

# ANNUAL NEEDS ASSESSMENT

2022-2025



South Eastern Melbourne Primary Health Network

November 2021

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## Abbreviations

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

## Introduction

South Eastern Melbourne PHN 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.

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.

Evidence-based practice is the foundation of our work, and we are constantly asking, 'together, how can we do this even better?'

The Australian Government has seven priority areas for improvement and innovation for primary health. This needs assessment provides a comprehensive analysis of the health and service needs for these priority areas.

### PRIORITY HEALTH AREAS



Mental health



Aboriginal and Torres  
Strait Islander health



Population health



Health workforce



Digital health



Aged care



Alcohol and other  
drugs (AOD)

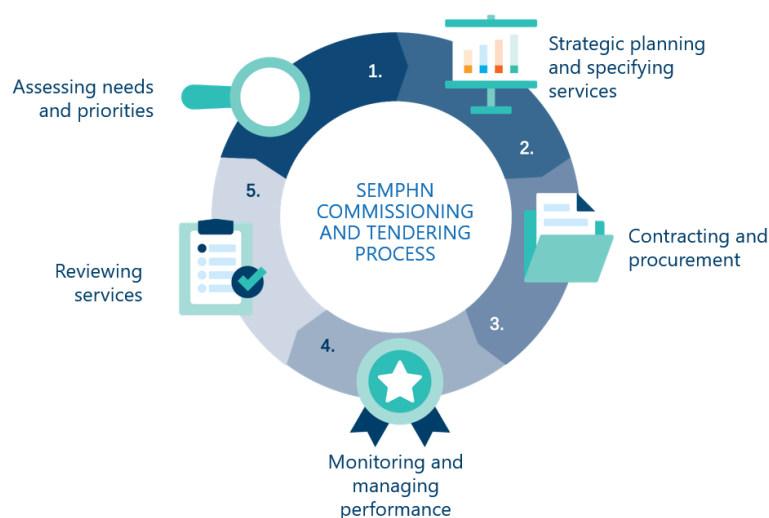
### Needs assessment approach

The needs of a community can be understood across four types: comparative, felt, expressed and normative (Bradshaw, 1972). 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.



<b>Comparative</b>	Comparisons are made between and within population groups
<b>Felt</b>	Community members identify their need through how they feel
<b>Expressed</b>	Community members express their unmet needs
<b>Normative</b>	Need determined by professional judgement or standards

SEMPHN undertakes needs assessments to support evidence-informed decision making around service commissioning. The SEMPHN commissioning and tendering process highlights the assessment and prioritisation of need as a first critical step.



This needs assessment was conducted with oversight from a Project Governance Group at SEMPHN. Population health and service needs were scoped largely through a comprehensive desktop review of secondary data sources. This was guided by previous needs assessments, as well as validation and identification of new sources through collaboration with SEMPHN staff and subject matter experts on each health priority area. Stakeholder consultations were also undertaken, including engagement with the sector/provider organisations, community/consumers and internal staff. We also undertook health service mapping activities 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. 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.

# 1. Our community

The SEMPLHN region covers a total geographical area of 2,935 square kilometres across 10 local government areas (LGAs) (see Figure 1.1). We serve a highly diverse population of just over 1.6 million people which equates to approximately one quarter (24%) of the total Victorian population.

Figure 1.1: SEMPLHN region and LGA boundaries



## Population growth

We are a rapidly growing community which has experienced a 10% population growth between 2012 and 2016 (Australian Bureau of Statistics, 2018b). Population projections indicate that the region will be home to more than 1.8 million people by 2025, and more than two million people by 2030 (Department of Environment, 2019) (see Table 1). By this time, it is expected that the City of Casey will experience the largest population growth (42.1% by 2030) and Cardinia Shire will home the largest population in the region (Department of Environment Land Water and Planning, 2019).

Table 1.1: Population growth across SEMPHN LGAs, 2020 to 2030

LGA	2020	2025		2030	
	n	n	% Increase	n	% Increase
City of Bayside	108,612	115,713	6.5	122,054	12.4
City of Casey	117,469	142,419	21.2	166,893	42.1
Cardinia Shire	363,512	424,589	16.8	483,095	32.9
City of Frankston	146,305	155,541	6.3	163,909	12.0
City of Glen Eira	160,300	174,534	8.9	187,113	16.7
City of Greater Dandenong	174,770	192,911	10.4	208,621	19.4
City of Kingston	169,278	182,584	7.9	194,525	14.9
Mornington Peninsula Shire	171,714	183,935	7.1	194,519	13.3
City of Port Phillip	117,920	129,489	9.8	139,218	18.1
City of Stonnington	121,956	133,922	9.8	143,690	17.8

Source: (Australian Bureau of Statistics, 2016b; Public Health Information Development Unit, 2021b)

Nearly one in three (30.2%) people in the region are aged between 25 to 44 years (Australian Bureau of Statistics, 2016b; Public Health Information Development Unit, 2021b) and five out of the 10 LGAs have a median age below the Victorian average (median = 37 years) (Australian Bureau of Statistics, 2016f).

- Although the proportion of young people aged 15 to 24 years is relatively similar across LGAs, Greater Dandenong has the highest proportion of young people (14.2%).
- The City of Casey and Cardinia Shire have younger populations (median age of 34). Both LGAs have high proportions of children aged 0 to 14 years (Cardinia 23.2%, Casey 22.8%).
- Mornington Peninsula and Bayside have the highest proportions of people aged 65 and over, at 24.9% and 19.2% respectively.

## Socioeconomic disadvantage

The Index of Relative Socio-economic Disadvantage (IRSD) for the SEMPHN catchment is 1024<sup>1</sup>, indicating a low relative lack of disadvantage, however variabilities can be observed across LGAs and within LGAs (SA2 and SA1 levels) (see Table 1.2). Greater Dandenong is the only LGA with a score below 1000 (895), however within LGAs, there are pockets of high disadvantage. For example, the City of Kingston's IRSD score is 1044, however the suburb of Braeside has a score of 765 (Australian Bureau of Statistics, 2016c). Despite various suburbs across the region experiencing high disadvantage, the highest concentration of disadvantage is within the City of Greater Dandenong.

<sup>1</sup> 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



It should be noted that 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-served (Australian Institute of Health and Welfare, 2020d).

- Unemployment increased from 5.1% in February 2020 to a peak of 7.5% in July 2020. It returned to pre-pandemic levels by May 2021 and by June 2021 it was lower (4.9%).
- Average after-tax household income fell 9.1% between February and April 2020. Despite seeing income levels increase towards November 2020, this did not continue and by April 2021 average household income levels were 7.2% lower than levels seen in February 2020.
- Between April and May 2020, the proportion of Australians experiencing housing stress (when housing costs are too high for a household's income) doubled from 7% to 15%.

Table 1.2: Index of Relative Socio-economic Disadvantage (IRSD) across LGAs (2016)

LGA	Index of Relative Socio-economic Disadvantage (2016)	
	Index score (based on Australian score of 1000)	Usual resident population (Census 2016)
Bayside	1097	97,087
Cardinia	1021	94,128
Casey	1004	299,301
Glen Eira	1074	140,875
Greater Dandenong	896	152,050
Kingston	1044	151,389
Mornington Peninsula	1030	154,999
Port Phillip	1069	100,863
Stonnington	1087	103,832
Victoria	1010	5,919,020
Australia	1000	23,347,379

## Education and employment

Nearly nine out of ten people (86.8%) aged 15 to 24 years are engaged in school, work or further education/training in the south eastern Melbourne catchment. This is similar to the Victorian proportion (86.2%) (Australian Bureau of Statistics, 2016b; Public Health Information Development Unit, 2021b). The highest rates of work and study are in Bayside (91.7%) and Glen Eira (91.1%). The lowest rates are in Greater Dandenong (82.8%) and Frankston (83.7%).

A similar pattern is observed for people who left school at Year 10 or those who did not go to school, with the lowest rates (age-standardised rate per 100) seen across the inner areas of Stonnington (11.0) and Port Phillip (12.6), compared with rates almost three times higher in the outer areas of Cardinia

(33.8) and Greater Dandenong (32.9) (Australian Bureau of Statistics, 2016b; Public Health Information Development Unit, 2021b).

The region's unemployment rate (4.6%) is comparable with Victorian estimates (4.8%). Overall, labour force participation is 68.1%, slightly higher than the Victorian proportion of 66.2% (March 2019) (Australian Bureau of Statistics, 2016b; Public Health Information Development Unit, 2021b). Differences were observed across LGAs:

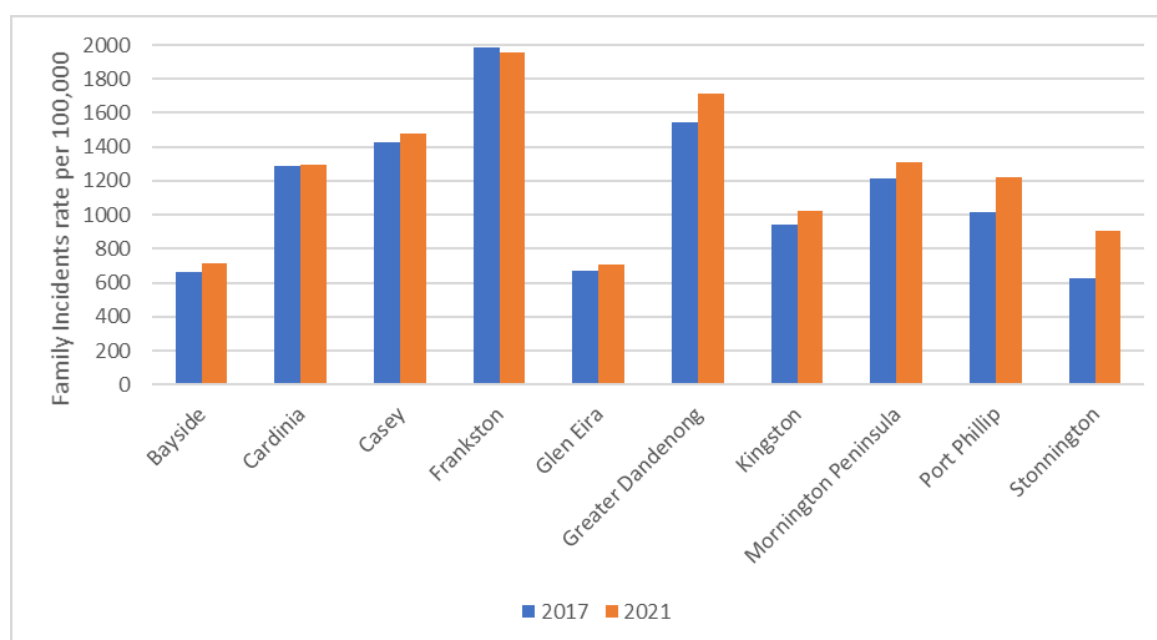
- Highest unemployment rate was in the City of Greater Dandenong (7.7%),
- Lowest unemployment rates were in the Cities of Stonnington (2.5%) and Bayside (2.8%)

## Safety in the community

Criminal incident rates (per 100,000 population) in the SEMPHN catchment are similar to the Victorian rate (SEM 5,598.7, Victoria 5,792.5) (Crime Statistics Agency, 2021b). However, the City of Port Phillip (8,974.7 per 100,000) and the City of Greater Dandenong (8,631.1 per 100,000) reported rates of criminal incidents considerably higher than the Victorian rate (Crime Statistics Agency, 2021a).

While the rates of family incidents were lowest across other Victorian regions in 2021, rates since 2017 have steadily increased in south-eastern Melbourne (2017, 1,191.9 per 100,000; 2021, 1,284.4 per 100,000), with major disparities seen between inner regions (Glen Eira, Bayside and Stonnington recording the lowest rates) and outer regions (Frankston and Greater Dandenong recording the highest) (Figure 1.2) (Crime Statistics Agency, 2021a).

Figure 1.2: Family incident rates in SEMPHN, 2017 and 2021.



## Homelessness

People may experience homelessness due to social, economic or health-related factors. Census data indicates that just over 6,000 (3.8%) people in SEMPHN experienced homelessness due to not having

suitable accommodation alternatives in 2016. Data indicates that Port Phillip and Greater Dandenong are locations with significantly higher rates of homelessness (Table 1.3).

Table 1.3: Homelessness across the SEMPHN region by LGA (2016)

LGA	Homeless people (n)	SEMPHN Population Estimates	Rates per 10,000 population
Bayside	212	108,612	2.0
Cardinia	144	117,469	1.2
Casey	931	363,512	2.6
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
SEMPHN region	6,257	1,651,836	3.8

Source: Australian Bureau of Statistics, 2016b; Public Health Information Development Unit, 2021b

## Cultural and linguistic diversity (CALD)

Almost a quarter (23.8%) of the South Eastern Melbourne population were born in predominantly non-English speaking (NES) countries. The City of Greater Dandenong is the most culturally diverse LGA in Victoria, with more than 50% of its residents born in a predominantly NES country (Australian Bureau of Statistics, 2016b; Public Health Information Development Unit, 2021b). More than 64% of Greater Dandenong residents also speak a language other than English and less than one-third (29.8%) speak only English (Australian Bureau of Statistics, 2016e). The most common languages spoken are Vietnamese (11.2%), Khmer (5.2%), Punjabi (3.9%), Mandarin (3.6%) and Cantonese (3.0%) (Australian Bureau of Statistics, 2016e).

From 2000 to 2016, our catchment has settled more than 18,000 permanent migrants under the Offshore Humanitarian Program which is almost 30% of all humanitarian entrants into Victoria (Australian Bureau of Statistics, 2016b; Public Health Information Development Unit, 2021b).

- The region's proportion of permanent migrants under the program is identical to Greater Melbourne (1.3%) but is higher than the national proportion (0.9%).
- The majority (approximately 90%) of humanitarian migrants in our region have settled in either the City of Casey or Greater Dandenong.
- Casey welcomed the second largest number of humanitarian entrants in Victoria (8,720 people).
- Greater Dandenong welcomed 7,857 people, which represented 5.2% of the LGA's total population.

## First Nations peoples

The traditional custodians of land in the SEMPHN catchment are the Boon Wurrung and Wurundjeri peoples. Approximately 8,950 First Nations peoples reside in the catchment. This equates to 0.6% of the total region's population, slightly lower than the Victorian proportion of 0.9% (Australian Bureau of Statistics, 2016b; Public Health Information Development Unit, 2021b). The highest proportions of First Nations peoples (as a proportion of an LGA population) reside in Frankston (1.2%), Cardinia (1.0%) and Mornington Peninsula (1.0%). The highest number of First Nations peoples reside in Casey (1,941), reflective of a concentration across the outer eastern and southern LGAs (Australian Bureau of Statistics, 2016b; Public Health Information Development Unit, 2021b). Chapter 5 provides detail on the needs of our First Nations peoples residing in the SEMPHN region.

## LGBTIQ+

In their responses to the Victorian Population Health Survey 2017, 5.7% (1,300) of respondents in Victoria identified as LGBTIQ+. The SEMPHN estimates are comparable (Table 1.4). The proportion of adults identifying as LGBTIQ+ was significantly higher in those aged 18–34 years and those living in Port Phillip (10.6%).

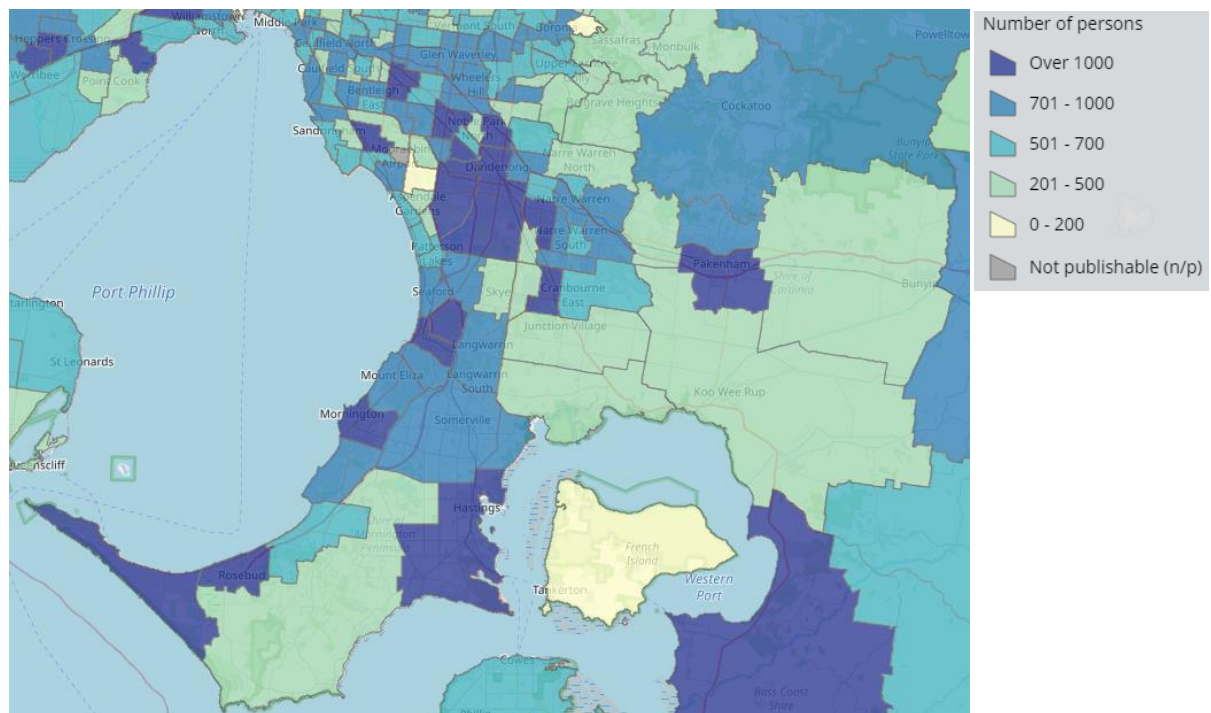
Table 1.4: Proportion (%) of the adult (18+ years) population, by LGBTIQ+ status and by LGA, 2017

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

## People with disabilities

In the SEMPHN region, there is a higher prevalence of people living with a profound or severe disability reside in Greater Dandenong, Frankston, Mornington Peninsula (Rosebud and Hastings) and Cardinia (Pakenham) LGAs compared to Victoria. Areas in dark blue in Figure 1.3 denote numbers with profound or severe disability over 1000 persons (Australian Bureau of Statistics, 2020a).

Figure 1.3: Persons with profound or severe disabilities, south-eastern Melbourne, 2017-18.



## 2. General health

In Australia, the leading cause of ill-health are chronic diseases (Australian Institute of Health and Welfare, 2021g). Many people with chronic conditions experience co or multi-morbidities. There has been an increase in the prevalence of the chronic conditions nationally from 42% of people in 2007-08 (ABS 2018) to 47% of Australians reporting one or more chronic conditions in 2017-18. 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).

### Key insights

- In the SEMPLHN region, approximately one in four people (27.3%) have two or more chronic conditions.
- The most prevalent chronic diseases are mental and behavioural problems, arthritis and asthma.
- Although the prevalence of many chronic conditions in SEMPLHN is slightly lower compared to Victorian averages, a cluster of neighbouring LGAs in the outer south-east (Greater Dandenong, Frankston, Casey and Cardinia) have higher rates.
- Frankston, Casey and Cardinia have significantly higher-than-average rates of arthritis, asthma, chronic obstructive pulmonary disease and cardiovascular disease and associated risk factors such as poor dietary intake, obesity and physical inactivity are the highest in the region.
- Greater Dandenong has a notably higher rate of diabetes mellitus.
- The childhood immunisation rate in the region is lower than the Victorian average across all three age cohorts, with children in the five-year-old group the only one above the coverage target of 95%.
- Casey (South) has the lowest participation rates for bowel and cervical cancer screening in SEMPLHN, followed closely by Greater Dandenong and Frankston.
- The patterns of chronic disease and risk factor prevalence have closely followed the rates of hospital admissions for these conditions, with the highest rates recorded in Frankston, Casey and Cardinia.
- A high proportion of residents living in Greater Dandenong report experiencing barriers to health service access, commonly related to transport and cost.
- There is higher utilisation of after-hours GP services in the SEMPLHN catchment compared with other PHN catchments.



## Life expectancy and mortality

From 2014 to 2019, the median life expectancy of people living in south-eastern Melbourne was 83 years. Males in SEMPHN have a life expectancy of 80 years (Vic = 79) and women have a life expectancy of 85 years (Vic = 85 years).

During 2015-2019, the leading cause of death in SEMPHN region was coronary heart disease, followed by Dementia including Alzheimer's disease and cerebrovascular disease, collectively accounting for just over one in four deaths (Table 2.1).

Table 2.1. Top 10 causes of death in SEMPHN, 2015 to 2019

Cause of death	Number of deaths	% of all causes
Coronary heart disease	5,240	11.3
Dementia including Alzheimer's disease	4,226	9.1
Cerebrovascular disease	2,934	6.3
Lung cancer	2,360	5.1
Chronic obstructive pulmonary disease (COPD)	1,990	4.3
Colorectal cancer	1,490	3.2
Accidental falls	1,317	2.8
Diabetes	1,260	2.7
Heart failure and complications and ill-defined heart disease	1,184	2.6
Influenza and pneumonia	1,180	2.5

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

Avoidable mortality is premature death from diseases considered to be treatable through timely and effective health care or public health interventions (Table 2.2).

Table 2.2: Avoidable mortality across SEMPHN (ASR per 100,000)

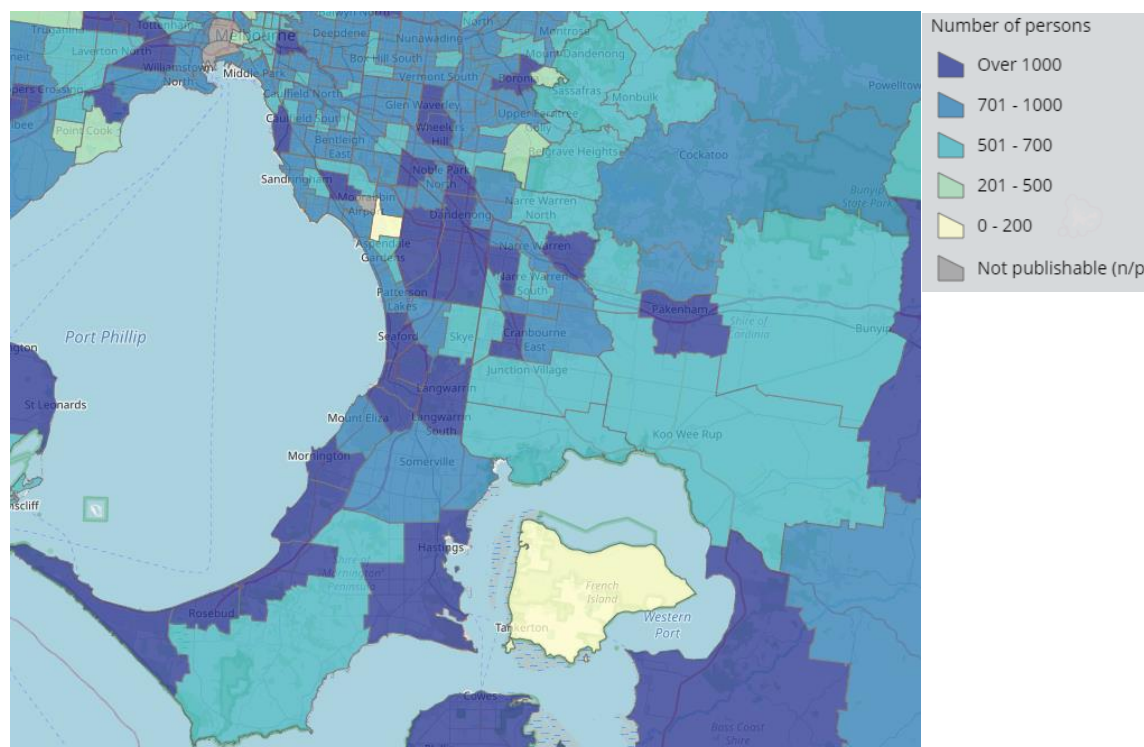
Cause of death	SEMPHN (ASR per 100,000)	Priority LGA (ASR per 100,000)
Breast cancer	16.7	<ul style="list-style-type: none"> <li>• Cardinia, 20.5</li> <li>• Glen Eira, 19.9</li> <li>• Frankston, 19.0</li> <li>• Casey, 18.9</li> </ul>
Circulatory systems diseases	29.4	<ul style="list-style-type: none"> <li>• Greater Dandenong, 43.3</li> <li>• Frankston, 35.3</li> </ul>
Chronic obstructive pulmonary disease (COPD)	7.3	<ul style="list-style-type: none"> <li>• Frankston, 13.0</li> <li>• Cardinia, 9.8</li> <li>• Port Phillip, 9.7</li> </ul>
Colorectal cancer	9.3	<ul style="list-style-type: none"> <li>• Frankston, 11.8</li> <li>• Port Phillip, 10.2</li> <li>• Glen Eira, 10.0</li> </ul>
Diabetes	4.7	<ul style="list-style-type: none"> <li>• Greater Dandenong, 7.8</li> <li>• Glen Eira, 5.6</li> <li>• Port Phillip, 5.6</li> <li>• Frankston, 5.0</li> </ul>
Respiratory diseases	7.8	<ul style="list-style-type: none"> <li>• Frankston, 13.4</li> <li>• Cardinia, 10.2</li> <li>• Port Phillip, 9.8</li> </ul>

Source: (Australian Bureau of Statistics, 2016b; Public Health Information Development Unit, 2021b)

## Chronic diseases

Comorbidities are considered to increase the risk of the effects from COVID-19. Data modelled from the National Health Survey 2017-18 for persons 60 years and over with three or more chronic health conditions are mapped in Figure 2.1. The geographic distribution suggests high concentration (dark purple indicating numbers over 1,000 persons) of this at-risk population in the Greater Dandenong, Frankston, the Mornington Peninsula coastline, and suburbs surrounding Hastings and Pakenham.

Figure 2.1: Persons aged 60 years and over with three or more chronic health conditions, 2017-18.

