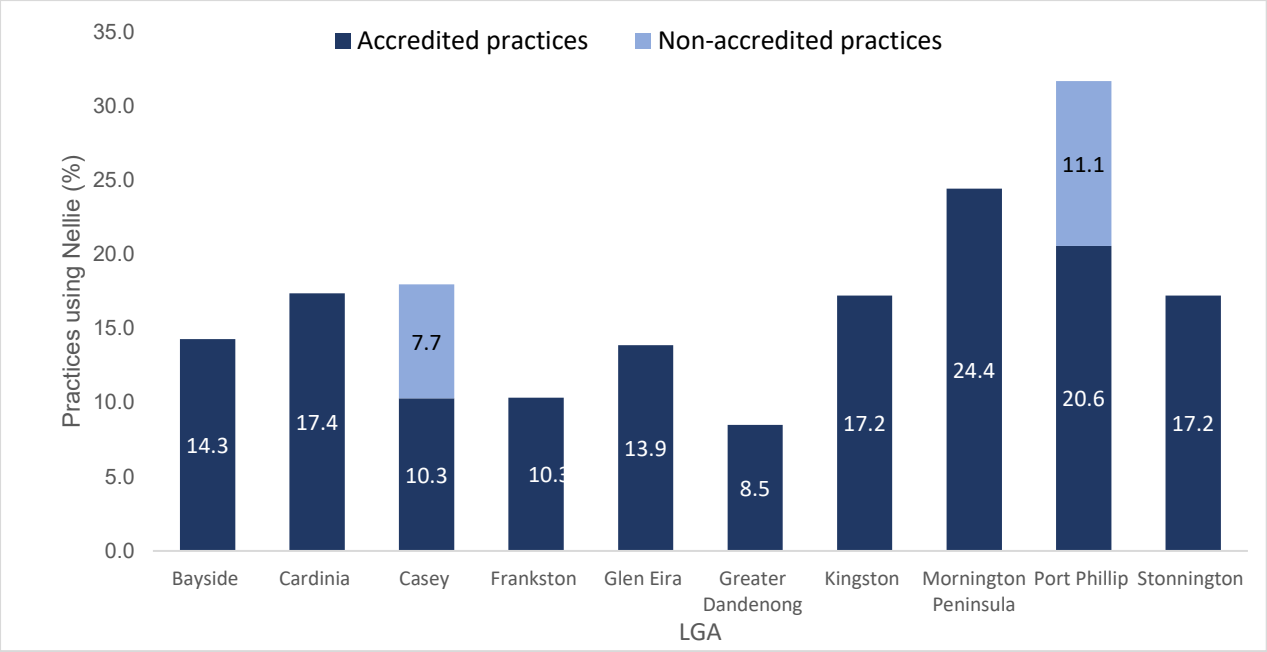
My Health Record Specialist Usage:
SEMPHN's contract with the Australian Digital Health Agency required to

- Register & connect 60% of specialists in SEMPHN region to My Health Record.
- Encourage 10% of 60% registered to view & embed My Health Record into their workflow

A database of 212 specialists (SEMPHN, 2022d) who expressed some interest in finding out more about My Health Record was prepared by SEMPHN staff. Of these 212 specialists 58% (n = 123) registered for My Health Record. Although the target was not quite met at the end of June 2022, challenges experienced included specialists who were not interested as they were too busy due to COVID backlogs & were catching up on waiting lists etc. More than half (52.0%) of the specialists registered were viewing and/or uploading to My Health Record and embedding into their workflow.

Nellie is an automated SMS-based persona for promoting patient self-care provided to general practices by SEMPHN. Nellie 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 Dandenong 9%, Casey 10%, Frankston 10%). Non-accredited practices in only two of 10 LGAs use Nellie.

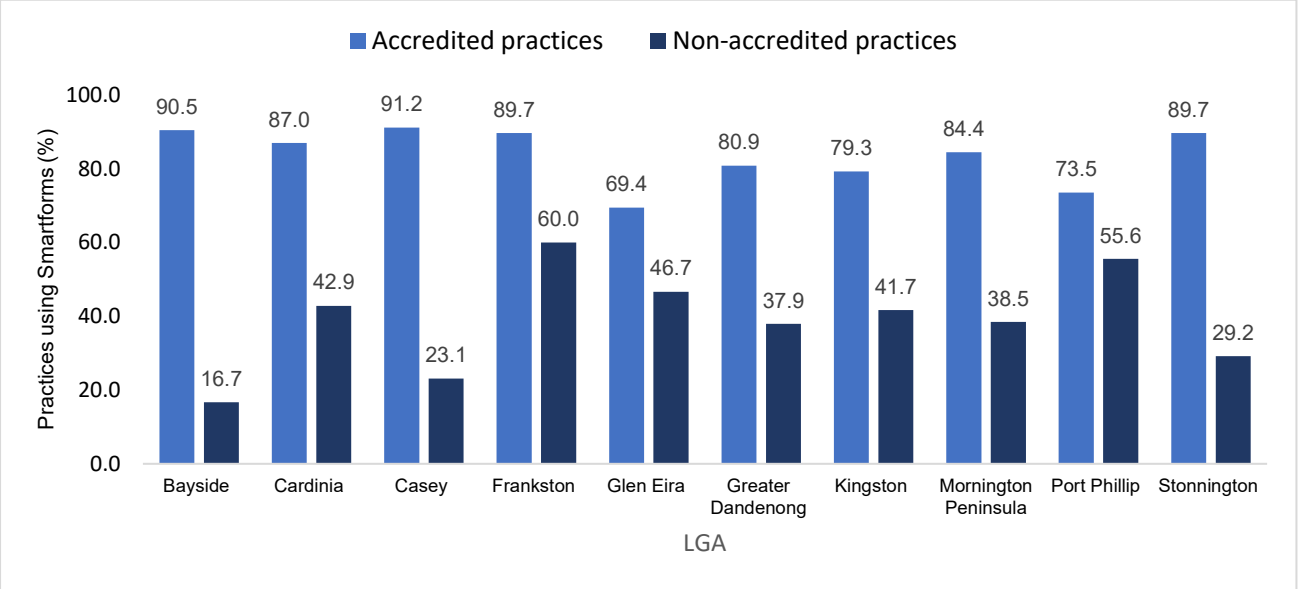
Figure 10.6 Practices using Nellie by accreditation status and LGA, 2021



Source: SEMPHN CRM data, 202.

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 10.7). 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 data, 2021.

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

Digital surge 	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: • telehealth • mobile health (mHealth) • remote patient monitoring • electronic prescriptions • e-diagnostics • e-referrals. 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.
Funding uncertainty 	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.
Co-design 	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.

Inquiries 	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.
New technologies 	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.
Reporting 	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.
Engagement 	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. 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.

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