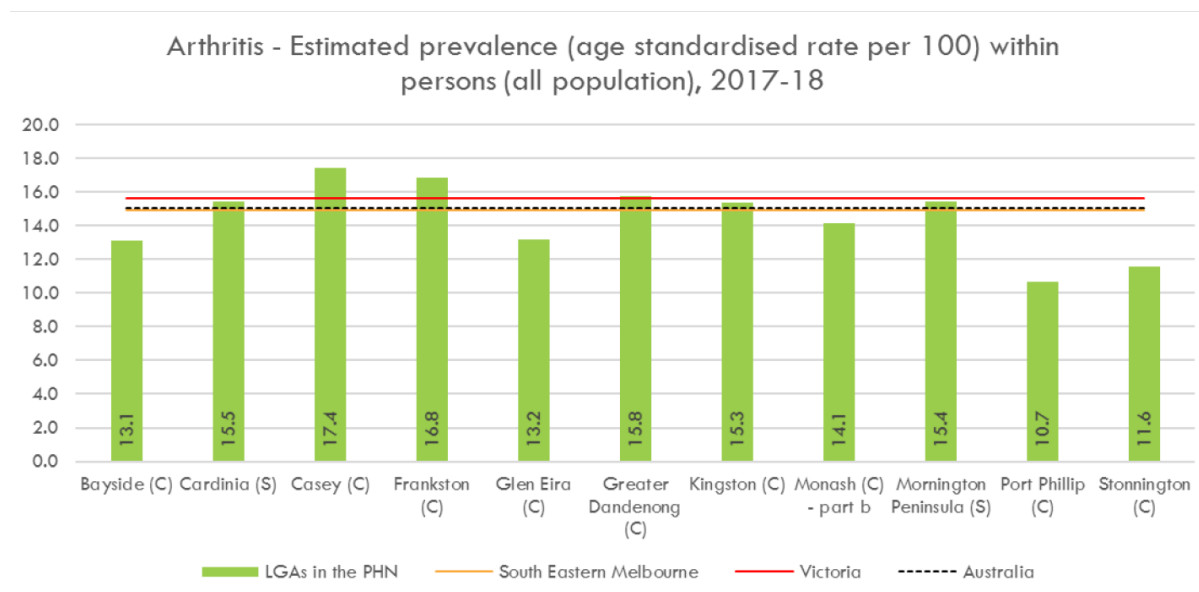


Source: (Australian Bureau of Statistics, 2018a).

## Arthritis

Arthritis is a major contributor to illness and disability with impacts on quality of life. Chronic pain is known to affect other aspects of health such as mental and social wellbeing (Briggs, 2016). One in five Australians (22%) with arthritis experience high to very high levels of psychological distress. This is twice as likely as people without arthritis (10%) (Australian Institute of Health and Welfare, 2020b). In 2017-18, three out of four (75%) people aged 45 and over with arthritis had at least one other chronic condition (Australian Bureau of Statistics, 2019a). The estimated prevalence of arthritis for the SEMPHN catchment is lower than the Victoria average; however, in 2017-18 high prevalence (ASR per 100) was observed in the City of Casey, City of Frankston and City of Greater Dandenong.

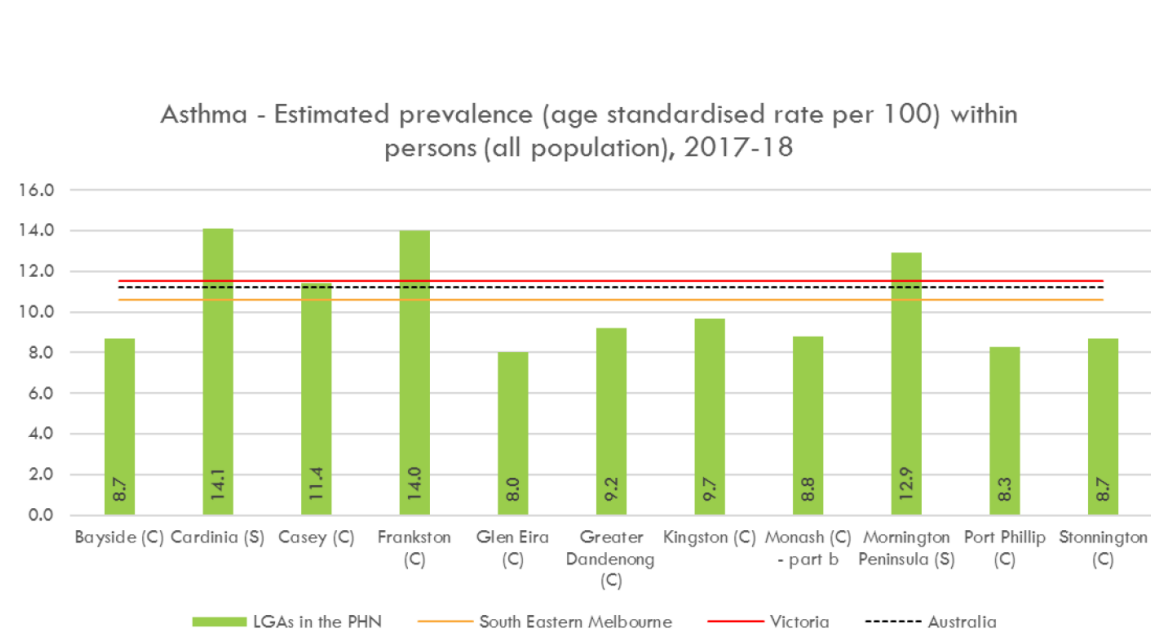
Figure 2.2: Estimated prevalence of people with arthritis in SEMPHN (2017-2018)



## Asthma

The asthma disease burden varies across different population groups. Nationally, the rate of total burden (disability-adjusted life years [DALY]) due to asthma in the lowest socioeconomic area is 1.8 times as high as the rate for the highest socioeconomic area (Australian Institute of Health and Welfare, 2015). Estimated prevalence of asthma for the region is lower than the Victorian average. However, in 2017-18 high prevalence (ASR per 100) was observed in the City of Cardinia, City of Frankston, and the Mornington Peninsula Shire.

Figure 2.3: Estimated prevalence of people with asthma in SEMPHN (2017-2018)

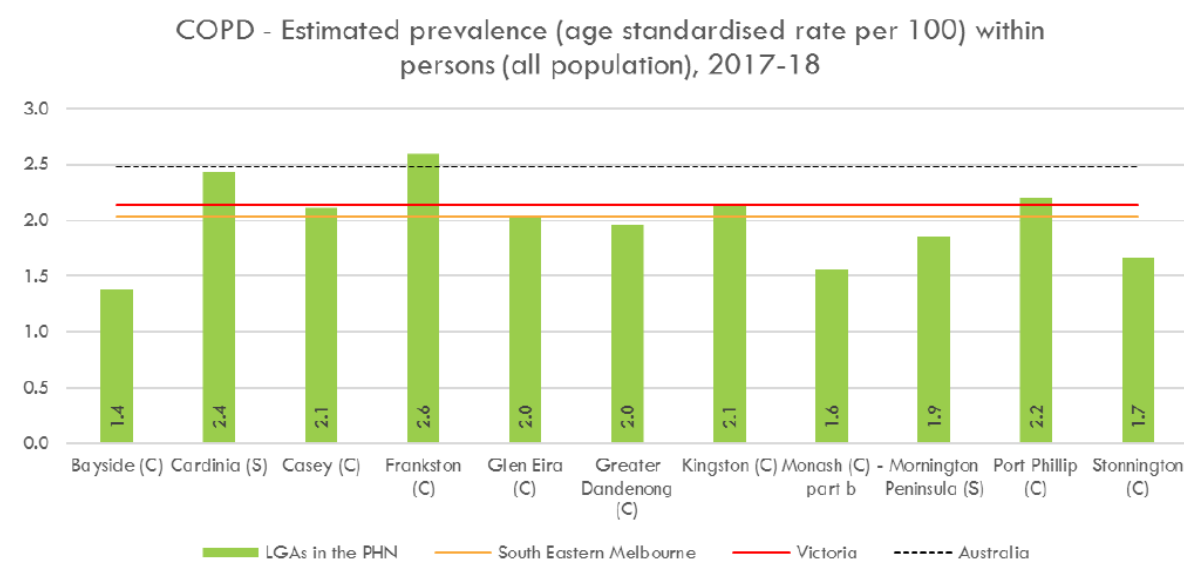


## Chronic Obstructive Pulmonary Disorder (COPD)

The estimated prevalence of chronic obstructive pulmonary disease (COPD) for the region is lower than the state average, although in 2017-18 high prevalence (ASR per 100) was observed in the City of Frankston, City of Cardinia and City of Port Phillip.

While the region's prevalence mirrors that of Victoria, there are differences in population groups. Based on national self-reported data, in 2018-19 10% of First Nations peoples aged 45 and over had COPD (an estimated 17,800 people), with a higher rate among women (13%) compared with men (6.7%). The prevalence of COPD among First Nations peoples was 2.3 times as high as for non-First-Nations peoples, after adjusting for the difference in age structure (Australian Bureau of Statistics, 2020c). 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, 2020c).

Figure 2.4: Estimated prevalence of COPD in SEMPHN, 2017-2018

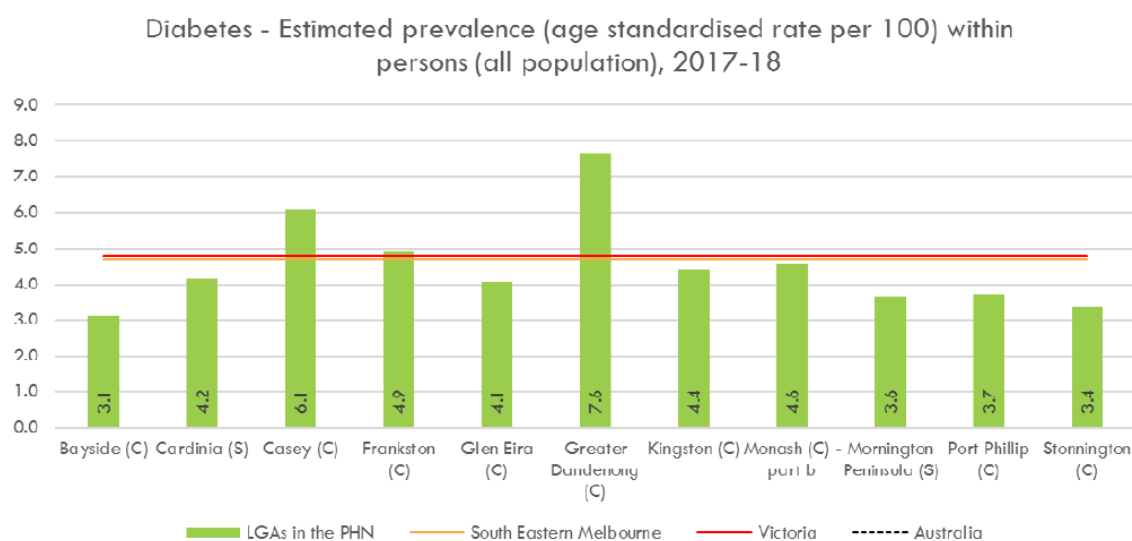


## Diabetes mellitus

National data also reveals the association between diabetes and socioeconomic indicators, suggesting that the prevalence is approximately twice as high among those living in the lowest socioeconomic areas (7.0%) compared with the highest socioeconomic areas (3.3%).

The estimated prevalence of diabetes mellitus for SEMPHN is lower than the state average, although in 2017-18 high prevalence (ASR per 100) was observed in City of Greater Dandenong, City of Casey and City of Frankston.

Figure 2.5: Estimated prevalence of Diabetes mellitus in SEMPHN, 2017-2018

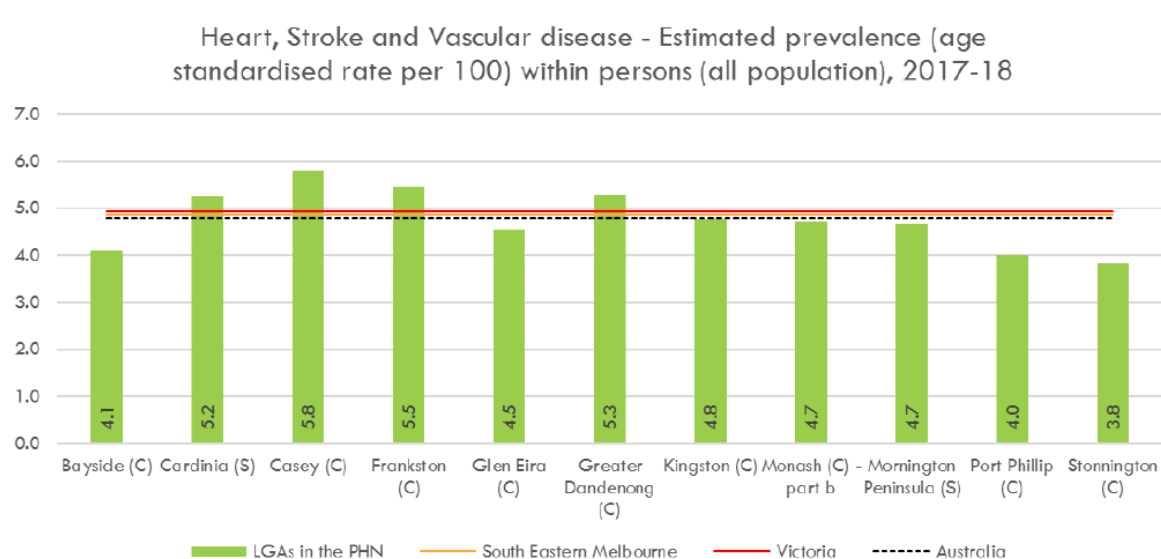


## Heart, stroke and vascular disease

Cardiovascular disease remains a major health issue that generally has a bigger impact on men and First Nations peoples, plus gaps in disease prevalence between areas of socioeconomic differences. 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).

The estimated prevalence of heart, stroke and vascular disease for the region was equal to the state average, although in 2017-18 high prevalence (ASR per 100) was observed in the City of Casey, City of Frankston, City of Greater Dandenong and Cardinia Shire.

Figure 2.6: Heart, stroke and vascular disease in SEMPHN, 2017-2018





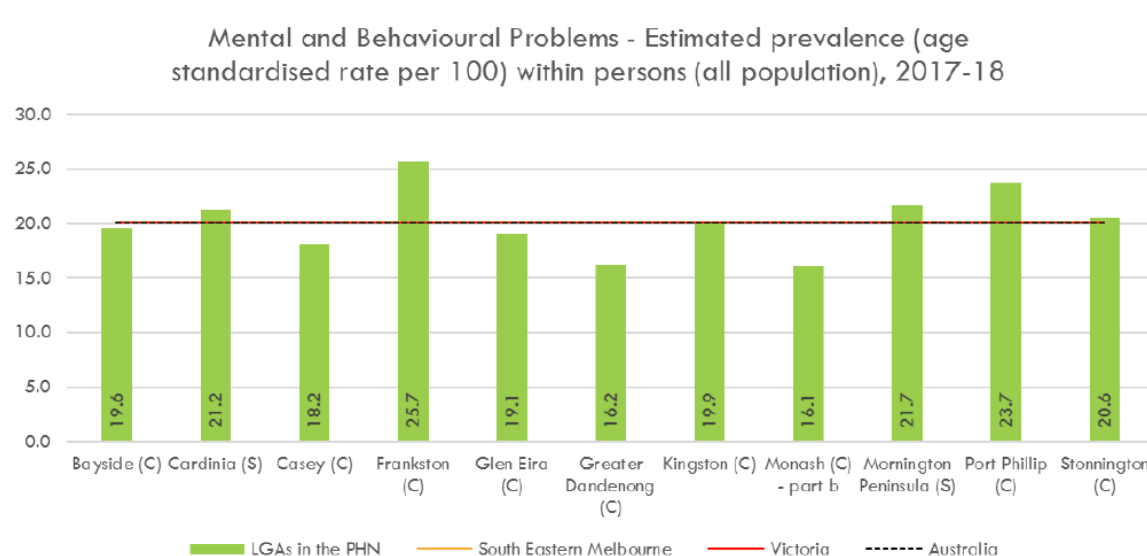
## Mental and behavioural problems

As detailed further in Chapter 3, mental health conditions are associated with multiple socioeconomic factors, such as a person's access to services, living conditions and employment status. They affect the individual and their families and carers. Evidence suggests that people with mental illness are more likely to develop physical illness due to a combination of lifestyle, socioeconomic and system-level factors such as social stigma, lack of health service integration, and a lack of clarity about who is responsible for physical health monitoring. In addition, substance use is strongly associated with mental illness and also has associations with physical health conditions such as cancer and cardiovascular disease (Firth J, 2019).

The estimated prevalence of mental and behavioural problems for the region is slightly higher than the state average; however, in 2017-18, high prevalence (ASR per 100) was observed in several LGAs (Australian Bureau of Statistics, 2016b; Public Health Information Development Unit, 2021b):

- Frankston, 25.7
- Port Phillip, 23.7
- Mornington Peninsula, 21.7
- Cardinia, 21.2
- Stonnington, 20.6.
- SEMP HN region: 20.2; Victoria: 20.0

Figure 2.7: Mental and behavioural problems in SEMP HN, 2017-2018

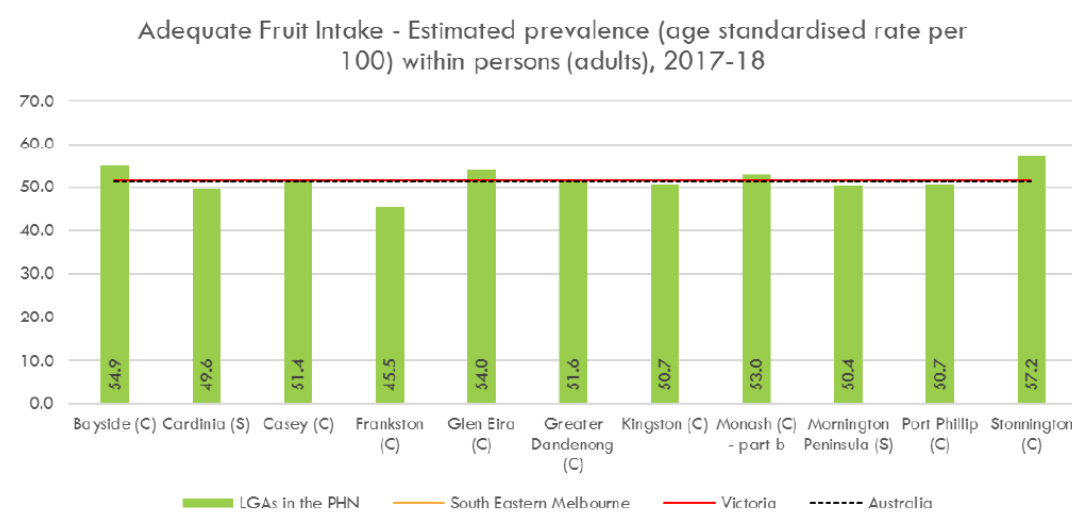


## Risk factors

### Nutrition

Food and nutrition play a vital role in health and wellbeing, with health conditions commonly associated with diet including overweight and obesity, coronary heart disease and type 2 diabetes (Australian Institute of Health and Welfare, 2020g). The region equals the state average in the estimated number of people aged 18 years and over who have adequate fruit intake. However in 2017-18, low rates (ASR per 100) were observed in the City of Frankston and the Shires of Cardinia and Mornington Peninsula.

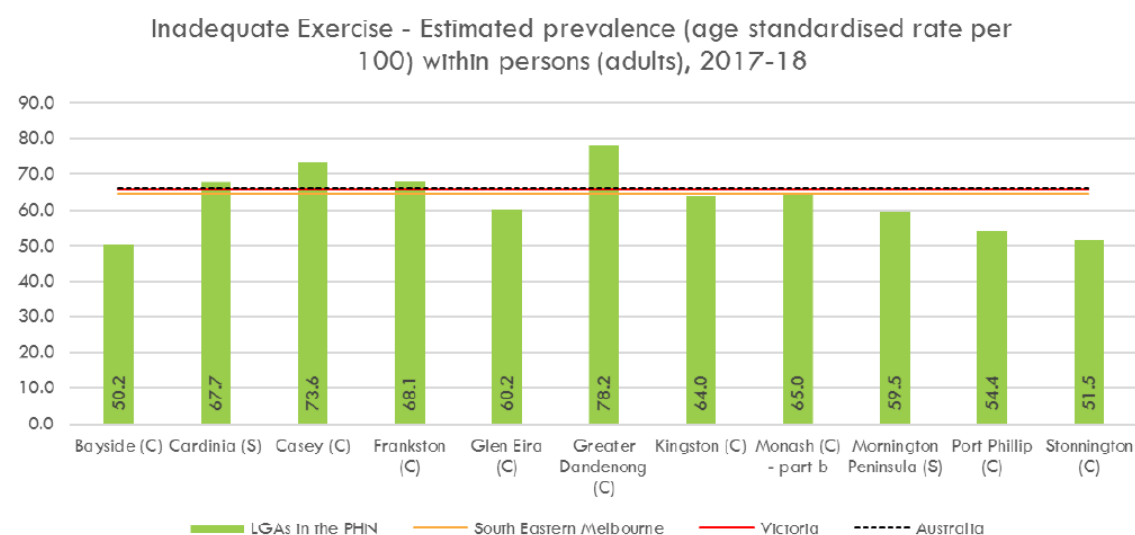
Figure 2.8: Adequate fruit intake in SEMPHN, 2017-2018



## Physical inactivity

The region's estimated population aged 18 years and over who undertook low, very low or no exercise in the previous week is lower than the state average. However, in 2017-18 high rates (ASR per 100) were observed in the City of Greater Dandenong and City of Frankston, and Cardinia Shire.

Figure 2.9: Inadequate exercise prevalence in SEMPHN, 2017-2018

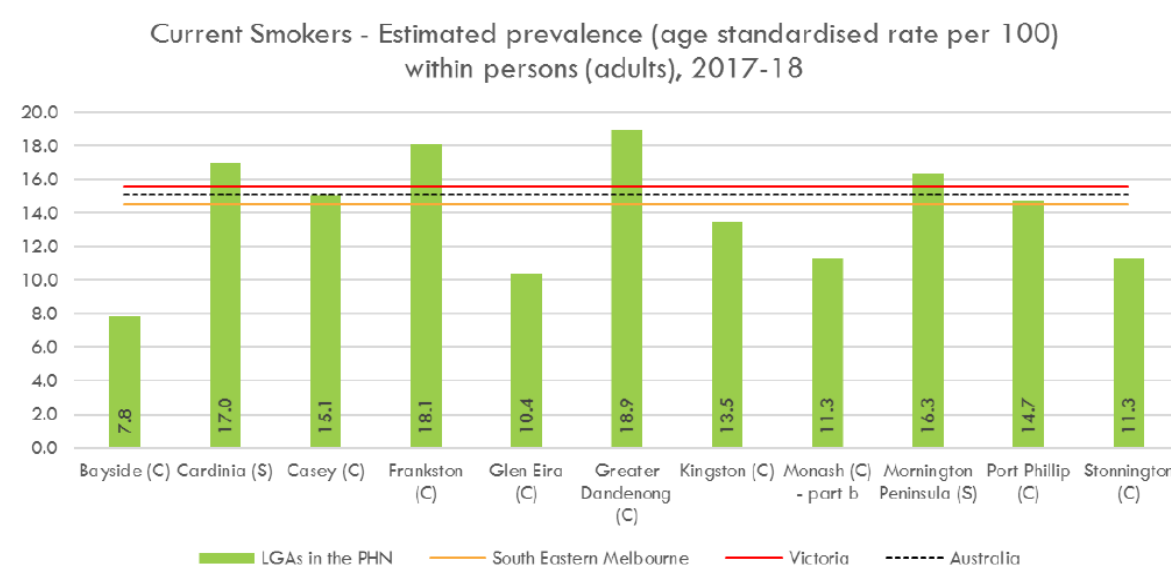


## Smoking

Smoking is a leading risk factor for the development of various chronic conditions and premature mortality, including associations with cancer, respiratory disease and heart disease. National data suggests higher prevalence of daily smoking among those aged in their 40s and 50s (Australian Institute of Health and Welfare, 2021d).

The estimated number of people aged 18 years and over in the region who are current smokers is lower than the state average; however, in 2017-18 high rates (ASR per 100) were observed in the City of Greater Dandenong, City of Frankston and the Shires of Cardinia and Mornington Peninsula.

Figure 2.10: Current smokers in SEMPHN, 2017-2018

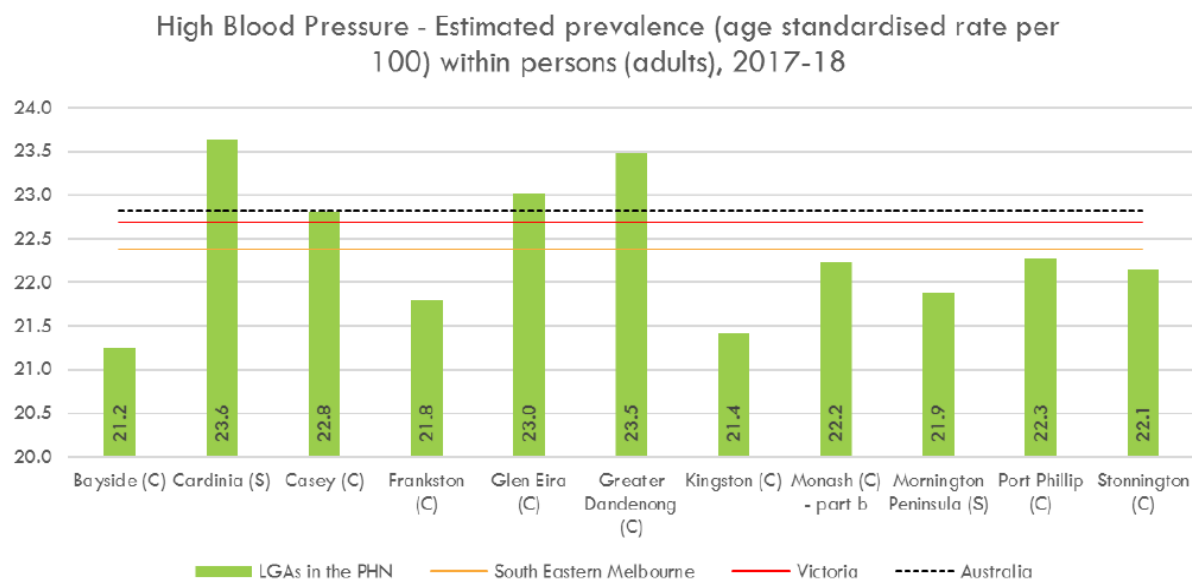


Overall, a similar proportion of the region's women smoke during pregnancy compared with Victorian women (8.3 compared with 8.4 per 100), but the proportions of women in Frankston (17.7 per 100), Cardinia (12.9 per 100) and Mornington Peninsula (12.4 per 100) who smoke during pregnancy are concerning (Australian Bureau of Statistics, 2016b; Public Health Information Development Unit, 2021b).

## High blood pressure

Risk factors for chronic disease related to high blood pressure include a poorer diet, obesity and insufficient physical activity, which Cardinia and Casey also experience. The estimated prevalence in the region of high blood pressure among people aged 18 years and over is lower than the state average, although in 2017-18 high rates (ASR per 100) were observed in the Shire of Cardinia, City of Greater Dandenong, City of Glen Eira and City of Casey.

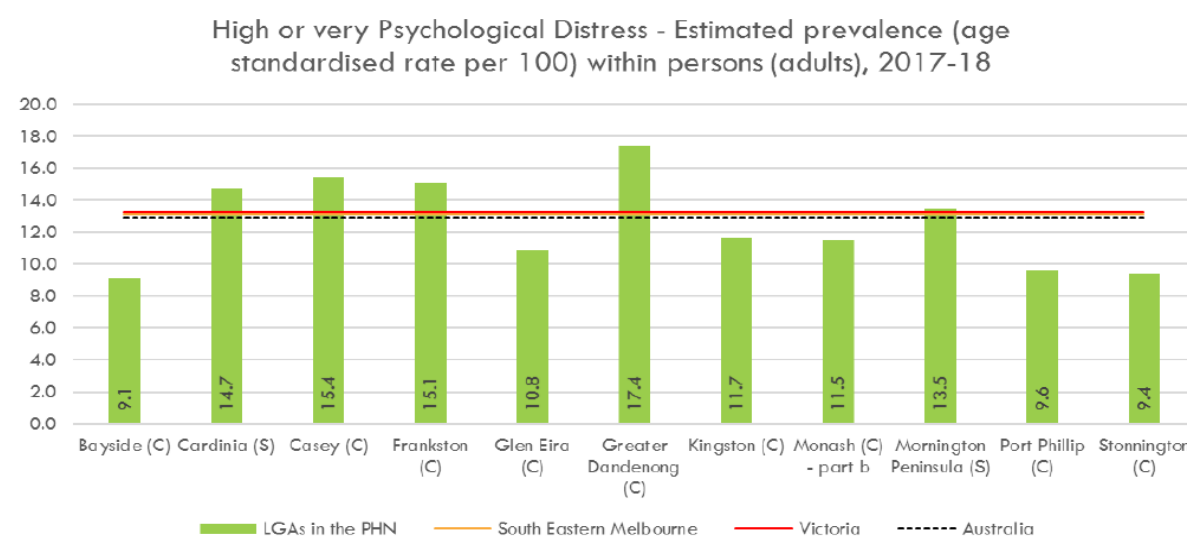
Figure 211: High blood pressure prevalence in SEMPHN 2017-2018



## Psychological distress

The region's estimated prevalence of people aged 18 years and over with high or very high psychological distress (based on the Kessler 10 Scale) is lower than the state average. However, half of the region's LGAs have rates of high/very high distress, above the state average. In 2017-18 high rates (ASR per 100) were observed in the City of Greater Dandenong, City of Casey, City of Frankston, and the Shires of Cardinia and Mornington Peninsula.

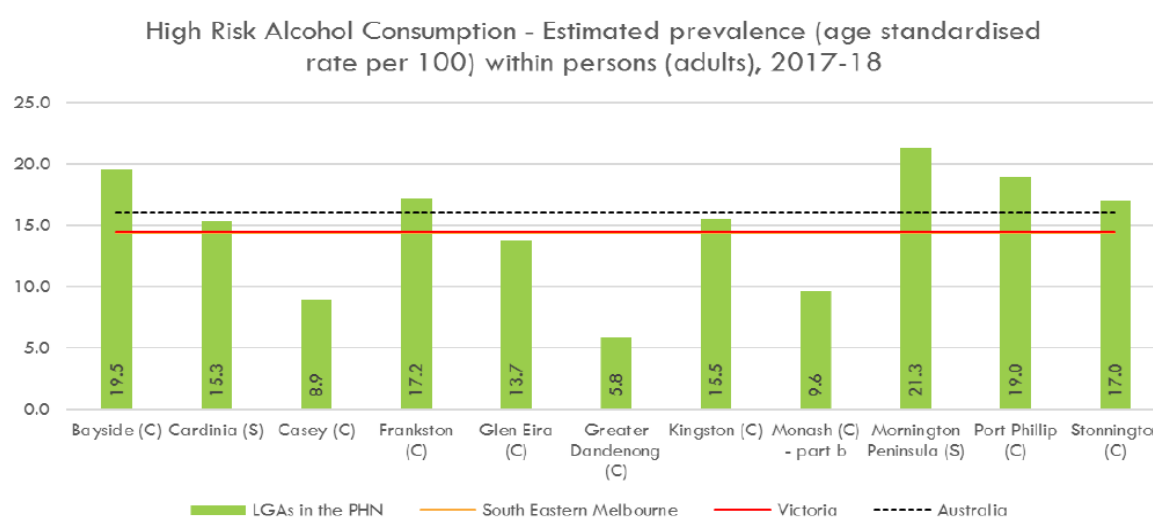
Figure 2.11: High or very high psychological distress in SEMPHN, 2017-2018



## Alcohol consumption

It is estimated that the number of people aged 18 years and over who consume more than two standard alcoholic drinks per day on average is equal to the Victorian average in 2017-18. However, there was a significantly higher rate of risky alcohol consumption in the Mornington Peninsula, Bayside and Port Phillip compared to other LGAs in the region.

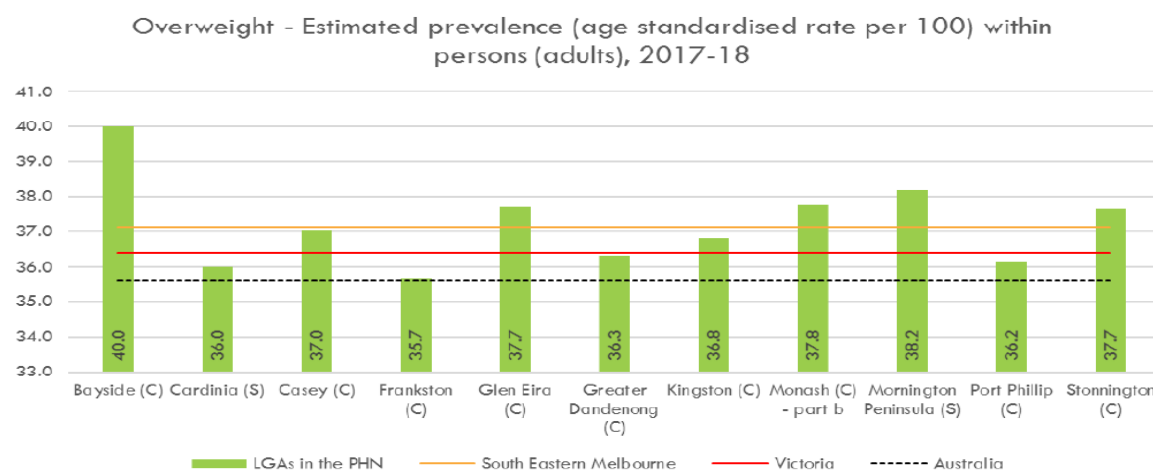
Figure 2.12: Prevalence of high-risk alcohol consumption in SEMPHN, 201-2018



## Overweight and obesity

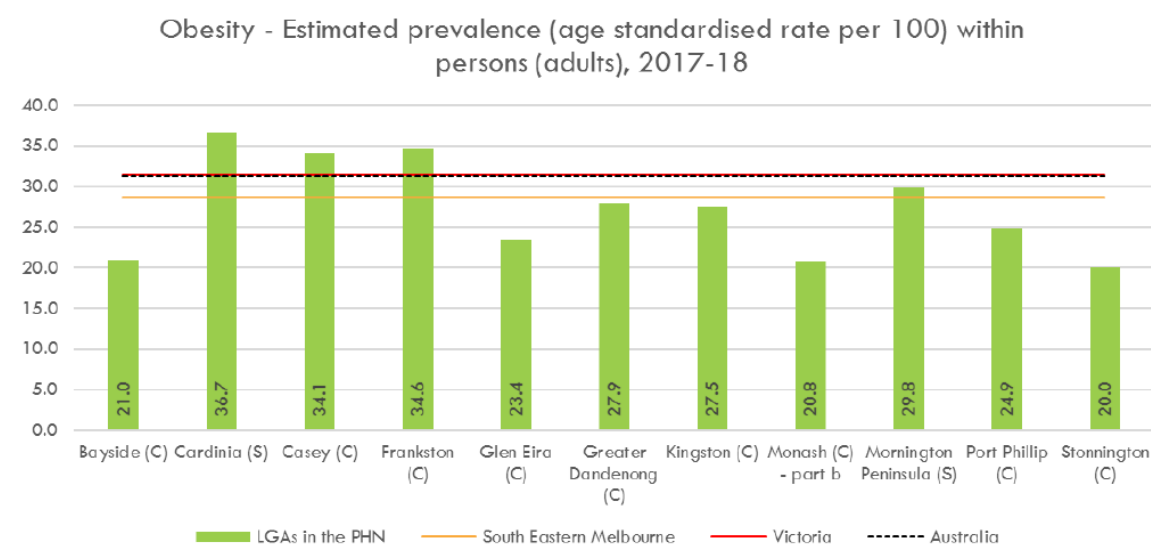
Nationally, overweight and obesity are the leading risk factor for non-fatal burden of disease, with high rates increasing the likelihood of developing chronic conditions related to cardiovascular disease, diabetes and some cancers. Socioeconomic gradients are apparent with obesity rates, with adults aged 18 years and over in the lowest socioeconomic areas more likely to be overweight or obese than those in the highest socioeconomic areas (age adjusted proportion of 72% versus 62% respectively (Australian Bureau of Statistics, 2019a). The estimated number of people in the region aged 18 years and over who are overweight (but not obese) is higher than the Victorian average. In 2017-18, high rates (ASR per 100) were observed in the City of Bayside and the Mornington Peninsula Shire.

Figure 2.13: Prevalence of overweight in SEMPHN, 2017-2018



The estimated number of people aged 18 years and over in the region who are obese is lower than the state average. However, in 2017-18 high rates (ASR per 100) were observed in Cardinia Shire, City of Frankston and City of Casey.

Figure 2.14: Prevalence of obesity in SEMPHN, 2017-2018



## Immunisation coverage

Immunisation protects against communicable diseases. 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 states/territories 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, 2021d). Childhood immunisation rates in the SEMPHN catchment are lower than state averages (see Table 2.2). 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 2.3: Immunisation coverage for children as at 30 June 2021

% Immunisation rates for vaccines in the national schedule	SEMPHN	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

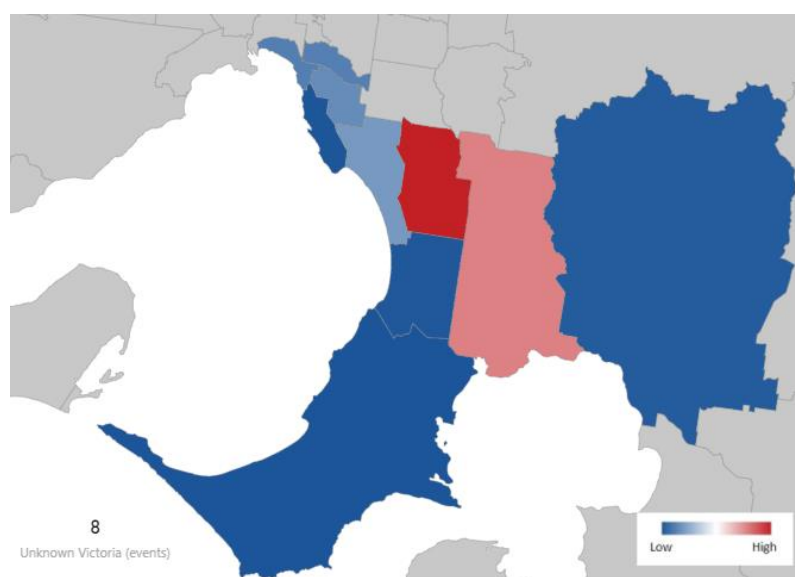


## Tuberculosis

Notified cases of tuberculosis in the region have fluctuated in the past 10 years (Department of Health Victoria, 2018), with 124 cases notified in 2020 (112 in 2019). Analysis by sex shows a slightly higher proportion of cases in men (53.3%) since 2010. Cases by age show that women in younger age cohorts had a higher proportion of infections than men. However, for age cohorts of 30 years and over, the proportion by sex is higher in men.

While the confirmed cases of tuberculosis for First Nations peoples in 2018 and 2019 were lower than prior years (2.1 per 100,000 in 2018 and 2019 compared with 4.2 per 100,000 in 2016 and 2017), the rate increased significantly in 2020 (6.3 per 100,000). It is important to note that population size suggests the number of confirmed cases is relatively low for this cohort. Analysis by LGA shows Greater Dandenong (n=260) and Casey (n=207) recorded the highest number of cases from 2015 onwards (Figure 2.15).

Figure 2.15: Tuberculosis cases in the south-eastern Melbourne region since 2015.



## Cancer screening

Cancer screening programs are a way to detect cancer in the early stages and can assist in rates of survival and better health outcomes. There are pockets across the SEMPHN region with low cancer screening rates compared to the regional and state rates – Casey (South), Greater Dandenong and Frankston (Table 2.3).

Table 2.4: Cancer screening participation rates (2018-2019)

Cancer	Regional participation rates %	Priority LGAs %
Bowel <sup>2</sup> persons aged 50 to 74 years	<ul style="list-style-type: none"> <li>• SEMPHN region, 43.7</li> <li>• Victoria, 46.0</li> </ul>	<ul style="list-style-type: none"> <li>• Casey (South), 38.7</li> <li>• Greater Dandenong, 39.3</li> <li>• Frankston, 41.5</li> <li>• Casey (North), 41.5</li> </ul>
Breast women aged 50 to 74 years	<ul style="list-style-type: none"> <li>• Victoria, 53.6</li> <li>• SEMPHN region, 52.1</li> </ul>	<ul style="list-style-type: none"> <li>• Casey (South), 49.3</li> <li>• Stonnington (West): 45.1</li> <li>• Port Phillip, 48.3</li> <li>• Frankston, 49.1</li> </ul>
Cervical <sup>3</sup> women aged 25 to 74 years	<ul style="list-style-type: none"> <li>• Victoria, 46.2</li> <li>• SEMPHN region, 47.6</li> </ul>	<ul style="list-style-type: none"> <li>• Casey (South), 41.1</li> <li>• Greater Dandenong, 44.1</li> <li>Frankston, 44.3</li> </ul>

<sup>2</sup> National Bowel Cancer Screening Program – participation rates for (2018-19) (Australian Institute of Health and Welfare, 2021e)

<sup>3</sup> National Cervical Cancer Screening Program – participation rates for screened as a percentage of women in the population (2018-19) (Australian Institute of Health and Welfare, 2021e). For 2018-19, participation is defined as the number of people who had a screening HPV test (primary screening or 12-month repeat HPV tests). This is a change from previous AIHW reports in which participation was defined as the number of people who had an HPV test for any reason. This means participation is lower than, and not comparable with, previous reports. Participation in the new five-year program cannot be properly reported until there are five years of data available. In the interim, preliminary estimates have been calculated, including a two-year estimate of participation for 2018-19.

## Service Needs

### Emergency Department presentations

Table 2.5: Emergency Department presentations in SEMPHN, 2018-2019

Presentation type	SEMPHN (ASR per 100,000)
Emergency	<p>There are higher rates of emergency presentations in the region, particular in areas frequently identified with high chronic disease prevalence. The ASR per 100,00 rate in Frankston was significantly higher than the Victorian rate. The rate of emergency presentations was highest in:</p> <ul style="list-style-type: none"> <li>• Frankston, 5,595.1</li> <li>• Cardinia, 4,979.9</li> <li>• Casey, 4,783.6</li> <li>• SEMPHN region: 3,774.2, Victoria: 3,519.0</li> </ul>
Urgent	<p>Urgent presentations mirror rates of emergency presentations across the catchment, with Frankston significantly higher than the Victorian rate. The ASR per 100,000 rates for urgent presentations were highest in:</p> <ul style="list-style-type: none"> <li>• Frankston, 14,052.9</li> <li>• Cardinia, 12,660.7</li> <li>• Casey, 11,925.0.</li> <li>• SEMPHN region: 10,389.8, Victoria: 10,438.8</li> </ul>
Non-urgent	<p>While the rates of non-urgent presentations in the region are relatively low across LGAs compared with the Victorian rate, Port Phillip had a notably higher rate (ASR per 100,000) of non-urgent presentations:</p> <ul style="list-style-type: none"> <li>• Port Phillip, 2,024.7</li> <li>• Frankston, 1,518.4</li> <li>• Cardinia, 1,401.3.</li> <li>• SEMPHN region: 1,307.5, Victoria: 1,940.4</li> </ul>
After-hours	<p>In 2019-20, Frankston had the highest number of lower-urgency, after-hours Emergency Department hospital presentations</p> <ul style="list-style-type: none"> <li>• Frankston, 21.6%</li> <li>• Greater Dandenong, 17.4%</li> <li>• Casey, 16.4%.</li> </ul>

Source: (Australian Bureau of Statistics, 2016b; Public Health Information Development Unit, 2021b) Outcome Health, 2021)

## Hospital admissions

Table 2.6: Hospital admissions in SEMPHN, 2018-2019

Health issue	SEMPHN hospital admission data
Chronic disease	<p>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 (Australian Bureau of Statistics, 2016b; Public Health Information Development Unit, 2021b):</p> <ul style="list-style-type: none"> <li>• Casey, 1,974.7</li> <li>• Frankston, 1,897.1</li> <li>• Cardinia, 1,825.9.</li> <li>• SEMPHN region: 1,526.4; Victoria: 1,516.4</li> </ul>
Asthma	<p>Hospital admission rate for asthma in the region being almost identical to the Victorian rate, Greater Dandenong has a notably higher admission rate for this illness. Admissions for chronic asthma for all hospitals in 2018-19 (ASR per 100,000) were highest in:</p> <ul style="list-style-type: none"> <li>• Greater Dandenong, 159.4</li> <li>• Frankston, 136.8</li> <li>• Casey, 133.7.</li> <li>• SEMPHN region: 121.5; Victoria: 125.1</li> </ul>
COPD	<p>Admissions for COPD are similar to rates for total chronic disease, with the cluster of Frankston, Cardinia and Casey with the highest rates. Admissions for COPD for all hospitals in 2018-19 (ASR per 100,000) were highest in:</p> <ul style="list-style-type: none"> <li>• Frankston, 392.8</li> <li>• Cardinia, 375.0</li> <li>• Casey, 335.1</li> <li>• SEMPHN: 254.7, Victoria: 263.7</li> </ul>
Diabetes mellitus	<p>Chronic diabetes hospital admissions are clustered in the outer south-east where rates are notably higher than the Victorian rate. Admissions for chronic diabetes complications for all hospitals in 2018-19 (ASR per 100,000) were highest:</p> <ul style="list-style-type: none"> <li>• Casey, 340.9</li> <li>• Cardinia, 307.4</li> <li>• Frankston, 287.9</li> <li>• SEMPHN region: 230.1, Victoria: 238.7</li> </ul>
Vaccine preventable conditions	<p>Admissions for vaccine-preventable conditions in Greater Dandenong are almost twice the Victorian rate. Admissions in 2018-19 for all hospitals (ASR per 100,000) were highest in:</p> <ul style="list-style-type: none"> <li>• Greater Dandenong, 494.2</li> <li>• Casey, 283.1</li> <li>• Port Phillip, 264.0</li> <li>• SEMPHN region: 252.1, Victoria: 252.9</li> </ul>

Health issue	SEMPHN hospital admission data
Pneumonia and influenza	<p>The neighbouring LGAs of Casey, Greater Dandenong and Cardinia have high hospital admission rates for pneumonia and influenza; all hospitals in 2018-19, ASR per 100,000 were:</p> <ul style="list-style-type: none"> <li>• Casey, 155.7</li> <li>• Greater Dandenong, 150.9</li> <li>• Cardinia, 150.2.</li> <li>• SEMPHN region: 139.0, Victoria: 141.8</li> </ul>
Acute conditions	<p>Acute condition hospital admissions were much higher in neighbouring outer LGAs of Mornington Peninsula and Frankston. Overall, the region's rates mirror that of Victoria. Admissions for total acute conditions for all hospitals in 2018-19 (ASR per 100,000) were highest in:</p> <ul style="list-style-type: none"> <li>• Mornington Peninsula, 1,580.2</li> <li>• Frankston, 1,564.2</li> <li>• Cardinia, 1,318.1</li> <li>• SEMPHN region: 1,254.; Victoria: 1,209.6</li> </ul>

Source: (Australian Bureau of Statistics, 2016b; Public Health Information Development Unit, 2021b)

## After-hours GP attendance

After-hours GP attendances are relatively higher in the SEMPHN region compared to other PHNs across Australia. 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.

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) (Australian Institute of Health and Welfare, 2018c). 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 SA3s within the region based on need (from highest to lowest need).

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

## Barriers to accessing services

### Transport

Transport as a barrier to accessing health services is high in Greater Dandenong, where prevalence and risk factors for health conditions are also significantly higher. The estimated number of people aged 18 years and over who often have a difficulty or cannot get to places they need to go via transport, including housebound people (modelled estimates 2014, ASR per 100 with transport barrier), is highest in (Australian Bureau of Statistics, 2016b; Public Health Information Development Unit, 2021b) :

- Greater Dandenong, 5.6
- Port Phillip, 4.9
- Stonnington, 4.3.
- SEMPHN region: 4.1; Victoria: 4.2

### Cost and affordability

The estimated number of people aged 18 years and over who experienced cost as a barrier to accessing healthcare in the past 12 months, (modelled estimates 2014, ASR per 100) was highest in:

- Greater Dandenong, 2.5
- Frankston, 1.9
- Casey, 1.7.
- SEMPHN: 1.6; Victoria: 1.6

Patient-reported cost barriers to health care can lead to people delaying or not accessing medical services. The proportion of people affected by this barrier is higher in the SEMPHN region than in Australia overall.

- Proportion of people who delayed or did not see a medical specialist, GP, or have an imaging or pathology test when needed due to cost in the past 12 months – SEMPHN region 9.2%, Australia 7.6% (2016-17) (Australian Institute of Health and Welfare, 2018c).
- Proportion of people who delayed or did not see a GP when needed due to cost in the past 12 months –SEMPHN region was 4.3%, Australia 4.1% (2016-17) (Australian Institute of Health and Welfare, 2018c).

Stakeholders (including community members) report affordability as the leading barrier to accessing medical services in south-eastern Melbourne. This mirrors evidence that shows the region's rates are higher than national figures. Stakeholders identified the following as key barriers to access (Pricewaterhouse Coopers, 2018; South-Eastern Melbourne Primary Health Network, 2016) :



- Lack of affordable medical services 69%
- Lack of awareness of existing services 61%
- Lack of affordable transport 59%
- Shortage of allied health services 52%
- Gaps in health literacy 50%
- Distance to healthcare services 42%
- Lack of available after-hours appointments 35%
- Poor past experiences 35%
- Lack of available appointments 30%
- Shortage of culturally appropriate services 21%
- Shortage of GPs 19%
- Concerns related to privacy 19%
- Shortage of First Nations health workers 14%
- Lack of accommodation during treatment 14%
- Communication difficulties (e.g. experiences of people with hearing difficulties or intellectual disabilities) 11%
- Other notable barriers included access to allied health and gaps in general practice after-hours services including catchment-wide gaps particularly on Sundays.

### 3. Mental health

Mental health includes a person's emotional, psychological and social wellbeing and can significantly affect many aspects of a person's life and quality of life. In addition to a person's social and emotional wellbeing, there may be physiological effects associated with mental health. Furthermore, mental health effects, and is affected by, multiple socioeconomic factors, including a person's access to services, living conditions and employment status. It affects not only the individual but also their families and carers (Compton, 2015; Whiteford, 2009).

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, 2021q) .

#### Key insights

- There are higher rates of age-standardised suicide deaths in Frankston, Port Phillip and Mornington Peninsula compared with the overall SEMPHN region and Victoria.
- There is high prevalence of anxiety and depression in residents of all ages in the region. Depression is the leading mental illness in older residents.
- Higher psychological distress was experienced by Victorian residents during the COVID-19 pandemic due to public health orders and lockdowns, compared with the rest of Australia.
- Frankston and Dandenong continue to have the highest rate of mental health-related ED presentations, suggesting there may be opportunities to prevent mental health presentations through primary care management and early intervention.
- Areas such as Greater Dandenong have lower-than-expected primary mental health service utilisation, particularly with the community diversity of in the area. There are high occupancy rates of hospital services and high rates of mental health-related ED presentations, but lower engagement in general practice and PHN-commissioned services for mental health.
- There has been high use of mental health services in the region during the COVID-19 pandemic, although there is limited evidence on the possible longer-term impacts of COVID-19 on mental health services.
- There are high numbers of south-eastern Melbourne residents seeing GPs for mental health concerns. However, there is limited ongoing interaction between patients and GPs around their ongoing treatment of mental health concerns. Psychiatrists and psychologists tend to have the largest number of interactions per consumer to manage mental illnesses.
- There is low utilisation of GP mental health treatment plans to support the management of mental illness.
- Opportunities exist for further co-design and refinement of services to suit the needs of particular community groups, such as First Nations peoples and people from CALD communities.
- Mental health service consumers have difficulty accessing and navigating the local health system.

## Mental wellbeing

In 2019, three in four residents (74.5%) reported high to very high levels of life satisfaction, while around one in four (24.2%) reported low to medium levels of life satisfaction. A greater proportion of men reported lower levels of life satisfaction (25.5%) compared to women (22.2%).

One in five (20%) of residents reported low to medium levels of feeling that life was worthwhile. More than one in five of the region's residents (22.1%) reported poor/fair overall health status which was comparable to the Victorian population (Victorian Agency for Health Information (VAHI), 2019).

Psychological distress increased during 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). This can be attributed to the multiple and long lockdown periods in Victoria throughout 2020 and 2021.

## Mental illness

Prevalence of mental illness in the SEMPHN population is consistent with Australian prevalence, however there are variations between LGAs. The 2014-15 National Health Survey estimated that 311,200 people (20.2%) in the SEMPHN region were living with a mental illness and/or behavioural concerns, including 30,000 people aged four to 17 years (PHIDU, 2021). LGAs with higher proportions of residents living with mental health illness are:

- Frankston (25.7%)
- Port Phillip (23.7%)
- Mornington Peninsula (21.7%).

In 2020-21, 15% of adults (aged between 25 and 64) accessing SEMPHN-commissioned primary mental health services were diagnosed with mixed anxiety and depression, which was the most prevalent condition. This was followed by anxiety (8.6%), post-traumatic stress disorder (7.8%) and depression (6.9%) (South Eastern Melbourne PHN, 2021b).

This age group experienced a significant increase for stress-related mental illness between 2019-20 and 2020-21 (2.8% and 4.5% respectively) and a minor increase in mixed anxiety and depression (13.2% and 15.0%, respectively) (South Eastern Melbourne PHN, 2021b). These increases may have been influenced by the pandemic, as suggested by consultations with local health professionals.

The three most common diagnoses<sup>4</sup> for consumers accessing SEMPHN-commissioned services in 2020-21 were mixed anxiety and depressive symptoms (13.6%), anxiety symptoms (9.0%), depressive symptoms (7.9%). These diagnoses did not significantly vary between 2019-20 and 2020-21. However, there were some variations in the diagnosed conditions with lower levels of prevalence:

- stress-related increased from 2.7% to 3.9%
- generalised anxiety disorder increased from 1.6% to 2.5%
- other anxiety disorder increased from 0.3% to 0.7%
- eating disorders<sup>5</sup> increased from 0.1% to 0.4%.

<sup>4</sup> Note that there was a high proportion of missing (27.9%) and Other (8.8%) was excluded.

<sup>5</sup> This was largely due to an increase seen in the younger age group.

Increases in stress and anxiety-related mental illness were supported by insights gathered through consultations with local health professionals. Key themes included:

- more people from the general population were presenting to primary care with anxiety symptoms
- an increase in parental anxiety due to lockdowns and children going in and out of schools.

Consultations with health professionals further suggested symptoms of severe anxiety could potentially be decreasing for some people due to limited exposure to common triggers, such as social interactions. Additionally, there were a greater number of new mental health diagnoses recorded in the catchment during the COVID-19 pandemic, although service utilisation data is not yet available to support this perceived observation.

### Mental illness in young people

In 2019-20 for young people aged less than 25 years accessing SEMP HN-commissioned primary mental health services, anxiety was the most prevalent diagnosis (13.6%) followed by mixed anxiety and depression (12.2%)<sup>6</sup>.

Of particular interest, personality disorder, adjustment disorder and ADHD were diagnoses that were significantly overrepresented in the younger age group compared with adults and older people in 2019-20 and 2020-21 (South Eastern Melbourne PHN, 2021b). There was also a significant rise in young people being treated for post-traumatic stress disorder between 2019-20 (4%) and 2020-21 (6.9%) (South Eastern Melbourne PHN, 2021b).

Consultations with local health professionals suggest the profile of those with mental health problems has been changing, with more younger people reporting mental health issues (anxiety and depression).

### Depression in older people

In 2019-20, depression was the most prevalent diagnosis for older people (aged 65 years and over) in SEMP HN'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). (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). 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 ).

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<sup>6</sup> Note: 16.2% and 18.0% of diagnosis data were missing from the PMHC-MDS for people aged less than 25 years for 2019-20 and 2020-21, respectively.

## Eating disorders

Based on the national eating disorder prevalence (4% of the population) and Census data from 2016, it is estimated that there are more than 60,000 people living with an eating disorder in south-eastern Melbourne (Australian Bureau of Statistics, 2016b; Eating Disorders Victoria, 2016). Of these people, research from Eating Disorders Victoria (2016) suggests:

- 47% have binge eating disorder
- 12% have bulimia nervosa
- 3% have anorexia nervosa
- 38% have other eating disorders.

Between 2019-20 and 2020-21, there was an increased presentation of young people with eating disorders in SEMPLHN-commissioned primary mental health services (0.3% compared with 1.4%). This increase also resulted in younger people being significantly overrepresented with this diagnosis compared with adults and older people in 2021-21 (South Eastern Melbourne PHN, 2021b).

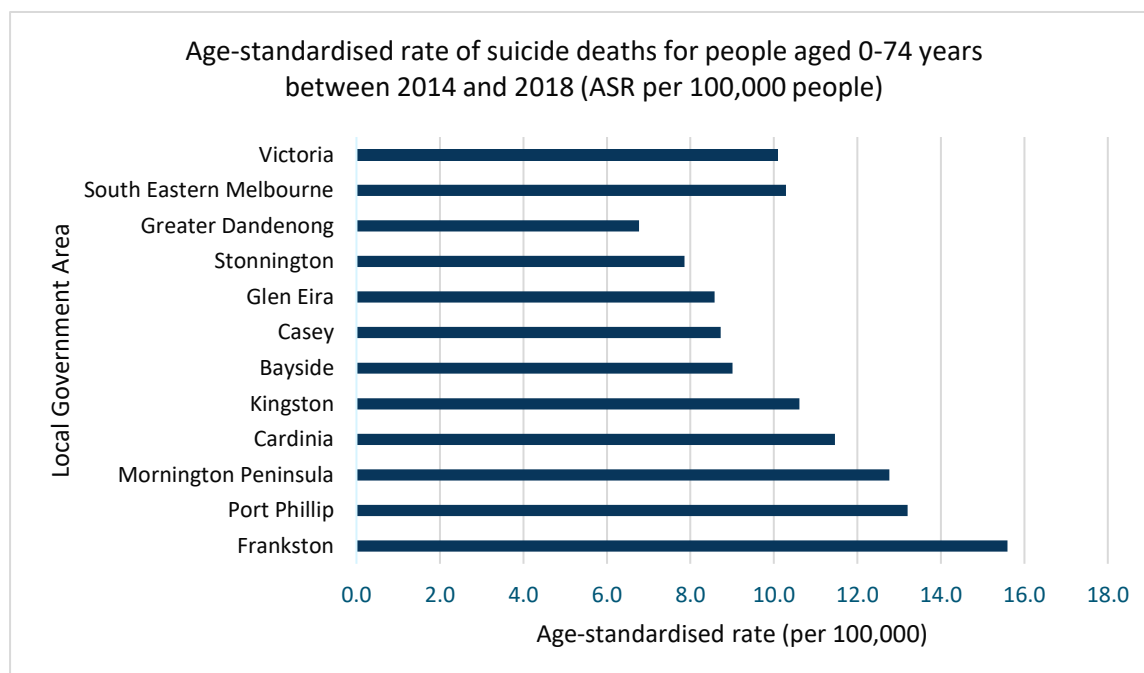
While the majority of people experiencing eating disorders are female (64%), the prevalence of eating disorders is increasing among males (Australian Government Department of Health, 2018; Deloitte, 2012). Up to 97% of people experiencing an eating disorder had a co-occurring condition, most commonly depression, anxiety disorders, AOD or personality disorders (National Eating Disorders Collaboration, 2020).

## Suicide

Suicide rates for all age groups in the region were comparable with Victoria rates (ASR 10.3 per 100,000 people) between 2014 and 2018 with variation observed by LGA (Australian Bureau of Statistics, 2016b)(PHIDU, 2021). Frankston reported the highest rates of suicide – ASR 15.6 per 100,000 people, while Greater Dandenong reported the lowest rates, ASR 6.8 per 100,000 people (see Figure 3.1). Between 2015 and 2019, Frankston and Mornington Peninsula had the highest number of suicide deaths than any other area (SA3) in Victoria (120 and 110 suicide deaths, respectively) (Australian Institute of Health and Welfare, 2021j).

In 2020-21, 8.47% of episodes in SEMPLHN-commissioned mental health services were flagged as those with consumers with a recent history of suicide attempt or suicide risk being a factor noted in the referral that underpinned their need for assistance at entry to the episode (South Eastern Melbourne PHN, 2021b).

Figure 3.1: Suicide deaths per 100,000 people for residents aged 0-74 years by LGA



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

## Youth suicide

Suicide is the leading cause of death among young Australians and accounts for almost 40% of deaths for Australians aged between 15 and 24 years. The proportion of deaths by suicide is relatively high among children and young people due to the fact these age groups do not die from other health-related and aging causes (Australian Institute of Health and Welfare, 2021s).

Local age-specific suicide death data is not available. However, national data indicates that throughout 2010 to 2020, age-specific suicide rates:

- were higher for young adults (aged 18-24) than adolescents (aged 15-17) and children (aged 14 and below)
- increased in young people aged 18-24 (from 10.8 deaths per 100,000 population in 2010 to 16.4 in 2020) while remaining relatively stable for those aged 15-17 (7.9 to 8.3 deaths per 100,000 population)
- ranged from 0.5 deaths per 100,000 population in 2010 to 0.8 in children aged 14 and below (Australian Institute of Health and Welfare, 2021s).

## Service needs

The cost to the Australian economy of mental illness and suicide is, conservatively, in the order of \$43 to \$51 billion per year, or around \$2 billion to \$2.5 billion in south-eastern Melbourne (Australian Government Productivity Commission, 2020).

Of a total 5,856 episodes referred to SEMPHN-commissioned mental health services in 2020-21, the majority (71.0%) of episodes were among people who were not homeless. However, just under 3% of episodes were among people recorded as being in short-term or emergency accommodation. One third (34.0%) of consumers were not in the labour force, and nearly half (41.87%) did not state or had inadequately described their labour force status (South Eastern Melbourne PHN, 2021b).

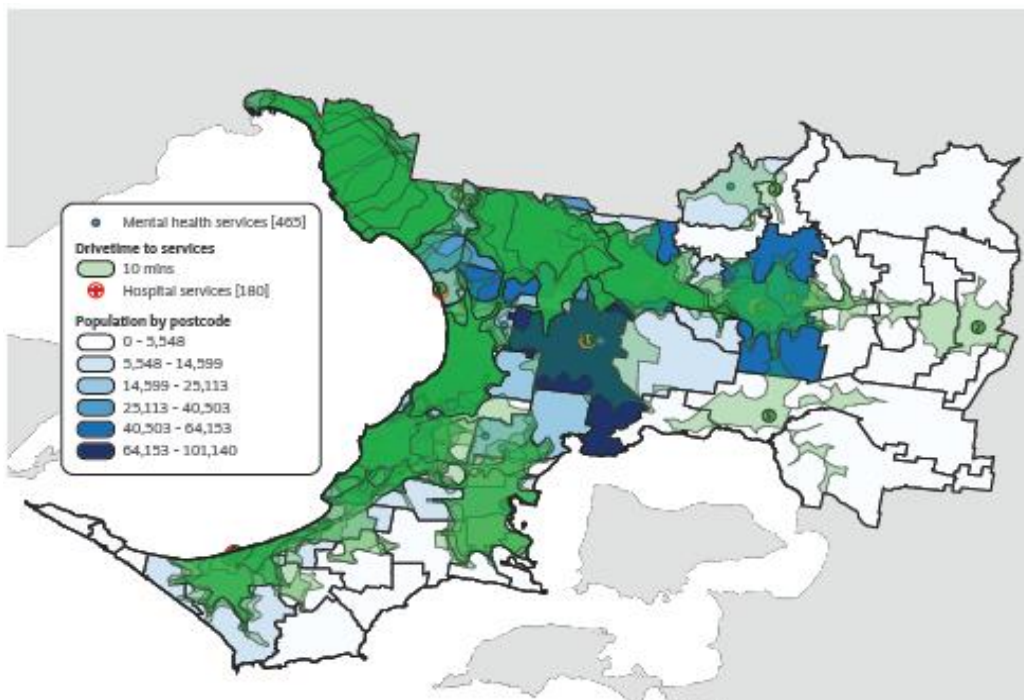
Population risk, service locations and service access mapping of the region shows that most mental health services (Figure 3.4) are located in inner-city postcodes and are more evenly spread among these. Further away from the CBD, they tend to cluster around the major suburban centres of Dandenong, Cranbourne, Pakenham and Frankston, with fewer services in the Mornington Peninsula and Cardinia LGAs.

This aligns to south-eastern Melbourne workforce data, which shows that mental health professionals are available in higher numbers and in greater capacity in LGAs that are closer to the CBD such as Glen Eira and Stonnington. Areas of good access have higher socioeconomic status and larger commercial centres. There is limited access to bulk-billing services for some who require it (e.g. Health Care or Pension Card holders) in Mornington Peninsula, the northern areas of Cardinia, Casey and some areas of Frankston and Kingston. There is less access to after-hours general practice in the northern area of Cardinia, the southern area of Casey and some small areas of other LGAs (Australian Government Department of Health, 2018).

Service gaps include very low provision of acute and non-acute day care or day programs and limited options for inpatient care provided outside the hospital setting (particularly with 24-hour physician coverage)(Australian Government Department of Health, 2018).



Figure 3.2: Location of services (red and green), mental health risk stratification (blue) and 10-minute driving time to access a mental health service.



Cardinia and Casey have the largest service gaps (right of map). A risk stratification is shown in blue (darker colouring highlights increased risk), service locations in green and red, and drivetime showing where a person in a postcode can access a mental health service within a 10-minute drive.

### Impact of COVID-19

Currently, there is limited availability of service utilisation data for mental health services during the COVID-19 pandemic at the region level. National data provide insight into possible effects at the local level. Nationally, data indicates:

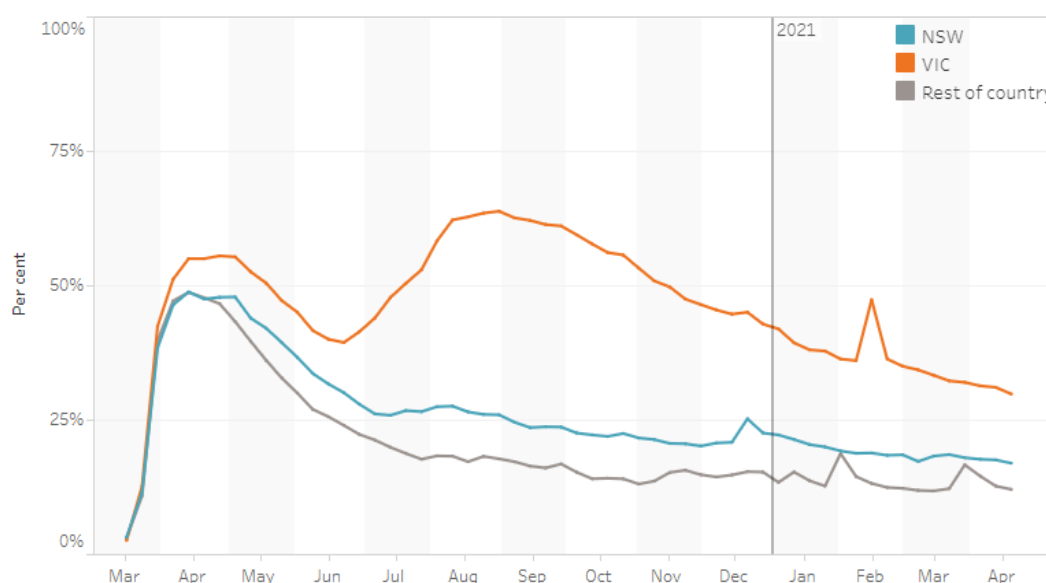
- MBS mental health services delivered via telephone or videoconference peaked during April 2020 when about half of MBS mental health services were delivered via telehealth. In the four weeks to 25 April 2021, 20% of MBS mental health services were delivered via telehealth.
- In the four weeks to 25 April 2021:
  - Lifeline received almost 82,000 calls (a decrease of 2.3% from the four weeks to 26 April 2020 and an increase of 18.4% from the four weeks to 28 April 2019)
  - Kids Helpline received almost 26,000 answerable contact attempts (a decrease of 26.6% from the four weeks to 26 April 2020 and an increase of 10.5% from the four weeks to 28 April 2019)
  - Beyond Blue received more than 22,000 contacts (a decrease of 14.9% from the four weeks to 26 April 2020 and an increase of 30.7% from the four weeks to 28 April 2019).

Australian Institute of Health and Welfare, 2021h)

## Telehealth services

There was increased utilisation of telehealth for MBS mental health service delivery in Victoria compared with the rest of Australia during the COVID-19 pandemic (Australian Institute of Health and Welfare, 2021h). Figure 3.3 shows the proportion of MBS mental health services delivered via telehealth.

Figure 3.3: Proportion of MBS mental health services via telehealth, March 2020 to April 2021.



**Notes:**

- 1) "Rest of country" refers to MBS services identified as having been delivered for people usually residing in Qld, WA, SA, Tas, ACT and NT.
- 2) Data points represent week commencing date.

Source: Medicare Benefits Schedule data.

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

## Head to Help

The use of Head to Help significantly increased during the COVID-19 pandemic. In the SEMPHN region, Head to Help received more than 2,800 calls between September 2020 and September 2021. Of those calls, there were 943 referrals into mental health services in south-eastern Melbourne. There was an initial surge of referrals in the first six months with an increasing number of calls to the 1800 number. In the next six months, there were decreasing numbers of calls, while the number of monthly referrals remained consistent. In March 2021, there was a spike in calls and referrals was observed again. This could be associated with the impending cessation of the national JobKeeper financial support program, as more than 40% of consumers using Head to Help services were not in the workforce.

Between September 2020 to September 2021, GPs were the main source (just over 42%) for referrals to Head to Help, while self-referrals and walk-ins accounted for 36% and 8%, respectively. Mental health nurses provided almost 40% of the service contacts for consumers and low-intensity mental health workers provided a further 23%. The level of severity of referrals varied. Of 923 referrals where the level

of care was assessed via an Intake and Referral, 83% required moderate-intensity support, 8% required low-intensity support and 8% required high-intensity support.

### SEMPHN-commissioned Mental Health 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 2020-21, 5,779 unique consumers were referred to a SEMPHN-commissioned mental health service, which resulted in commencement of 4,831 episodes of care (South Eastern Melbourne PHN, 2021b).

Table 3.1: Geographic distribution of consumers of SEMPHN-commissioned mental health services.

LGA	Consumers (n)	Consumers (%)
Bayside	163	3.6
Cardinia	303	6.6
Casey	675	14.7
Frankston	613	13.3
Glen Eira	274	6.0
Greater Dandenong	668	14.5
Kingston	286	6.2
Mornington Peninsula	865	18.8
Port Phillip	510	11.1
Stonnington	239	5.2
Total	4,596 <sup>7</sup>	100.0

The majority of episodes of care started in 2020-21 had psychological therapy (43.6%) as the principal focus of the treatment plan. Just over one-quarter of episodes were low-intensity psychological interventions (25.7%).

<sup>7</sup> Proportion of consumers have not stated LGA

Figure 3.4: Principal focus of treatment plans commenced in 2020-21, SEMPHN commissioned services

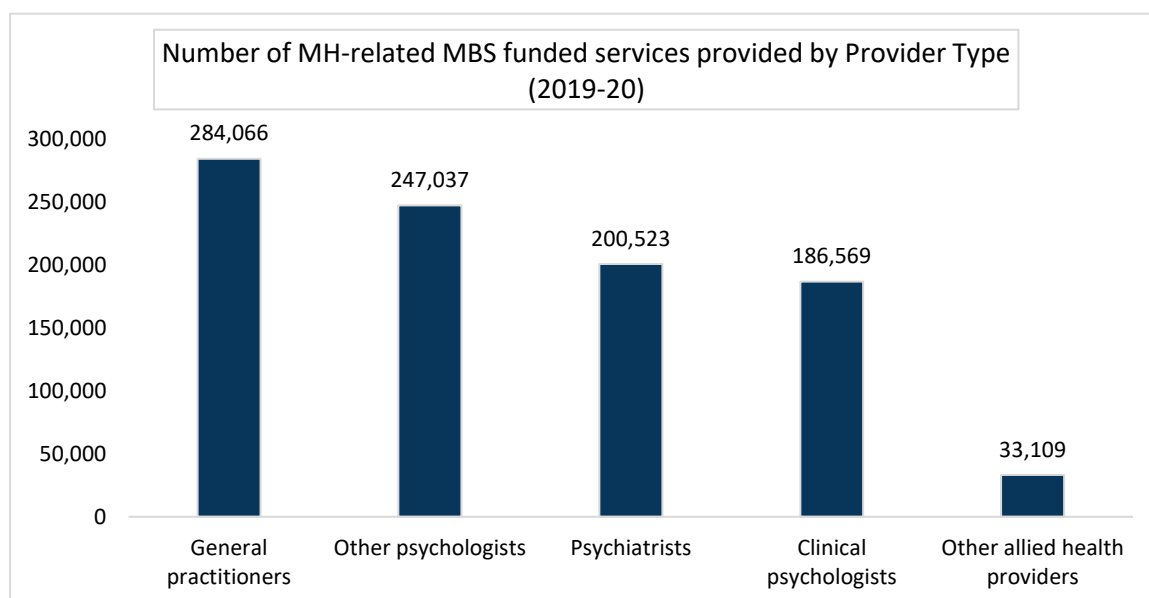


Source: (South Eastern Melbourne PHN, 2021b)

## GP Mental health treatments

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 psychologist and psychiatrists (Figure 3.5).

Figure 3.5: Number of mental health-related funded services, by provider type, 2019-20.



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

There has been a low utilisation of specific MBS items related to GP Mental Health Treatment Plans out of the total number of active consumers receiving any MBS services in general practice, by financial

year (Outcome Health, 2021). 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, 2021p)

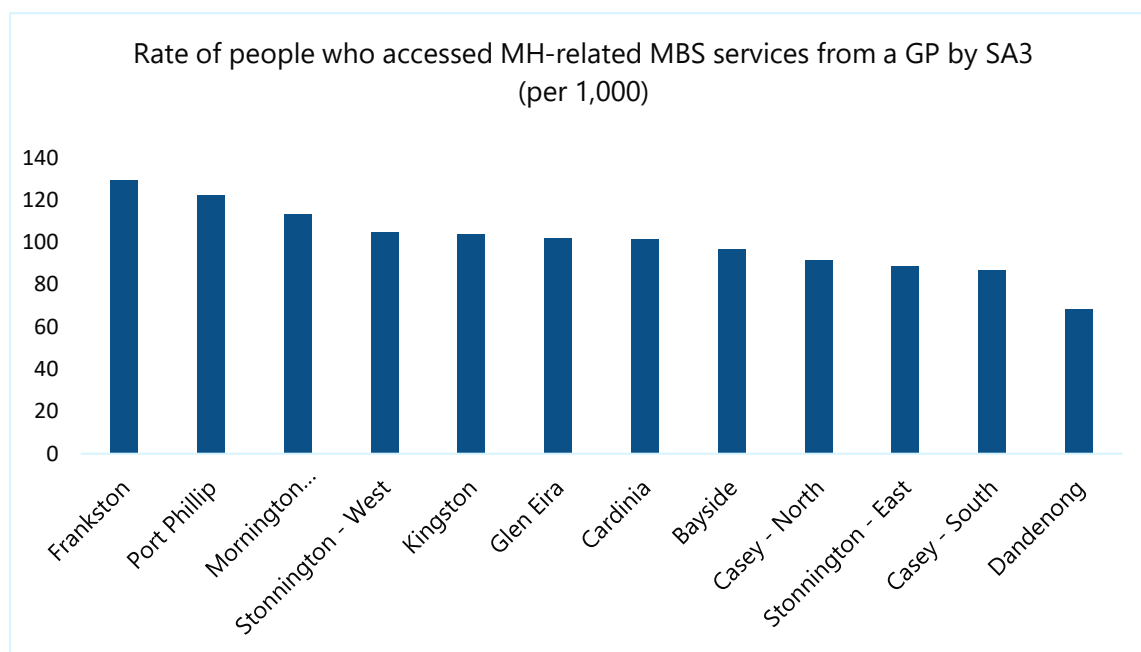
Table 3.2: Patients receiving specific MBS items related to GP Mental Health Treatment Plans.

Financial year	2017/2018	2018/2019	2019/2020	2020/2021
Patients receiving GP mental health plans (MBS items 2700,2701,2715 and 2717)	6.0%	6.3%	5.7%	4.5%

Source: (Outcome Health, 2021)

Figure 3.6 shows utilisation of MH-related MBS services in general practice varies significantly between regions of south-eastern Melbourne. Frankston, Port Phillip, and Mornington Peninsula have the highest rate of people accessing services in general practice. Of particular note is that Dandenong had the lowest utilisation of these services, despite relative high need of services.

Figure 3.6: Rate of people who access mental health-related MBS services from a GP by LGA (per 1,000 people).



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

Table 3.3 shows that more than 27% of episodes of care started in 2020-21 were of consumers who had a General Practitioner Mental Health Treatment Plan.

Table 3.3: SEMPHN region consumers with Mental Health Treatment Plan.

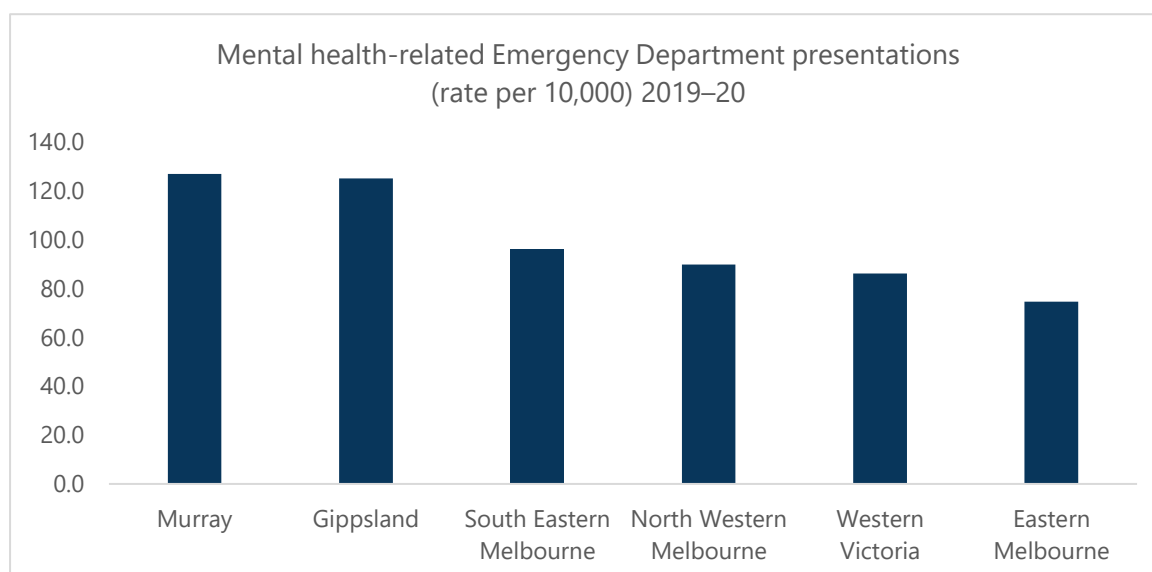
Mental Health Treatment Plan status	% episodes
Yes	27.2
No	32.1
Not stated/inadequately described	26.1
Unknown	14.6
Total (n)	4831

Source: PMHC MDS 2021

## Presentations to Emergency Departments

In 2019-20, residents in the south-eastern region presented to emergency departments for mental health-related concerns at a higher rate than any other Victorian metro PHN.

Figure 3.7: Mental health-related presentations to emergency departments (rate per 10,000), 2019-20.



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

There was a minor decrease in MH ED presentations in the region between 2018-19 and 2019-20 (0.8%), while all other PHNs experienced an increase. Within SEMPHN's region, there is stark variation between SA3 regions.

## Child and youth specific mental health services

There is a high percentage of young people accessing MBS-funded mental health services in Frankston (12.8%) and Mornington Peninsula (11.7%). However, there is low use in Greater Dandenong (5%), despite data suggesting it is an area of high need (Australian Institute of Health and Welfare, 2018d). Data also suggests that young men aged 16-24 years are less likely to seek help for a mental health difficulty compared with young women (Slade, 2009).

### Children (0-11 years):

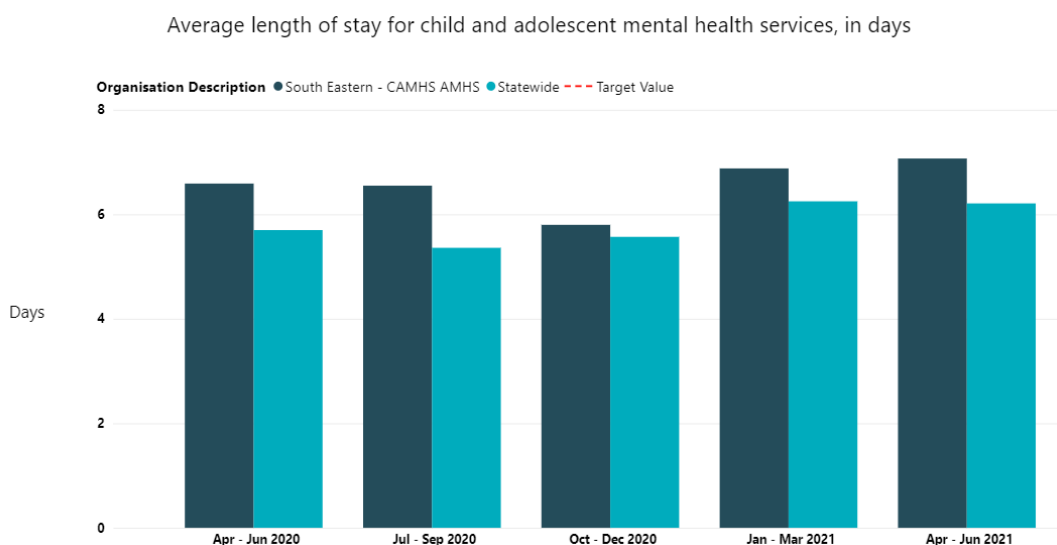
- There are limited programs funded in primary care.
- There is a reliance on private providers and tertiary mental health services, with known gaps.
- There are limited after-hours services for children requiring psychological treatment.

### Young people (12-25 years):

- There are service gaps for young people who exceed criteria for early intervention primary care services and do not meet admission criteria for tertiary services (missing middle).
- There are limited after-hours services for young people requiring psychological treatment.
- There are limited telehealth opportunities for young people.

Over the past 12 months, young 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 3.8: Average length of stay for child and adolescent health services, in days, 2020-21.



Source: (Victorian Agency for Health Information, 2021)

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).

## Stakeholder engagement

The SEMPLHN Needs Assessment Stakeholder Survey (2016), completed by service providers and consumers in the region highlighted several major obstacles to accessing mental health services (South-Eastern Melbourne Primary Health Network, 2016)

- lack of awareness of existing services
- lack of affordable transport
- distance to healthcare services
- lack of available after-hours appointments
- lack of available appointments
- poor past experiences
- shortage of culturally appropriate services
- concerns related to privacy.

SEMPHN community members reported several barriers for people accessing suicide prevention supports, including:

- stigma about suicide, which deters people from reaching out, having conversations and seeking help (Beyond Blue, 2015)
- some groups, such as older men, being reluctant to engage with health professionals
- suicidal ideation or suicidality being treated as an acute issue with the person being taken to an emergency department (ED); however, this can cause more harm

There are a large number of people presenting to EDs with depression and suicidal ideation at SEMPLHN access points, yet a large proportion are not able to access treatment and care (beyondblue, 2015; McKenzie, 2018; Monash Health, 2020; South-Eastern Melbourne Primary Health Network, 2019,)

## Market analysis for mental health services

Table 3.4 Market analysis for youth mental health services

<b>Good quality services</b>	SEMPHN has a highly competitive market for youth mental health services. Each market approach SEMPLHN 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.
<b>Provider capability</b>	Increased service provider capability in commissioning process

	<p>Consultation with service providers and ongoing market analysis identified an increased capability among service providers and prospective service providers in the SEMPHN commissioning process.</p> <p>Key improvements include:</p> <p>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.</p> <p>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.</p>
<b>Diversification of health services provided</b>	<p>Observations of the SEMPHN market have identified that service providers are taking opportunities to diversify their service offerings. For example, AOD service providers have used their experience with comorbidities to lead MH services. This has positive effects for the market and integration of services and community members with comorbid AOD and MH concerns.</p>
<b>Uncertainty in market</b>	<p>As part of the final report of the Royal Commission into Victoria's Mental Health System, it was recommended that LHNs should deliver headspace services in Victoria. Feedback from service providers highlights the uncertainty among existing headspace lead agencies. Service providers are in a position where they must wait and see what actions are taken on the Commission's recommendation.</p>
<b>Increasing real estate and operational costs</b>	<p>Commercial real estate costs in the region's key locations are increasing significantly. The high cost of operations in major suburban centres such as Dandenong, Cranbourne, Pakenham and Frankston tend to be largely attributed to high lease costs.</p> <p>The added challenge in these regions is forecasting the size of the service. Typical service and demand challenges exist within SEMPHN-commissioned services; however, with short-term (12-24 months) contracts service providers find it difficult to invest in larger premises due to uncertainty of longer-term funding and the implications this may have on their existing service delivery and consumers.</p> <p>Growth of services becomes challenging without appropriate venues to accommodate increasing numbers of consumers and overall demand for services.</p>

	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.
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Table 3.5: Market analysis for adult mental health services

<b>Funding uncertainty</b>	Service provider uncertainty of funding. Service providers are increasingly confused and uncertain about the recent inquests and Royal Commission recommendations.
<b>Workforce shortage of mental health professionals</b>	<p>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 MH professionals:</p> <ul style="list-style-type: none"> <li>• shortage of qualified MH professionals in south-eastern Melbourne</li> <li>• lack of secured continuity of funding for some programs</li> <li>• increased state-funded services with increased salary opportunities</li> <li>• lower reporting burden for state-funded services.</li> </ul>

Opportunities exist to improve psychosocial support services in the region. Consultations with service providers, consumers and carers identified the following areas for improvement.

Table 3.6 Key themes from mental health stakeholder consultations

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

## 4. Alcohol and Other Drugs

The consumption of alcohol and other drugs (AOD) can have a significant impact on a person's quality of life. This can include the effects on the individual themselves, their family and the community. Consumption of alcohol at risky levels and other drugs, including pharmaceuticals, have negative effects on family and community functioning including family violence, crime rates and unemployment. High consumption and use refer to levels that may increase an individual's risk of longer-term poorer health outcomes. Dependency refers to drug use that leads to psychological and physiological dependence where the individual cannot, at will, discontinue use without experiencing significant mental or physical distress. Drug use is central to the user's day-to-day life (Australian Department of Health, 2004).

### Key insights

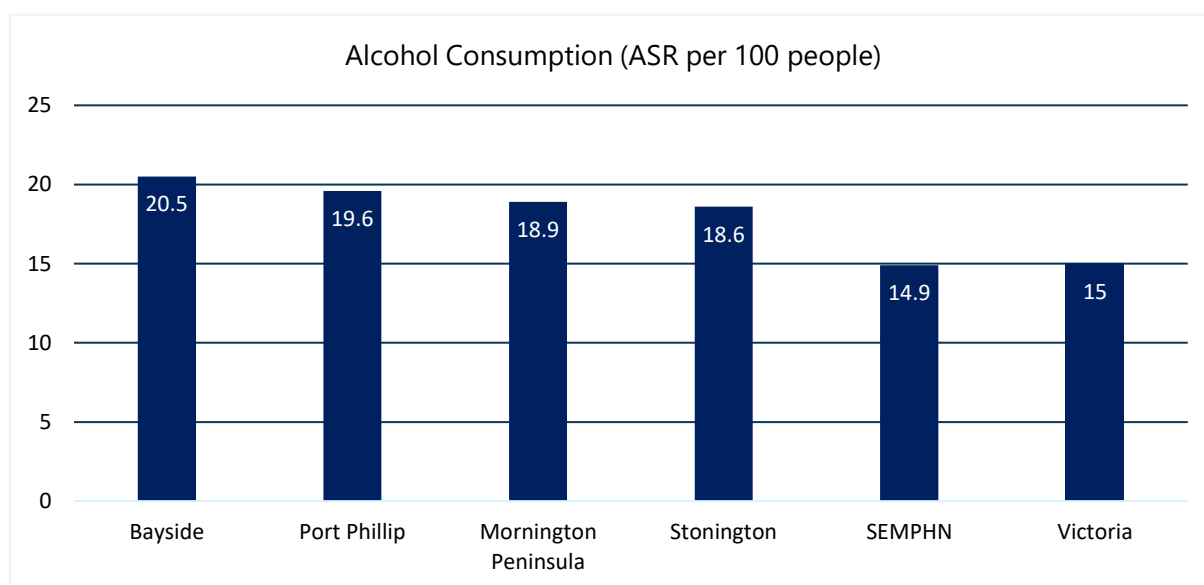
- Alcohol, methamphetamine, cannabis and heroin consumption have increased across Victoria and reports identified significant availability of these in the community.
- Risk factors associated with alcohol consumption were more prevalent in the inner LGAs of Bayside and Port Phillip, with the exception of the highest rate seen in Mornington Peninsula.
- Alcohol consumption at risky levels for people aged 15+ is high in Bayside, Port Phillip, Mornington Peninsula and Stonnington, which may impact on longer-term health outcomes.
- Growing rates of AOD hospitalisations in Glen Eira between 2012 and 2018 are of significant concern.
- Coordination and integration of services to support continuity of care for AOD consumers. Revised treatment strategies are required for clients with a dual diagnosis of mental health and AOD concerns.
- Consumers with increased access and engagement with peer support workers report improved outcomes.
- Strategies and services need to maximise the utilisation of the consumer's stages of readiness to engage.

## Alcohol consumption

Although alcohol consumption rates (ASR per 100 people) for residents aged 15 years and over are similar for the region compared with Victoria, there are higher rates in Bayside, Port Phillip, Mornington Peninsula and Stonington. There are also high rates of high alcohol consumption among the region's younger people aged 15-24 years in:

- Greater Dandenong (72.8%)
- Frankston (70.3%)
- Kingston (61.9%).

Figure 4.1: Alcohol consumption in south-eastern Melbourne, 2017-18



Source: (Public Health Information Development Unit, 2021b)

It is recognised that alcohol use among adolescents creates additional issues including other risky behaviours such as tobacco use, unsafe sex, violence, drinking and driving, and suicide. The Australian Psychological Society cites research on the relationship between adolescent drinking patterns and parental attitudes to drinking, parental modelling of alcohol use and parental supply of alcohol to adolescents. As such, it has been recommended that interventions targeting teenage drinking adopt a family counselling approach (Australian Government Department of Health, 2020b; Australian Institute of Health and Welfare, 2018b, 2019; Ten to Men, 2020) .

Analysis of the 2019 National Drug Strategy Household Survey shows that since 2004 there has been a decrease in the proportion of people aged over 14 years regularly drinking alcohol in Australia and Victoria. However, between 2016 and 2019 there was no significant change in the proportion of Victorians aged 18-24 who regularly drink alcohol (Australian Institute of Health and Welfare, 2021c).

Consultation with AOD service providers, consumers and the AOD community 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 (South-Eastern Melbourne Primary Health Network, 2019).

Data from the ANUPoll, a survey conducted by the Australian National University, showed that a higher proportion of respondents reported their alcohol consumption had decreased (27%) since the start of COVID-19 in early 2020, compared with the proportion who said it had increased (20%) (Biddle, 2020). Of those who reported an increase in alcohol consumption, nearly half (46%) said that the increase was one to two standard drinks per week and 28% reported an increase of three to four standard drinks. The most common reason given for increased alcohol consumption 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). Similar to the ANUPoll, the ABS Household Impacts of COVID-19 survey found most people reported their alcohol consumption had not changed due to COVID-19 (47.1%), 14.4% reported an increased alcohol consumption and 9.5% reported a decrease (Australian Bureau of Statistics, 2020b)

## Illicit drug use

The 2019 National Drug Strategy Household Survey (NDSHS) estimated 16.4% of Australians aged 14 years and over had used an illicit drug in the previous 12 months, which was similar to the 2016 survey (15.6%) (AIHW, 2020). In 2019, the most common illicit drug used in Australia in the previous 12 months was cannabis (11.6%), followed by cocaine (4.2%) and ecstasy (3.0%) (AIHW, 2020). Table 4.1 shows that there has been an increase in all illicit drugs between the years 2016 and 2019.

Table 4.1: Illicit drug use in SEMPHN, 2016 and 2019

Illicit drug	2016 (%)	2019 (%)	Change (%)
Cannabis	10.4	11.6	+1.2
Cocaine	2.5	4.2	+1.7
Ecstasy	2.2	3.0	+0.8
Hallucinogens	1.0	1.6	+0.6
Inhalants	1.0	1.4	+1.4
Ketamine	0.4	0.9	+0.5

Source: (AIHW, 2020)

In 2019, young people (aged 14-29) were less likely to have used an illicit drug in the previous 12 months than young people in 2001, with this difference observed among teenagers. In 2001, 28% of 14-19 year-olds had used an illicit drug in previous 12 months, compared with 16% in 2019 (AIHW,



2020). In 2019, people aged 20-29 were the most likely age group to have used an illicit drug in the previous 12 months (31%), a similar proportion to 2016 (28%) (AIHW, 2020).

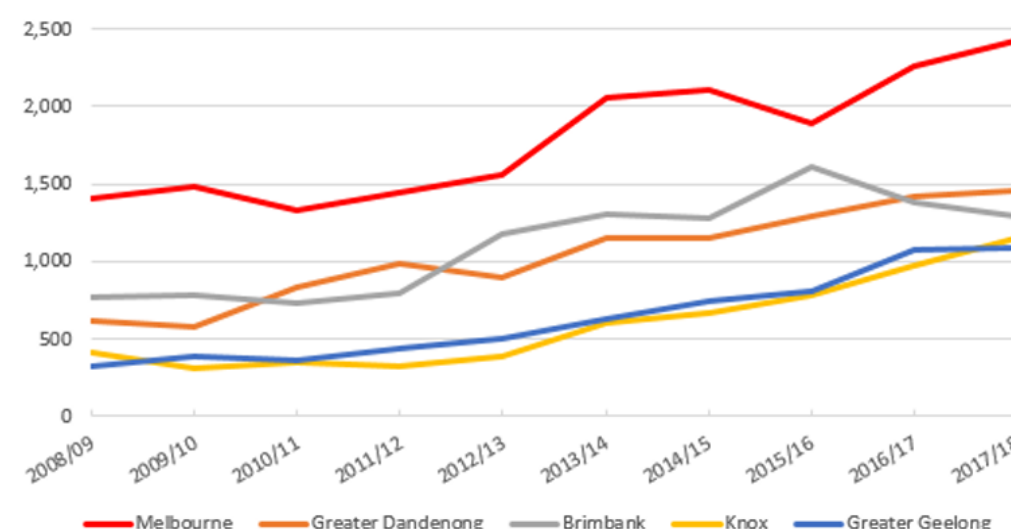
There have been significant changes in the types of drugs used by people in their 20s. Ecstasy use among people in their 20s declined from 12.0% in 2004 to 7.0% in 2016 then rose again to 9.8% in 2019. This was the first time an increase was reported in ecstasy use for people in this age group in more than a decade, with use returning to a similar level reported in 2001 (10.4%) (Australian Institute of Health and Welfare, 2021n). 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. On the other hand, use of methamphetamines among people in their 20s is at its lowest level since 2001 (declined from 11.2% in 2001 to 2.4% in 2019) (AIHW, 2020; Australian Institute of Health and Welfare, 2021n).

Port Phillip, Greater Dandenong and Frankston have been among the most frequent locations for heroin-involved overdose deaths in Victoria between 2016 and 2020. Positively, there has been a reduction in heroin-involved overdose deaths in all three LGAs over the five years, with a significant reduction in Greater Dandenong and Frankston between 2019 and 2020 (Coroners Court of Victoria, 2021).

## Drug-related offences

Victoria Police drug crime data shows that in 2017-18, Greater Dandenong had the second highest number of drug-related offences of any LGA in Victoria (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 4.2: Top five local government areas for drug offences in Victoria, April 2008 to March 2018.



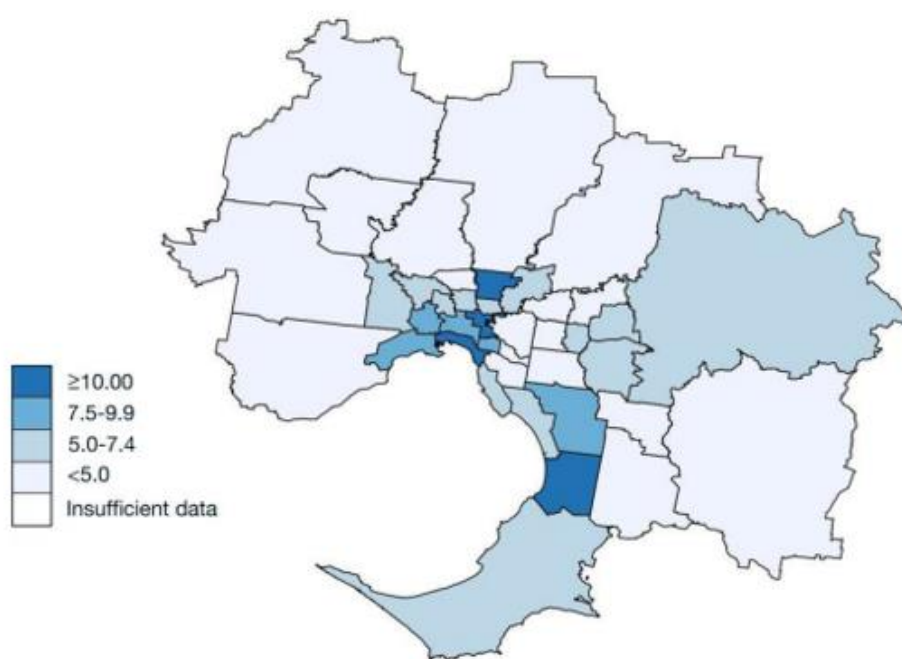
Source: (Parliament of Victoria, 2018).

## Unintentional drug-induced deaths

Unintentional drug-induced death refers to deaths caused by drug overdose and accidental poisoning due to drugs, although that drug might not be the sole cause of death. Data show that 1,566 out of 2,070 drug-induced deaths were unintentional, with 58% being attributed to opioids overdose. This was a nine-percentage point increase on 2014 statistics (49%). Between 2014 and 2018, of the unintentional deaths involving opioids, heroin was involved in a higher share of deaths for men (35.1%) than women (21.2%). At the same time, women had a higher share of deaths involving pharmaceutical opioids (57.2%) than men (47.5%) (Penington Institute, 2020).

Figure 4.3 shows the unintentional drug-induced deaths rates (all drugs combined) at the SA3 level. The LGAs with the highest number of unintentional drug-induced deaths were Frankston and Port Phillip, with more than 10 deaths per 100,000 people, and Dandenong with between 7.5 and 9.9 deaths per 100,000 people. Within the Eastern and South Eastern PHNs, the average unintentional drug-induced rates for the 2014-18 period were 5.3 and 6.2 deaths per 100,000 people, respectively.

Figure 4.3: Unintentional drug-induced deaths at the SA3 level, rates per 100,000, 2014-18.



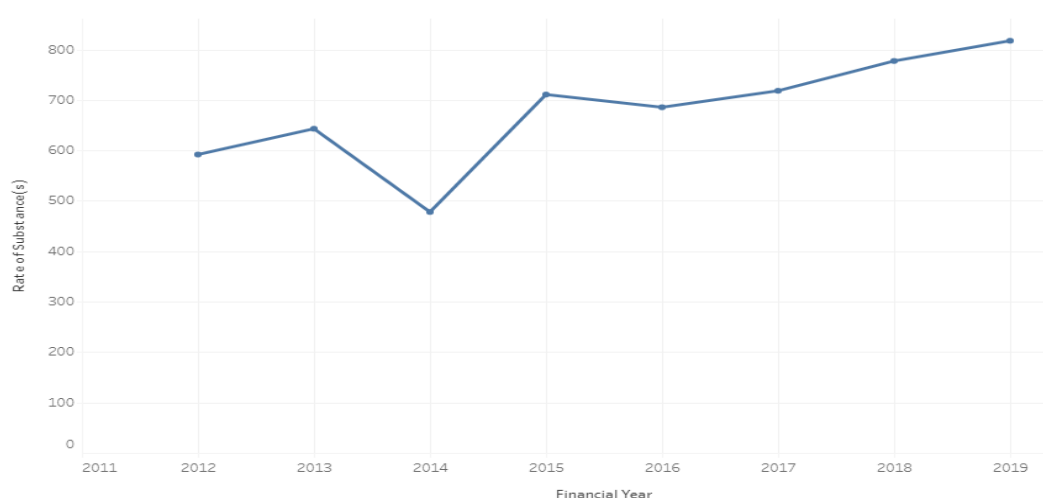
Source: Penington Institute, 2020.

## Service Needs

### Ambulance attendances

There has been an increase in AOD-related ambulance attendances in the region between 2012 and 2019. Although the overall rates have been increasing, there has been no significant increase in opioid-related attendances since 2016 (Figure 4.4).

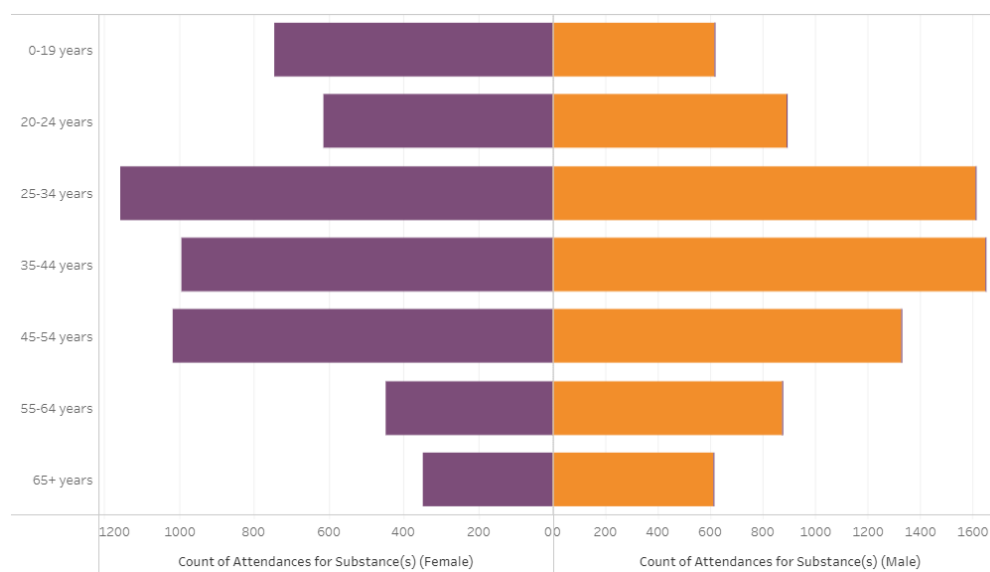
Figure 4.4: Rate per 100,000 AOD-related ambulance attendances in SEMPHN region, 2011 to 2019.



Source: (Turning Point, 2021a)

*Note: Due to paramedic industrial action, data between October and December 2014 is not available.*

Figure 4.5: AOD-related ambulance attendances in SEMPHN region by age and gender in 2018-19.



Source: (Turning Point, 2021a)

There is a similar number of men and women in ambulance attendances between the ages 25 to 54 years; however younger women and girls were over-represented in AOD-related ambulance attendances. Conversely, men aged over 55 years had higher numbers of AOD-related attendances than women. There was a reduction in the rate of AOD-related ambulance attendances for people aged 45-54 years in the region between 2017-18 and 2018-19 following significant growth in previous years. This was largely due to reduced rates in alcohol and heroin-related attendances for this age group.

### Police and ambulance co-attendances

The number of police and ambulance co-attendances for AOD-related concerns continues to increase in the region. 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. A similar trend is also seen in the number of AOD-related attendances that are transported to hospital.

Figure 4.6: Police and ambulance co-attendances at AOD incidents, 2012 to 2019.



Source: (Turning Point, 2021a)

## Hospital transportation

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.

Figure 4.7: Transports to hospital from ambulance attendances for AOD incidents, 2012 to 2019.



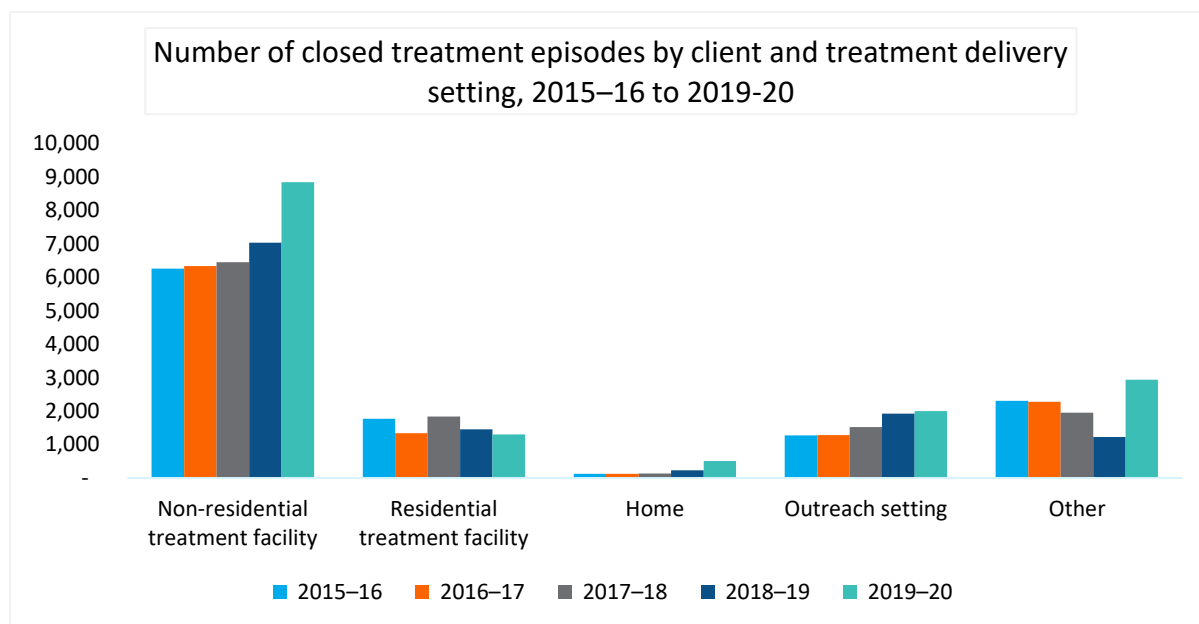
## Hospitalisations

- Port Phillip, Glen Eira and Frankston LGAs had the highest rates of hospital admissions for alcohol in Victoria in 2017-18 (993.8, 951.5 and 869.3 admissions per 100,000 people, respectively).
- Port Phillip and Glen Eira had the highest rates of admissions for opioids in Victoria in 2017-18 (196.1 and 137.8 admissions per 100,000 people, respectively) (Turning Point, 2021b)
- Port Phillip and Glen Eira had the highest rates of admissions for illicit drugs (any) in Victoria in 2017-18 (521.2 and 514.8 admissions per 100,000 people, respectively) (Turning Point, 2020, 2021a, 2021b, 2021c, 2021d).
- Of all LGAs in the SEMPHN region, Glen Eira is the only LGA experiencing a distinct, consistent rise in AOD-related hospital admissions between 2012 and 2018 (Turning Point, 2021b). Glen Eira was among the highest rates for hospital admissions related to alcohol, opioids and illicit drugs (any) in Victoria in 2017-18 (Turning Point, 2021b).

## Treatment delivery

Between 2015 and 2020, there has been increased use of home, outreach and non-residential settings for AOD treatment in the SEMPHN region (Australian Institute of Health and Welfare, 2021b).

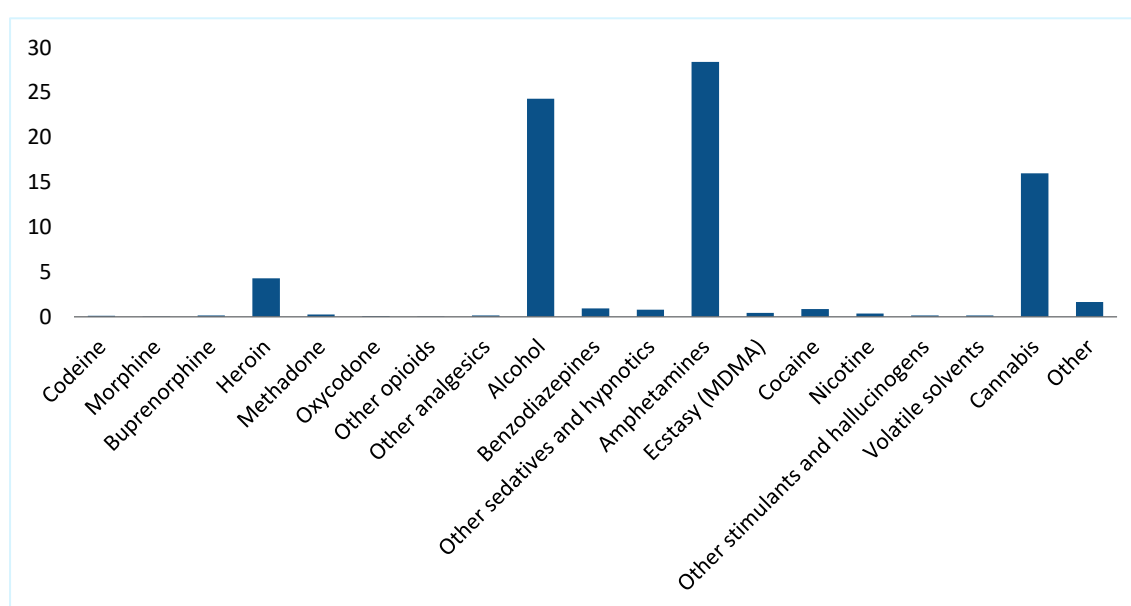
Figure 4.8: Closed treatment episodes and treatment delivery setting, 2015-16 to 2019-20.



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

Amphetamines are the most common principal drug of concern for south-eastern Melbourne residents who access publicly funded AOD treatment services (28%), followed by alcohol (24%), cannabis (16%) and heroin (4.3%). (Australian Institute of Health and Welfare, 2021b).

Figure 4.9: Consumers treated for their drug use by principal drug of concern (%), 2019-20.



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

## Telephone and online services

DirectLine is a free AOD phone-based counselling, information and referral service for Victorians residents. DirectLine received more than 6,000 calls from residents of Port Phillip in 2018-19. This equates to a rate of 591.8 calls per 100,000 population, which is the second highest utilisation of the service compared with all Victorian LGAs (Turning Point, 2020). Frankston also has a high rate of use of DirectLine (402 per 100,000). Port Phillip also has the second highest rate of utilisation of Turning Point's online counselling service (39.2 sessions per 100,000 people) in Victoria (Turning Point, 2021c). Region-wide, residents aged 25-34 had the highest rate of use of Turning Point's online counselling service.

## Stakeholder consultations

In consultation with community members and service providers in collaboration with the Department of Health and Services Australia, the following areas were identified as requiring either prioritised attention or additional services (SEMPHN and DHHS, 2018):

### Access:

- Lack of housing and no access to appropriate services.
- Limited links with primary care.
- Limited availability of family violence therapy.
- Identify who does/doesn't walk into services (unmet demand).
- Provision of programs for perpetrators of family violence.
- A lack of aftercare services.
- Long waiting times

### Quality and appropriateness of services:

- Rehabilitation with a focus on detoxification rather than therapy.
- Integrated AOD services separated from forensic services.
- Provision of outreach services.
- Service model that links with services outside the AOD space.
- Collaboration with services.

### Health literacy and patient activation:

- Negative perceptions of addictions and the stigma of AOD in the community.
- Awareness of family violence.

## Service models

Current services and service models require modification to be more appropriate for consumer care. Service provider consultations in 2018 highlighted the need for commissioned activities to deliver services that focus on harm minimisation, linking consumers to relevant services, advocating to relevant government agencies and other authorities on behalf of the consumer, as well as providing consumers with access to and engagement with peer support workers, which was contributing to improved outcomes.

Further, targeted service delivery aimed at marginalised groups (e.g., people sleeping rough) and parents experiencing AOD use and/or pharmacotherapy (e.g., parenting support programs) were reportedly showing positive outcomes (SEMPHN and DHHS, 2018). Additional concerns associated with quality and appropriateness of services include:



- rehabilitation with a focus on detoxification rather than therapy
- integrated AOD services separated from forensic services
- provision of outreach services
- service model that links with services outside the AOD space
- collaboration with services.

Service providers identified lack of appropriate services as a key challenge to supporting consumers effectively. The following areas were specifically mentioned in consultations:

- limited availability of dual diagnosis treatment services
- limited/lack of services providing long-term support and care. For example, a provider noted, "Many clients often seek help when in crisis, which requires long-term engagement (~12 months or more) and interventions to support them".
- limited/lack of face-to-face intake and assessment services. A provider noted, "Lack of accessible face-to-face intake and assessment services has proved problematic for clients seeking entry point into treatment".
- limited availability of inpatient facilities. A provider stated, "Lack of inpatient detox and rehab beds poses a risk as team is required to provide support to clients during high-risk time for an extended period".

## LGBTQIA+

The LGBTQIA+ community experiences higher rates of mental health concerns, which increases their risk of AOD use (LGBTIQ+ Health Australia, 2021a). These risks are further detailed in Chapter 3 Mental Health. Illicit drug use is a key issue in the LGBTQIA+ community (LGBTIQ+ Health Australia, 2021a). Barriers to service access for LGBTQIA+ people include (Leonard, 2014):

- homophobia from health professionals
- delay seeking treatment due to expectations they will face discrimination or receive reduced quality of care
- reluctance to having sexuality recorded in their medical history due to the fear that others may gain access to their records.

## First Nations

The First Nations community in south-eastern Melbourne experiences disproportionately higher risk for substance use disorders due to poorer outcomes in many social determinants of health. Community members experience higher prevalence of issues that increase their risk of AOD concerns, including:

- alcohol consumption at harmful levels
- smoking
- smoking during pregnancy
- mental health concerns.

Consultation with First Nations community members identified limited availability of culturally appropriate services and information and a shortage of First Nations health workers in AOD services as barriers to accessing AOD services in SEMPHN catchment.

## 5. First Nations peoples

The population of First Nations peoples in Victoria increased by 25.8% between 2011 and 2016 (Australian Bureau of Statistics, 2016d). First Nations Victorians have a median age of 23 years, compared with 37 years for all Victorians (Department of Health, 2020). In 2016, half (52.2%) of First Nations peoples were aged under 25 years, reflective of a young age profile (Australian Bureau of Statistics, 2017a), compared with almost one-third (31.2%) of non-First Nations peoples aged under 25. The proportion of older First Nations peoples (65 and over) is considerably smaller than for non-First Nations peoples (4.8% compared with 16%) (Australian Bureau of Statistics, 2017a).

Despite recent improvements in First Nations peoples' health outcomes (most notably, rates of childhood immunisation for Victorian First Nations children aged five years), Victorian First Nations peoples continue to experience the effects of trans-generational trauma, systemic racism and power imbalances that compound the impacts of discrimination. In many cases, First Nations peoples have lower access to health services than non-First Nations peoples due to cost and cultural appropriateness. It is therefore crucial that the diverse history and experiences of First Nations peoples are reflected in the design of culturally safe, sustainable and connected services.

### Key insights

- First Nations peoples continue to experience greater levels of poor health outcomes compared with non-First Nations peoples.
- A concentrated segment of LGAs within the SEMPHN region also exhibit disproportionately high levels of health and service needs, most commonly in the Greater Dandenong LGA.
- Greater Dandenong has high rates of early school leavers, low income and overcrowded households, high unemployment and the highest overall disadvantage.
- These rates in Greater Dandenong have translated to the highest levels within the region for hospital admissions for mental health-related conditions, circulatory and respiratory disease, potentially preventable conditions, and the vaccine-preventable conditions of pneumonia and influenza. In addition, ED presentations are highest in Greater Dandenong particularly for mental and behavioural disorders.
- Various rates in the neighbouring LGAs of Cardinia, Casey (Cranbourne/Narre Warren areas) and Frankston also frequently point to high needs.
- Services are needed that address accessibility and affordability to sustainable and culturally appropriate care, enabled through a skilled workforce and a better integrated and connected health sector of Aboriginal Community Controlled Organisations and non-First Nations providers.

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).

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). Among First Nations Australians, nearly two-thirds of the disease burden is a result of the following broad disease groups:

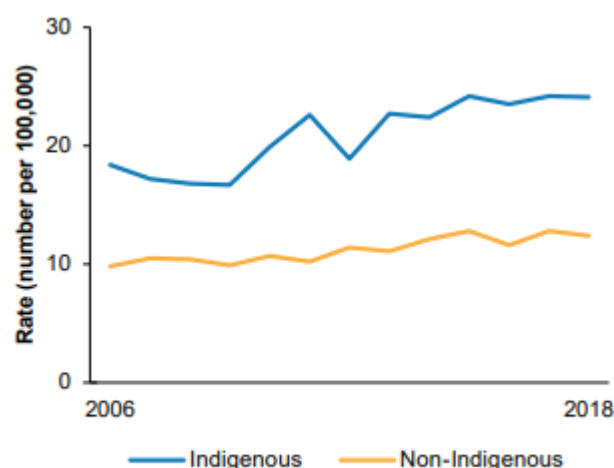
- mental and substance use disorders
- injuries
- cardiovascular disease
- cancer
- respiratory disease.

## Mental health and suicide

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

- 45.9% of First Nations peoples recorded high or very high levels psychological distress compared with 17.8% of all other adults
- more than half (51.2%) of First Nations peoples have been ever diagnosed with anxiety or depression, compared with 29.5% of all other adults
- one third (32.9%) of First Nations peoples were diagnosed with anxiety or depression in the last year, compared with 14.8% of all other adults.

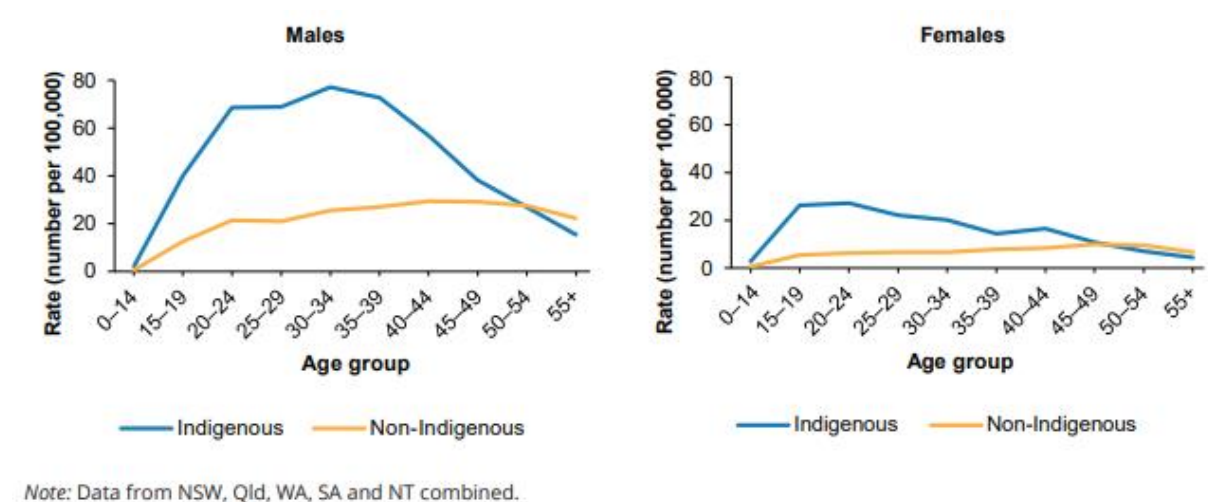
Figure 5.1: Suicide rate among First Nations Australians, rate per 100,000, 2006-18.



*Note: Data from NSW, Qld, WA, SA and NT combined.*

The suicide rate among First Nations Australians was highest among those aged 35 to 39 (62 per 100,000) in 2014-18 (data from NSW, Queensland, WA, SA and NT combined) (see Figure 5.2) (Australian Institute of Health and Welfare - National Indigenous Australian Agency, 2020).

Figure 5.2: Suicide rate by age group among First Nations Australians, rate per 100,000, 2014-18.



Source: (Australian Institute of Health and Welfare - National Indigenous Australian Agency, 2020)

## Chronic diseases

Recent data from the Victorian Population Health Survey 2019 also shows 43.2% of First Nations peoples have been diagnosed with two or more chronic diseases, compared with 27.4% of all other adults (Victoria Department of Health, 2021). First Nations women are diagnosed almost twice as often with two or more chronic diseases (60.7%) compared with all other adult women (31.3%).

## Health risk factors

### Smoking

Tobacco use by First Nations Victorians aged over 18 years is more than three times the rate of non-First Nations people (Victoria Department of Health, 2021). Recent data from the Victorian Population Health Survey 2019 shows:

- 41.6% of First Nations peoples were current smokers, compared to 16.7% of all other adults
- First Nations women had a higher proportion of smokers (30.3%) compared with all other women (13.9%)
- First Nations men had a higher proportion of smokers (43.9%) compared with all other men (19.3%).

The proportions of First Nations women smoking during pregnancy in the SEMP HN 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, 2021b). 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 (2016-18). Data are aggregated

over three years and may include women who gave birth more than once during the time period. The highest proportions are in:

- Greater Dandenong (IARE), 47.1%
- Melbourne – Port Phillip (part b) (IARE), 46.3%
- Frankston (IARE), 39.6%.
- Victoria: 40.6%; SEMPHN region: 37.7%

## Alcohol

Increased risky alcohol consumption in First Nations Victorians. 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 (Victoria Department of Health, 2021) 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.

## Determinants of health

There are multiple determinants of health which contribute to First Nations peoples' health issues including:

- socioeconomic disadvantage
- damage to traditional culture, spirituality and language
- child removals
- incarceration rates
- inter-generational trauma
- higher prevalence of chronic physical illnesses
- discrimination and racism.

## Socioeconomic disadvantage

The Indigenous Relative Socioeconomic Outcomes Index (IRSOI) reflects relative advantage or disadvantage at the Indigenous Area (IARE) level. The index ranges from 1 to 100, where a score of 1 represents the most advantaged area and a score of 100 represents the most disadvantaged area. More recent Census data (2016) suggests First Nations peoples living in the SEMPHN region are relatively more advantaged than the state. However, a significantly higher disadvantage for First Nations peoples in Greater Dandenong may be interpreted through disadvantages across other social determinants of health (Australian Bureau of Statistics, 2017a; Public Health Information Development Unit, 2021b).

First Nations peoples living in the SEMPHN region are relatively more advantaged than the state average. However, there are pockets of significant disadvantage, specifically in Greater Dandenong.

- Most advantaged: Melbourne – East (part b) (IARE): score = 1 (First Nations population: 743)
- Most disadvantaged: Greater Dandenong (IARE): score = 53 (First Nations population: 516)
- SEMPHN region score = 12; Victorian score = 25

## Education

Higher levels of education are a determinant of better health outcomes through increased health literacy, income and employment outcomes. Findings have shown low retention rates between Years 7/8 to Year 12 for First Nations students (70%) compared with other students (87%) (Australian Institute of Health and Welfare, 2017). Data has shown the Cranbourne/Narre Warren area (Casey LGA) and Greater Dandenong LGAs with higher-than-state-average rates of early school leavers. First Nations early school leavers who left at Year 10 or earlier or did not go to school (ASR per 100) in 2016.

- Cranbourne/Narre Warren (Casey) (IARE), 46.7
- Greater Dandenong (IARE), 43.6
- Cardinia (IARE), 41.9.
- SEMPHN: 38.7; Victoria: 42.9

## Employment

Participation in employment is an important factor for health, wellbeing and overall quality of life. Labour force status can be challenged by a variety of factors such as individual morbidities and disabilities, which in turn act as determinants to other aspects of physical, mental and social health. Prolonged periods of disengagement with the labour force may compound these effects. Historically, the unemployment rate for First Nations Victorians has been almost three times higher (16%) compared with non-First Nations Victorians (6.3%)(Australian Institute of Health and Welfare, 2017).

In 2016 (Australian Bureau of Statistics, 2017a; Public Health Information Development Unit, 2021b), the percentage of First Nations people aged 15 to 24 years engaged in school, work or further

education/training, as a proportion of all First Nations people aged 15 to 24 years, were lowest in:

- Greater Dandenong (IARE), 64.9%
- Cardinia (IARE), 78%
- Cranbourne/Narre Warren (Casey) (IARE), 78%
- SEMPHN: 78.9%; Victoria: 75.7%

The data shows the percentage of First Nations peoples unemployed, out of total First Nations in labour force (2016)(Australian Bureau of Statistics, 2017a; Public Health Information Development Unit, 2021b). The highest proportions are in:

- Greater Dandenong (IARE), 21.2%
- Cranbourne – Narre Warren (Casey) (IARE), 13.2%
- Frankston (IARE), 11.2%.

- Victoria: 14%; SEMPHN region: 11.6%

## 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).

The percentage of families with at least one First Nations person counted at home on Census night (2016) (Australian Bureau of Statistics, 2017a) and with an income under \$26,000 a year, as a proportion of all First Nations families, was highest in (Australian Bureau of Statistics, 2017a):

- Greater Dandenong (IARE), 17.1%
- Cranbourne/Narre Warren (Casey) (IARE), 11.7%
- Melbourne – Port Phillip (part b) (IARE), 11.2%.
- Victoria: 12.6%; SEMPHN: 10.4%

## Housing

Housing circumstances are a known contributor to health and wellbeing outcomes. For individuals, living situations add to the complexities of health determinants, for example socioeconomic determinants such as income and employment. 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).

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) (2016) (Australian Bureau of Statistics, 2017a; Public Health Information Development Unit, 2021b). The highest proportions were in:

- Greater Dandenong (IARE), 13.2%
- Melbourne – Port Phillip (part b) (IARE), 9%
- Cranbourne/Narre Warren (Casey) (IARE), 7.5%.
- SEMPHN region: 6.9%; Victoria: 7.6%

## Antenatal health

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.

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. 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 (2016-18). The data are



aggregated over three years and they may include women who gave birth more than once during the time period. The highest proportions are in (Australian Bureau of Statistics, 2017a; Public Health Information Development Unit, 2021b):

- Melbourne – East (part b) (IARE), 72.1%
- Greater Dandenong (IARE), 70.6%
- Melbourne – Port Phillip (part b) (IARE), 70.1%.
- Victoria: 61.5%, SEMPHN region: 55.6%

## 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. 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 5.1: Immunisation at 1, 2 and 5 years of age for SEMPHN region and Victoria, 2019

	1 year		2 years		5 years	
	SEMPHN	Victoria	SEMPHN	Victoria	SEMPHN	Victoria
<b>First Nations children</b>	93.1%	92.1%	88.8%	90.3%	98.4%	97.3%
<b>Non-First Nations children</b>	94.8%	94.8%	91.8%	92.3%	95.3%	95.7%

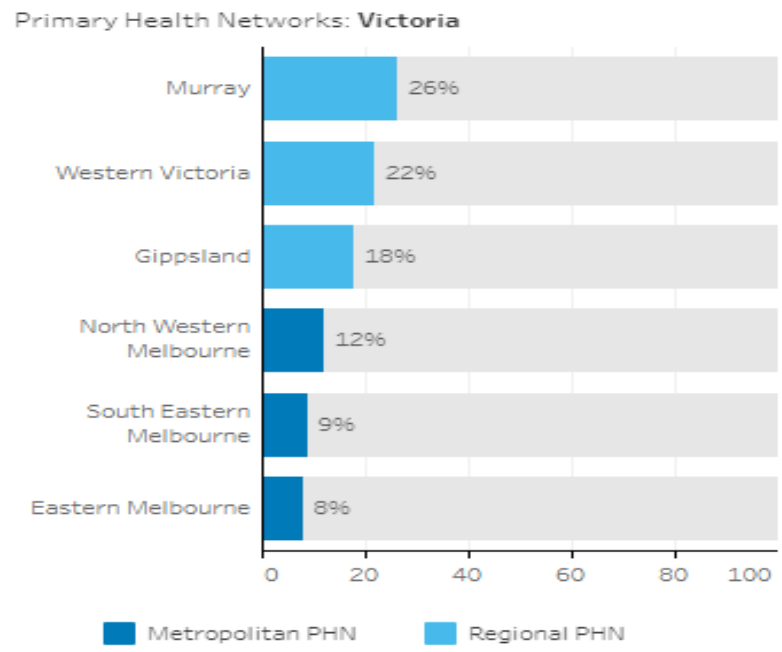
Source: Australian Institute of Health and Welfare, 2021i)

## Health checks

Health assessment items are important for First Nations peoples to ensure they receive primary healthcare services that are needs based, support their health and wellbeing, establish and plan health priorities, encourage preventative measures such as early detection/screening/diagnosis, and provide interventions for treatable conditions. The proportion of First Nations Victorians (843 people, 9%) who had an MBS item 715 or 228 health check in the SEMPHN region in 2018-19 was low (9%) compared to other PHN regions (Australian Institute of Health and Welfare, 2020i) .



Figure 5.3: Comparison of First Nations-specific MBS health checks among Victorian PHNs, 2018-19.



## Service Needs

Table 5.2: First Nations peoples emergency department presentations

Emergency department presentations	
Mental health	<p>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. The data show presentations to emergency departments (ED) between 1 July 2018 and 30 June 2019 (ASR per 100,000). The highest rates were in:</p> <ul style="list-style-type: none"> <li>Greater Dandenong (IARE), 11,493.3</li> <li>Melbourne – Port Phillip (part b) (IARE), 5,142.1</li> <li>Frankston (IARE), 3,604.3</li> <li>Victoria: 4,071.4; SEMPHN: 3,856.5</li> </ul>
Respiratory diseases	<p>Total presentations for diseases of the respiratory system for First Nations peoples in the SEMPHN region are lower than Victorian rates, but in the Greater Dandenong LGA they are significantly higher. The data show presentations to EDs between 1 July 2018 and 30 June 2019 are highest in:</p> <ul style="list-style-type: none"> <li>Greater Dandenong (IARE), 6,364.6</li> <li>Melbourne – Port Phillip (part b) (IARE), 3,673.8</li> <li>Cranbourne/Narre Warren (Casey) (IARE), 3,230.3</li> <li>Victoria: 4,917.6; SEMPHN region: 3,226.7</li> </ul>
External causes	<p>Total presentations for injury, poisoning and certain other consequences of external causes for First Nations peoples are high in Greater Dandenong</p> <p>Total presentations for injury, poisoning and certain other consequences of external causes for First Nations peoples are high in Greater Dandenong and neighbouring areas of Cranbourne/Narre Warren in Casey LGA. The data show ASR per 100,000 for presentations to EDs between 1 July 2018 and 30 June 2019. The highest rates are in:</p> <ul style="list-style-type: none"> <li>Greater Dandenong (IARE), 16,139.4</li> <li>Cranbourne/Narre Warren (Casey) (IARE), 11,325.4</li> <li>Melbourne – Port Phillip (part b) (IARE), 11,</li> <li>Victoria: 13,562.8; SEMPHN: 10,598.9</li> </ul>
Non-urgent presentations	<p>The data shows the ASR per 100,000 for presentations to EDs between 1 July 2018 and 30 June 2019. The highest rates are in:</p> <ul style="list-style-type: none"> <li>Melbourne – Port Phillip (part b) (IARE), 3,942.4</li> <li>Greater Dandenong (IARE), 2,983.7</li> <li>Cardinia (IARE), 2,011.2</li> <li>Victoria: 4,539.4; SEMPHN region: 1,988.4</li> </ul>

Table 5.3: First Nations peoples hospital admissions

Hospital admissions	
Mental health	<p>Admissions<sup>8</sup> for mental health-related conditions for First Nations peoples (ASR per 100,000, 2016-17 to 2018-19; see notes below) are slightly higher in the SEMPHN region compared with Victoria. However, Greater Dandenong observed rates almost three times higher than the state (Australian Institute of Health and Welfare, 2017; Public Health Information Development Unit, 2021a).</p> <ul style="list-style-type: none"> <li>• Greater Dandenong (IARE), 7,258.8</li> <li>• Melbourne (Port Phillip) (part b) (IARE), 3,755.2</li> <li>• Cranbourne/Narre Warren (Casey) (IARE): 2,545.2</li> <li>• Victoria: 2,462.2, SEMPHN region: 2,741.2</li> </ul>
Circulatory systems disease	<p>The data show admissions for circulatory system diseases for First Nations persons, average annual ASR per 100,000, for 2016-17 to 2018-19 (same caveats as above). The highest rates are in (Australian Bureau of Statistics, 2017b; Public Health Information Development Unit, 2021a):</p> <ul style="list-style-type: none"> <li>• Greater Dandenong (IARE), 2,720.1</li> <li>• Cranbourne/Narre Warren (Casey) (IARE), 1,713.1</li> <li>• Melbourne – Port Phillip (part b) (IARE), 1,626.0</li> <li>• Victoria: 1,567.9, SEMPHN region: 1,392.8</li> </ul>
Respiratory systems disease	<p>The data show admissions for respiratory system diseases, First Nations peoples, average annual ASR per 100,000, for 2016-17 to 2018-19 (same caveats as above) (Australian Bureau of Statistics, 2017b; Public Health Information Development Unit, 2021a). The highest rates are in:</p> <ul style="list-style-type: none"> <li>• Greater Dandenong (IARE): 3,890.0</li> <li>• Melbourne – Port Phillip (part b) (IARE), 2,819.8</li> <li>• Frankston (IARE), 2,055.7</li> <li>• Victoria: 2,682.9, SEMPHN region: 2,074.3.</li> </ul>
Preventable conditions	<p>The data show admissions for potentially preventable conditions for First Nations peoples, average annual ASR per 100,000, for 2016-17 to 2018-19 (same caveats as above) (data definition for potentially preventable conditions available through MeTeOR). The highest rates are in:</p> <ul style="list-style-type: none"> <li>• Greater Dandenong (IARE), 6,884.1</li> <li>• Melbourne – Port Phillip (part b) (IARE), 4,059.7</li> <li>• Cranbourne/Narre Warren (Casey) (IARE), 3,576.1.</li> <li>• Victoria: 4,258.0, SEMPHN region: 3,610.0.</li> </ul>

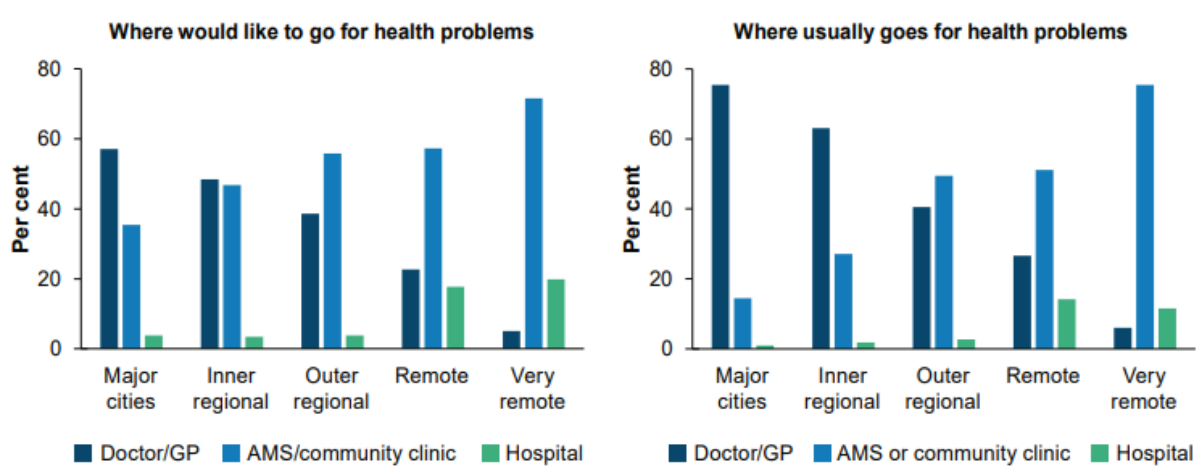
<sup>8</sup> Number of separations, or completions of the episode of care of a patient in hospital, where the completion can be the discharge, death or transfer of the patient, or a change in the type of care (e.g., from acute to rehabilitation). Reported as average annual ASR per 100,000. Period 2016-17 to 2018-19. Data have been aggregated over a period of three years to increase the number of admissions at the Indigenous Area level, thereby allowing data for more conditions to be published.)

Hospital admissions	
Vaccine-preventable diseases	<p>Admissions for vaccine-preventable conditions (pneumonia and influenza) for First Nations peoples in the SEMPHN region are below Victorian rates. However, neighbouring LGAs of Greater Dandenong and Cardinia have reported significantly higher rates similar to admission rates for conditions discussed above. The data shows the average annual ASR per 100,000 for 2016-17 to 2018-19 (same caveats as above) (data definition for potentially preventable conditions available through MeTeOR). The highest rates are in:</p> <ul style="list-style-type: none"> <li>• Greater Dandenong (IARE), 218.4</li> <li>• Cardinia (IARE), 184.8</li> <li>• Frankston (IARE), 140.7</li> <li>• Victoria: 166.0, SEMPHN region: 147.3.</li> </ul> <p>The admissions for total vaccine-preventable conditions for First Nations peoples are high in Melbourne – Port Phillip LGA. However, admissions are also high in Greater Dandenong, which has recorded low uptake of vaccines (for example, COVID-19 vaccines).</p> <p>The data show the average annual ASR per 100,000 for 2016-17 to 2018-19 for all vaccine-preventable diseases (same caveats as above) (data definition for potentially preventable conditions available through MeTeOR). The highest rates are in:</p> <ul style="list-style-type: none"> <li>• Melbourne – Port Phillip (part b) (IARE), 585.6</li> <li>• Greater Dandenong (IARE), 485.4</li> <li>• Melbourne (East) (part b) (IARE), 473.7</li> <li>• Victoria: 371.2; SEMPHN region: 371</li> </ul>

## Health service access

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, 2019b) 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 5.4: First Nations peoples' access to primary healthcare services.



In 2018-19, 30% (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, 2019b). 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%) said they were too busy
- about one in three (34%) said cost was a factor – higher in non-remote areas at 36%, compared with 21% in remote areas
- more than one in five (23%) 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 5.4: Average health spending for First Nations and non-First Nations health needs, 2015-16.

	First Nations Expenditure (\$)	Non-First Nations Expenditure (\$)	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

## Culturally appropriate services

Addressing cultural determinants of health is central to health and wellbeing services and overall health policy. Strength-based approaches to social and emotional wellbeing build strength, resilience and connectedness for First Nations peoples and their communities (Gee, 2014). Findings from the PHN Stakeholder Engagement Survey (November 2016), PricewaterhouseCoopers 2018 'Chronic Disease Service Mapping Project' for SEMPHN and numerous studies showed that for First Nations people, barriers to accessing services include (Davy, 2016; Isaacs, 2010; Pricewaterhouse Coopers, 2018; South Eastern Melbourne PHN, 2016):

- poor health literacy
- different attitudes towards health and wellbeing
- financial considerations
- lack of culturally appropriate services and information
- transport
- lack of trust
- familial relationships between First Nations clinic staff and consumers
- shortage of First Nations health workers.

It is important to address broad determinants of health through accessible, sustainable and culturally appropriate services that are supported through a skilled workforce and integrated health sector. The health and service needs for Victorian First Nations peoples are articulated across key documents: Korin Korin Balit-Djak: Aboriginal health, wellbeing and safety strategic plan 2017–2027, and Balit Murrup Aboriginal social and emotional wellbeing framework 2017–2027 (Department of Health and Human Services, 2017).

## 6. Aged Care

In 2020, residents aged 65 and over accounted for 15.0% of the SEMPHN region population and the percentage is expected to grow to about 16.5% by 2030. This equates to more than 330,000 people aged 65 years and over in less than 10 years (Public Health Information Development Unit, 2021b).

As people age, the risk of ill-health and poor health outcomes increases. People aged 65 years and over are more likely to have a higher prevalence of chronic conditions, mental health concerns and frailty. These health needs are complex, and tailored care is required to support the individual. The two most common types of aged care services provided in the SEMPHN catchment are residential aged care and home-based aged care services (Australian Institute of Health and Welfare, 2020f).

### Key insights

- In 2020, Mornington Peninsula had the highest number and proportion of older residents by LGA. By 2030, the largest number of older people is expected to reside in the City of Casey.
- Increased utilisation of home-based age care services will have an impact on GPs providing care for older residents.
- Higher cultural diversity in the SEMPHN catchment requires culturally safe and appropriate aged care services in home and residential settings.
- One in two older people who died in residential aged care services stayed in the service for less than two years.
- There are significant challenges in integrating GP care into residential aged care facilities.

In 2020, 15% of the SEMPHN population was aged 65 years or over. By 2030, this is expected to rise to 16.5% (more than 330,000 people) (Public Health Information Development Unit, 2021b). However, this growth rate varies significantly by LGA. As a proportion of the population, people aged 65 years and over account for the lowest proportion of Casey residents (Figure 6.2). Mornington Peninsula continues to have the largest proportion of residents aged over 65 years in the region and it is expected to increase to more than 28% by 2030.

The SEMPHN region has comparable numbers of older people who live alone (25%) to Victoria (24%) and nationally (24%). However, the catchment has a higher proportion of residents aged 65 years and over who were born overseas (47%) compared to Victoria (41%) and nationally (37%). Around one in four older people in SEMPHN prefer to speak a language other than English which is comparable to Victoria (24%) but greater than Australia (18%).

Figure 6.1: Population projections for SEMPLHN region residents aged 65 years and over, 2020 to 2030.

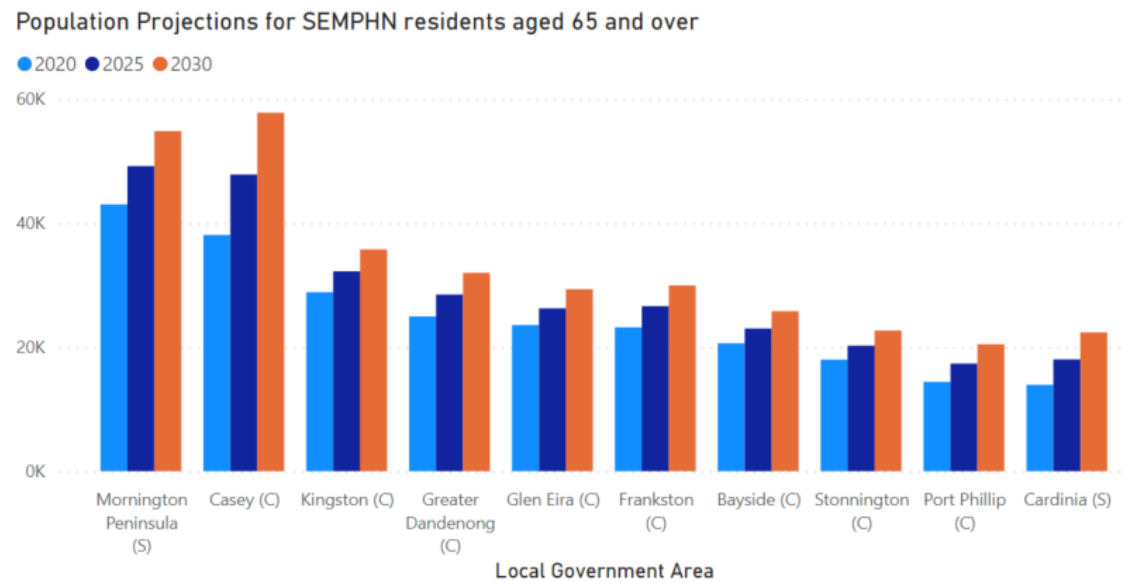
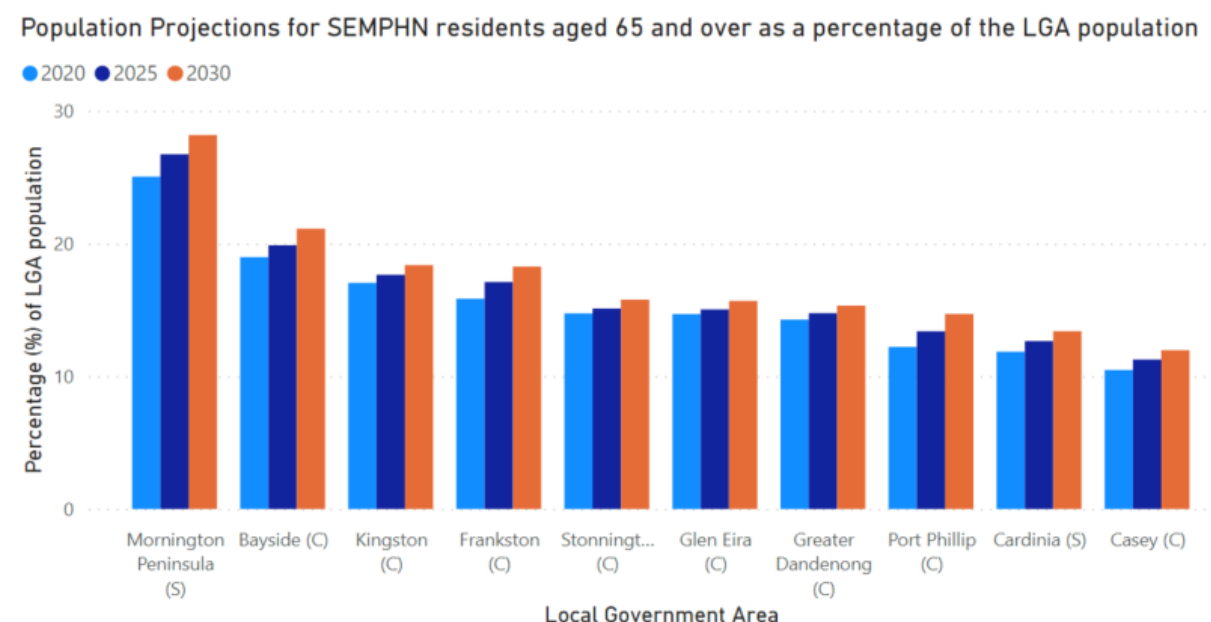


Figure 6.2: Population projections for residents aged 65 years and over as a % of LGA populations, 2020 to 2030.

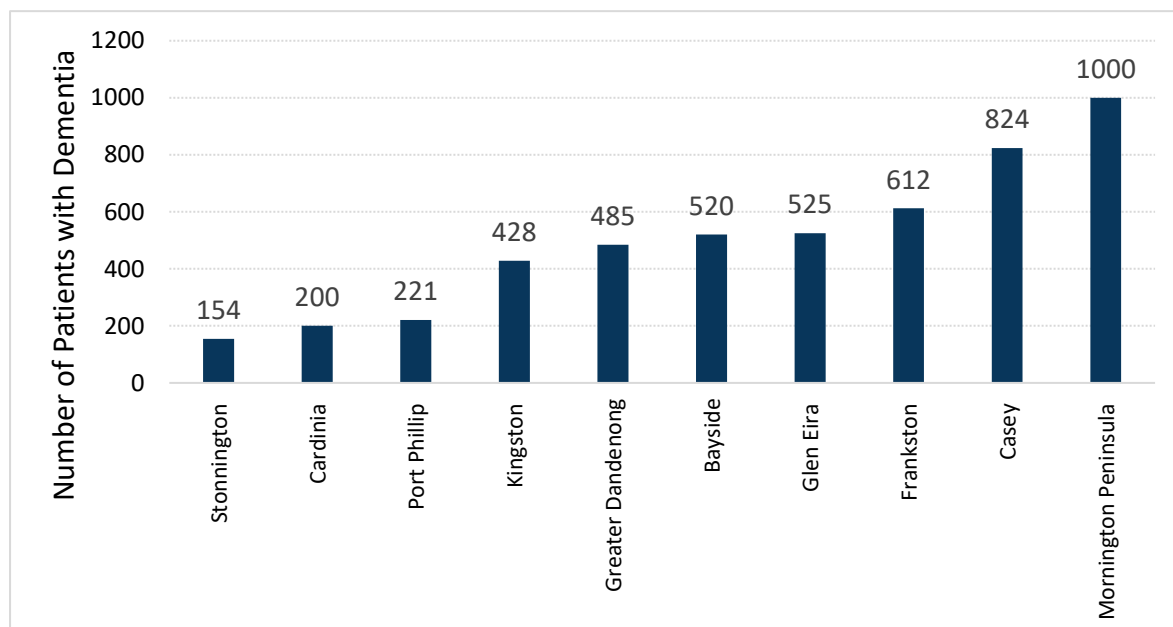




## Dementia

Analysis of POLAR data to determine prevalence of dementia within the SEMPHN region for the financial year 2020/21 among patients above the age of 65 years, identified a total of 4,969 patients with Dementia in the SEMPHN catchment. A high prevalence of dementia was observed in Mornington Peninsula (20.12%) followed by Casey (16.84%) for the financial years 2020/21 (Figure 6.3). A further analysis by Indigenous Status identified 13 patients diagnosed with Dementia who identified as Aboriginal and Torres Strait Islander. Dementia was most prevalent in the age groups above 85 years with 59.4% (n = 3,050) of patients diagnosed with Dementia. Of this group, almost 20% of older people above the age of 85 were residents of Mornington Peninsula, followed by Casey (11.7%). More than half (50.3%) of people using permanent residential care in south-eastern Melbourne on 30 June 2020 had a diagnosis of dementia (Australian Institute of Health and Welfare, 2020f).

Figure 6.3: Number of patients with dementia across the SEMPHN region, 30 June 2021



## Social isolation during COVID-19

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, 2021). A small study in the UK found many older people were able to identify positive aspects to lockdown and may be better equipped to deal with it than anticipated. However, strategies may be required to overcome the negative effects of loneliness for some older people and help resume pre-pandemic physical activity levels (Brown, 2021). This resilience was also found in a Sydney study, which showed older adults were adaptable and resilient during lockdown, demonstrating high uptake of new technologies to remain connected to others, while negative emotional health outcomes were linked to loneliness and unhelpful emotion regulation (Strutt PA, 2021).

Older people in Victoria may be experiencing psychosocial effects associated with the pandemic. These include loneliness, anxiety, boredom, fear, depression and (typically hypoactive) delirium. In comparison with the rest of Australia, Victorians in the following groups had lower quality of life during the pandemic:

- women
- those with lower education attainment
- people receiving financial benefits from government
- people with small social networks
- people with self-reported physical chronic health conditions.

## CALD communities

People from culturally and linguistically diverse communities stay longer in aged care services. Cultural factors such as being born overseas, preferred language and English proficiency can influence how people access and engage with aged care services, how long they are likely to stay in aged care, and the reasons why they exit a service (Australian Institute of Health and Welfare, 2021a)

In the SEMPHN region in 2019-20 people who preferred to speak languages other than English stayed in home care and permanent residential care for more than months longer and more than one month longer, respectively (Australian Institute of Health and Welfare, 2020f). As at 30 June 2020, 37% of the region's residents using aged care services were born in a non-English speaking country (Australian Institute of Health and Welfare, 2020f).

## Home care

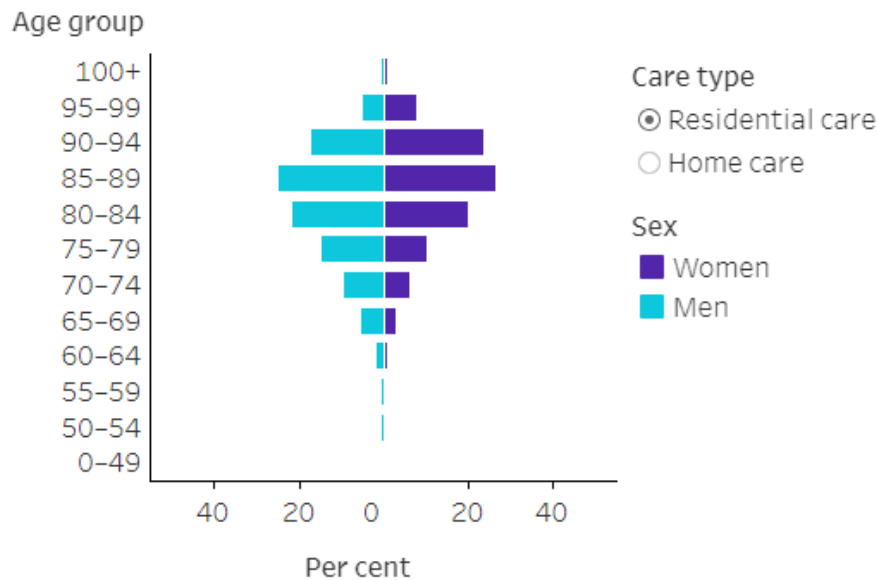
Just over half of the region's residents leaving home care entered residential aged care (55.4%), while one in three (34.2%) residents departed due to death (Australian Institute of Health and Welfare, 2020f). The median

## Aged care services

As at 30 June 2020, there were 158 residential care services, 149 home care services and 131 Home support services (Australian Institute of Health and Welfare, 2020f). In 2019-20, men in the SEMPHN region were entering residential aged care at a younger age than women (Australian Institute of Health and Welfare, 2020f). Figure 6.3 shows the most common age group for men and women to enter residential aged care was 85-89 years (more than 20%). Almost half (47%) of people exiting residential aged care in south-eastern Melbourne were aged between 85 and 94 years.

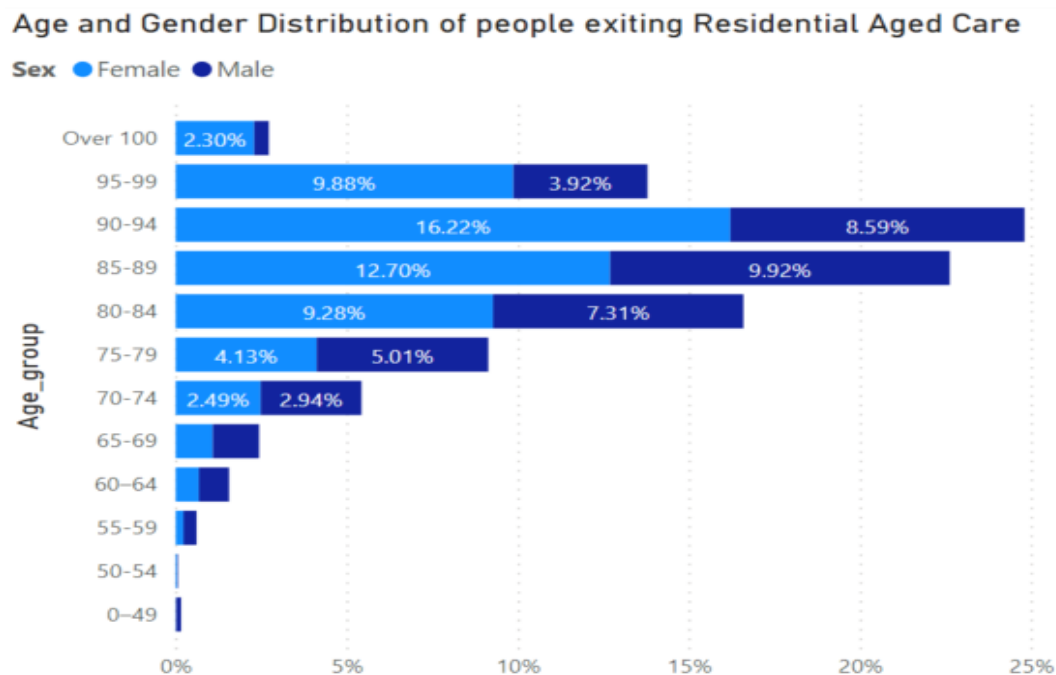
Figure 6.4: Proportion of men and women first admitted into residential aged care, 2019-20.

*Proportion of people in South Eastern Melbourne first admitted into aged care, by care type, age and sex, 2019-20*



Source: (Australian Institute of Health and Welfare, 2020f)

Figure 6.5: Age and gender distribution of people exiting residential aged care, 2019-20.

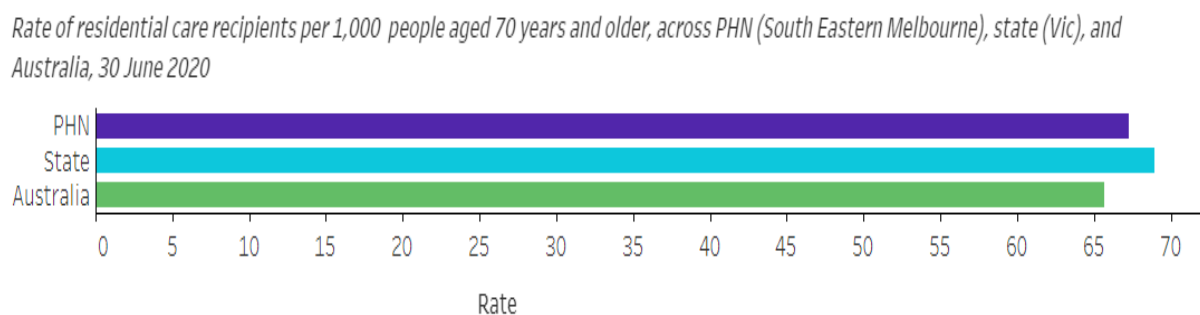


Source: (Australian Institute of Health and Welfare, 2020f)

## Utilisation of residential aged care facilities

As at 30 June 2020, there were 13,704 (53%) and 11,849 (46%) south-eastern Melbourne residents using home and residential aged care services, respectively. A minor decrease in the occupancy rate of residential aged care services was observed between 2019 and 2020. At 30 June 2019, the occupancy rate for residents in SEMPHN was 88.8%, with a 1.6% decrease by 30 June 2020 (Australian Institute of Health and Welfare, 2020f). In 2019-20, a slightly lower rate of the region's residents aged 70 years and over had received residential aged care services compared with Victorian residents; however, the region had a higher rate compared with Australia.

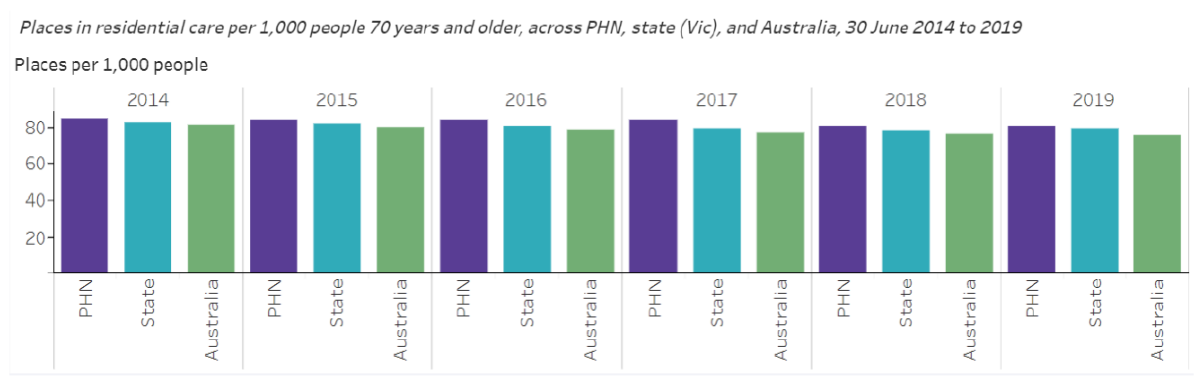
Figure 6.6: Rate of residential care recipients per 1,000 people aged 70 years and older



Source: (Australian Institute of Health and Welfare, 2020f)

Figure 6.7 shows there has been a minor but steady decline in places in residential aged care services for residents of in the region, Victoria and Australia between 2014 and 2019. This is due to the increased care options for older people, including the increased use of home aged care services and the growing desire for people to be able to “age in home” (Australian Institute of Health and Welfare, 2021a).

Figure 6.7: Places in residential aged care per 1,000 people 70 years and older, across region, Victoria and Australia, 2014 to 2019.



Source: extracted from (Australian Institute of Health and Welfare, 2020f)

## Exiting aged care

In 2019-20, the median length of stay for residents in permanent residential aged care facilities was 20.3 months, which is similar to the Victorian median (20.1 months) (Australian Institute of Health and Welfare, 2020f).

- The main reason for exiting an aged care facility was due to death in the facility (84%). Data shows that people who leave permanent residential aged care due to death have a median length of stay of 22.9 months.
- Around one in 10 people (9.9%) exited to go to another facility and had a median stay of 3.8 months.
- Nearly one in 20 (4.2%) returned back to the community with a median length of stay of 0.5 years (Australian Institute of Health and Welfare, 2020f).

## Integrating primary care and residential aged care services

In 2019, SEMPHN hosted a Residential Aged Care GP Forum for primary care providers and residential aged care services to engage and share challenges and opportunities for collaboration to improve support for consumers. Key outcomes from the forum included (South Eastern Melbourne PHN, 2020):

- Administrative reforms
  - Consistent advance care planning
  - Falls
  - Infection
  - Psychotropic medications
- Increasing knowledge base of GPs and residential aged care facilities
- A more organised approach to case conferences
- An improved, funded after-hours service
  - Based on geography – use local practices
  - Use nurse practitioners
  - More collaborations
- Services for those other than the aged in residential care
- Funded psychological services for consumers in aged care – communication to GPs and facilities
- Conversation with VicHealth about collaboration between the aged care sector and acute sector
- Technical solutions for nursing home/GP communication – use of secure email vs fax, and enabling one set of notes in multiple places

## 7. Health workforce

The health workforce includes registered medical practitioners, nurses, midwives, dentists and allied health professionals as well as non-registered practitioners such as dietitians and social workers. The South Eastern Melbourne PHN is one of the largest PHNs by population size in Australia, home to approximately 1.6 million people. To support the health and wellbeing of the region's residents, we require a skilled and diverse workforce.

### Key insights

- There is a significantly higher proportion of solo GP practices in Greater Dandenong.
- There are higher proportions of practices that bulk bill in the areas of the SEMPHN catchment that have higher socioeconomic disadvantage, however proportions remain lower than needed in areas such as Greater Dandenong and Frankston.
- There is a shortage of workers to support specific areas of the south-eastern Melbourne health system, including mental health professionals, First Nations health workers, AOD professionals and GPs providing care for older persons in aged care services.
- Ongoing support is needed to improve capacity-building of local workforce in MH, AOD and chronic disease complexities.

### General practices and general practitioners

There are 479 general practices and 2,782 general practitioners (GPs) in the SEMPHN region. There is variability in the number of GPs and practices to support the population across the region. Casey and Dandenong LGAs have the highest number of practices (80 and 72, respectively). However, compared with the population size in each LGA, Casey has the lowest rate of practices per 100,000 population (Figure 9.1).

Although Greater Dandenong, has the highest rate of practices per population, this LGA has a high proportion of solo GP practices (40%). All LGAs in the SEMPHN catchment have a higher number of GPs per population than the national full-time equivalent (117.7 FTE per 100,000) (Australian Government Department of Health, 2020a). Acknowledging the SEMPHN numbers represent headcount rather than workload (FTE), there are a relatively large number of GPs to support south-eastern Melbourne residents, which is a positive sign.

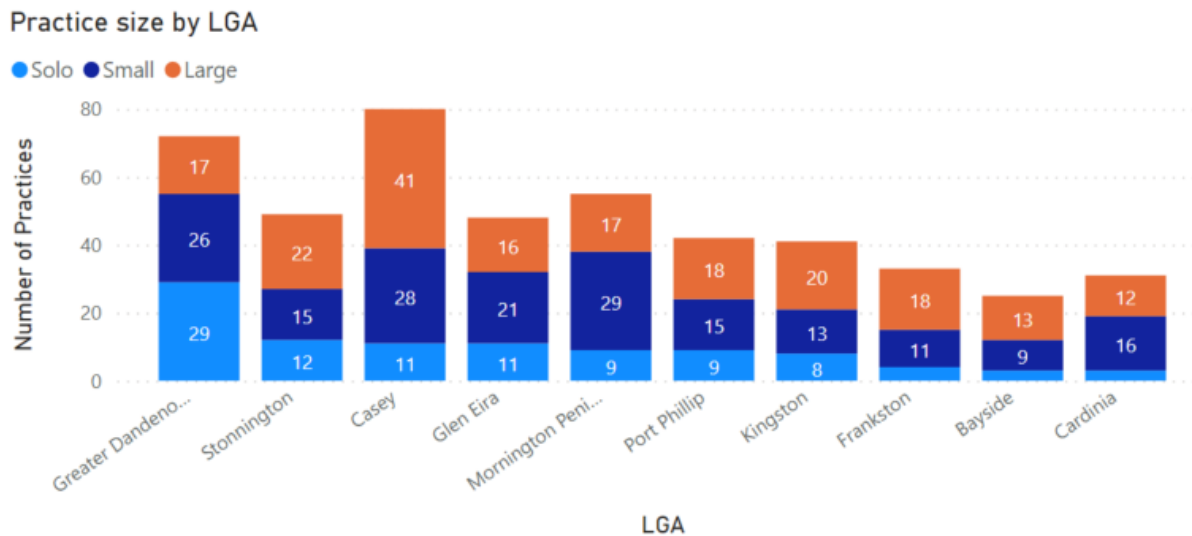
Table 7.1: GP practices and GPs by LGA in SEMPHN, 2021

LGA	GP practices (n)	GP practices per 100,000	Number of GPs (n)	GPs per 100,000
Bayside	25	23.4	243	439.8
Cardinia	31	27.6	178	630.1
Casey	80	22.6	589	600.8
Frankston	33	23.1	226	631.2
Glen Eira	48	3.7	262	597.4
Greater Dandenong	72	42.8	299	562.5
Kingston	41	24.7	257	645.1
Mornington Peninsula	55	32.8	261	642.3
Port Phillip	42	36.3	293	394.5
Stonnington	49	41.6	384	306.7
SEMPHN	479	29.6	3000	538.6

Source: SEMPHN CRM 2021

General practices can vary in size according to the number of GPs in the practice which indicates capacity to service surrounding areas. Greater Dandenong has the largest number of solo (one GP) practices. Mornington Peninsula has a high number of small practices (two to five GPs) and Casey has the highest number of large practices (six or more GPs). The majority (more than 50%) of practices are located in the Cities of Kingston, Frankston and Bayside, which have practices with six GPs or more.

Figure 7.1: Practice size by number of GPs, by LGA, 2019-20.



Source: (South Eastern Melbourne PHN, 2021a)

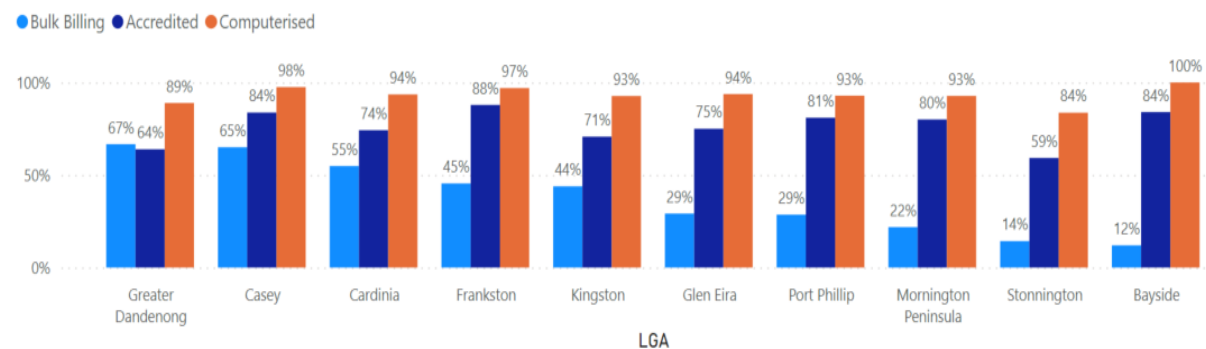
## Bulk billing practices

Lack of bulk billing places cost barriers to consumers accessing health care, which has been identified through community consultations as one of the leading barriers to health care for residents in the region. Across SEMPHN, although more practices offer bulk billing for patients (no out-of-pocket expense) in areas of higher socioeconomic disadvantage such as Greater Dandenong and Casey, there are still almost one-third of practices in these LGAs that do not offer bulk billing. More than half of practices in Frankston do not offer bulk billing, which has been identified as a priority health needs LGA (Figure 7.2).

Figure 7.2: Proportion (%) of general practices which are accredited, computerised and bulk bill, 2021.

Source: (South Eastern Melbourne PHN, 2021a)

Proportion (%) of General Practices in SEMPHN Bulk Billing, Computerised and Accredited





## Nursing workforce

General practice nursing (registered or enrolled nurse) includes women's health, men's health, aged care, infection control, chronic disease management (such as cardiovascular, asthma and diabetes care), immunisation, cancer management, mental health, maternal and child health, health promotion, population health, wound management, illness prevention and much more (Australian Primary Healthcare Nurses Association (APNA), 2021). 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).

Sixty-seven per cent of general practices in the SEMPLHN region have at least one nurse employed in their care team (South Eastern Melbourne PHN, 2021a) compared with 63% nationally. Staffing shortages, especially a lack of skilled staff such as registered nurses and home visiting doctors in the aged care sector, has been highlighted as a need to be addressed.

Consultations in 2018 with service providers working chronic disease areas have highlighted inadequacies in resourcing, which have resulted in challenges collecting and reporting mandated patient data and the provision of quality care coordination to patients. Respondents highlighted the need to build workforce capacity through:

- training and information sessions for clinicians and management
- training focused on the needs of consumers with complex health issues (e.g. dual diagnosis, pain management in palliative care)
- attendance at regular forums involving multi-agency representation
- supporting and facilitating cultural shift to increase uptake of AOD and MH consumers for "screening and brief interventions" by general practice. For example, education to reduce stigma surrounding AOD users
- provision of training to staff including nurses, clinicians and management. For example, in relation to working within the National Disability Insurance Scheme (NDIS) model and palliative care
- continuous professional development
- knowledge-sharing events
- support with accreditation
- competitive pay structures
- quality improvement processes implemented at a practice level.

## Mental health workforce

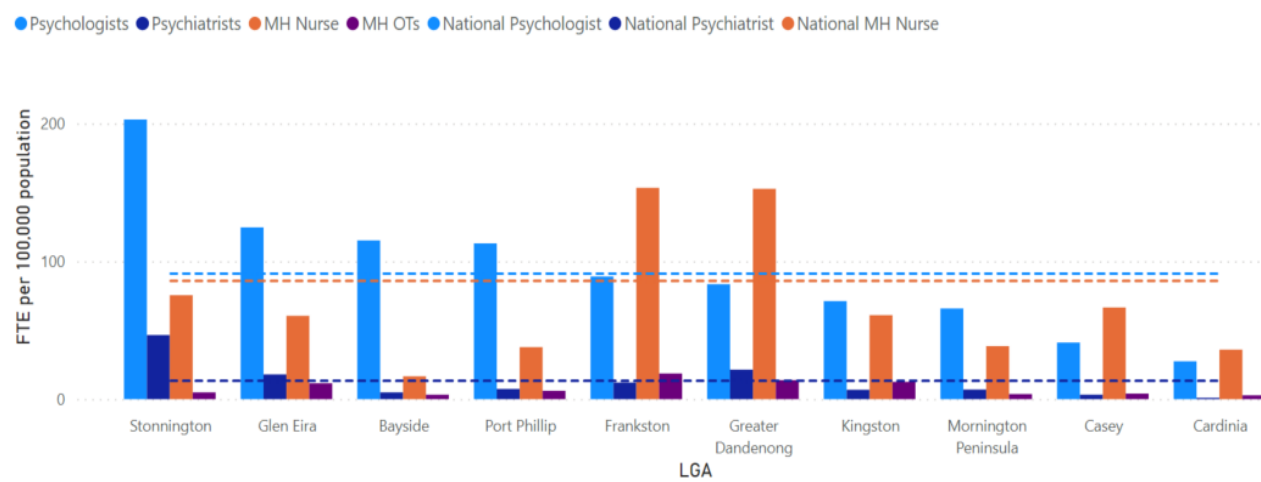
The mental health workforce includes psychologists, psychiatrists, and mental health nurses. Mental health trained professionals are critical to access and quality delivery of mental health care for our community.

Nearly two thirds (60%) of LGAs in the SEMPLHN region have lower rates of psychologists (FTE per 100,000) compared to the Australian equivalent. Residents of these LGAs experience the most socioeconomic disadvantage and mental health need in south-eastern Melbourne i.e. City of Casey and the City of Greater Dandenong. Mental health nurses play a significant role in the mental health

system in Frankston and Greater Dandenong. These LGAs have the highest rates of MH nurses in the region, which also exceed the national rate per 100,000 population (Figure 7.3).

Figure 7.3: Mental health professionals compared with national rates in 2017-18

Mental Health Professionals in SEMPHN in 2017-18 compared to National rates (FTE per 100,000 people)



Source: (AIHW, 2019)

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.

## Other health workforces

Community consultations identified a shortage in First Nations health workers, AOD workers and health workers trained in chronic diseases.

### First Nations workforce

In the 2016 Census, more than 11,000 First Nations Australians were employed in health-related occupations. Nationally, this is a rate equivalent to 173 per 10,000 (Australian Institute of Health and Welfare - National Indigenous Australian Agency, 2020). A lack of First Nations health workers in the SEMPHN region creates a significant challenge for First Nations people's access to services and culturally appropriate care.

### AOD workforce

Consultation with AOD service providers identified several key challenges including inadequate training (56.8%), staffing (52.9%) and language barriers (7.8%) (South Eastern Melbourne PHN, 2019).

## Chronic disease management

Care coordination, quality improvement and system infrastructure. Consultations in 2018 with providers of chronic disease management services further highlighted a need to build clinician skills in care coordination. This was especially pointed out in the context of providing care to priority population groups, which require more intensive assistance and support in managing chronic conditions. Feedback suggested the implementation of quality improvement processes at a practice level would contribute towards ongoing enhancement of practice functioning and service delivery, for example, a focus on policies and procedures, ongoing training for staff and improvements to IT infrastructure. Respondents spoke about the need to build infrastructure, such as:

- a single data system that can be used by all service providers across multiple systems. As noted by providers of CDM services, this will result in “continuity of information to follow the continuity of care”
- technology that will enable better communication across settings and promote e-health initiatives
- resources to promote health literacy among consumers
- improving quality systems including confidentiality agreements and a standardised privacy agreement (AOD).

## Refugees

Refugees have been identified as a vulnerable population group requiring trained health-care workers. Health-related service providers and consumer representatives identified time pressures and resourcing challenges. In general practice, providers noted the lack of available time in consultation sessions and limits on the use of interpreter services. Consumer consultations highlighted the challenges faced by this cohort when accessing services if no interpreter service is available. In such instances, service providers pointed out that “case workers are often required to assist with communication, particularly with complex clients”, alongside needing to follow “complex billing processes for those without Medicare”, further adding to their workload.

## 8. Digital health

The COVID-19 pandemic has accelerated digital health capacity in healthcare settings. This has been in part due to policy changes and the introduction of new telehealth MBS items. Research suggests an increase in the national proportion of telehealth consultations (0.2% in February 2020 prior to funding policy changes) to 35% in April 2020 (Snoswell, 2020). 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 (Thomas, 2020).

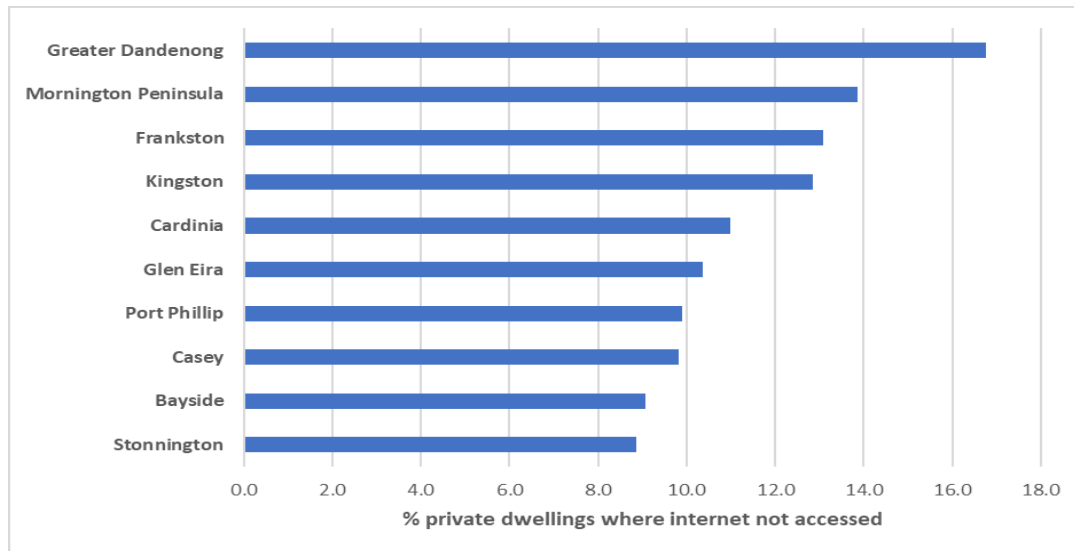
### Key insights

- Access to household internet varies across the catchment.
- Uptake and use of digital health technologies varies across LGAs; overall, Stonnington, Greater Dandenong and Glen Eira have demonstrated the lowest rates of use.
- There are variations in digital health utilisation and capability for general practices across SEMPHN.
- Digital health capabilities for accredited practices were significantly higher than non-accredited practices.
- Digital health need within accredited practices was identified for the Greater Dandenong area.

### Digital health technology

In 2016-17, 86% of households had internet access at home (Australian Bureau of Statistics, 2018c) 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). Figure 8.1 shows the proportion of households with internet access in 2016.

Figure 8.1: Private dwellings where the internet is not accessed by LGA, 2016.



Service providers across the SEMPLHN region use several types digital health technologies which are presented in Table 8.1. The uptake and use of these technologies varies across LGAs.

Table 8.1: Types of digital health technologies

<b>HealthLink Smart Forms</b>	Enables healthcare providers to electronically refer a patient to other providers including a large proportion of Victorian local health networks and My Aged Care.
<b>Healthlink</b>	A secure messaging provider used by a large number of local health networks and private healthcare service providers when sending discharge summaries and diagnostic test results to general practices.
<b>My Health Record (MyHR)</b>	National electronic health record system.
<b>Nellie</b>	An automated SMS-based persona for promoting patient self-care provided to general practice by SEMPLHN.
<b>POLAR</b>	A clinical audit tool provided to general practice by SEMPLHN.
<b>VideoCall</b>	A purpose-built telehealth platform provided for free to general practice by the Commonwealth Government.

## Digital health uptake

The use of these technologies was assessed at the LGA level (predominantly within the general practice sector due to limitations on data availability) (Figure 8.2). Findings show that there is variability across LGAs in the use of digital health.

Figure 8.2: Use of digital health technologies by LGA, 2021

LGA	Rate of SmartForms use	Rate of conformant clinical software	Rate of HealthLink use	Rate of GP MyHR registration	Rate of pharmacy MyHR registration	Rate of GP Nellie use	Rate of POLAR use	Rate of Video Call enabled in GP	Overall rate of DH capability
Bayside	29.6	85.2	77.8	85.2	87.0	14.8	66.7	29.6	59.5
Cardinia	40.0	90.0	83.3	80.0	94.1	13.3	70.0	13.3	60.5
Casey	49.4	97.5	81.5	82.7	72.9	9.9	75.3	18.5	61.0
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	50.0
Kingston	36.6	92.7	78.0	78.0	79.4	12.2	73.2	7.3	57.2
Mornington Peninsula	29.3	89.7	81.0	84.5	93.3	20.7	67.2	22.4	61.0
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	66.0	56.6	75.0	9.4	50.9	30.2	48.3

Lowest value (percentage)  Highest value (percentage)

The lowest uptake of digital health technologies<sup>9</sup> are:

- Stonnington has the lowest rates of use across multiple digital health technologies including SmartForms, HealthLink and My Health Record within general practices
- Greater Dandenong has the lowest use of technologies used across SEMPHN general practices. This includes their use of Nellie and POLAR
- Glen Eira has a low rate of use for the SmartLink electronic referral system.

Within SEMPHN, 73% of all general practices are accredited by the Royal Australian College of General Practitioners (RACGP), i.e. 360 out of a total 479 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

<sup>9</sup> Results should be interpreted with the following consideration:

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

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 (Figure 8.3) 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 (Figure 8.4) 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

Figure 8.3: Use of digital health technologies in accredited practices by LGA, 2021.

LGA	Rate of SmartForms use in accredited practices	Rate of conformant clinical software in accredited practices	Rate of HealthLink use in accredited practices	Rate of GP MyHr registration in accredited practices	Rate of GP Nellie use in accredited practices	Rate of POLAR use in accredited practices	Rate of Video Call enabled in GP in accredited practices	Overall rate of DH capability in accredited practices
Bayside	90%	95%	95%	95%	14%	86%	29%	72%
Cardinia	87%	96%	91%	87%	17%	87%	17%	69%
Casey	91%	100%	93%	93%	10%	82%	21%	70%
Frankston	90%	100%	86%	97%	10%	93%	10%	70%
Glen Eira	69%	92%	89%	97%	14%	78%	19%	65%
Greater Dandenong	81%	94%	89%	91%	9%	72%	13%	64%
Kingston	79%	100%	93%	93%	17%	90%	10%	69%
Mornington Peninsula	84%	100%	91%	98%	24%	80%	24%	72%
Port Phillip	74%	94%	79%	91%	21%	79%	29%	67%
Stonnington	90%	100%	90%	86%	17%	79%	38%	71%

Figure 8.4: Use of digital health technologies in non-accredited practices by LGA, 2021

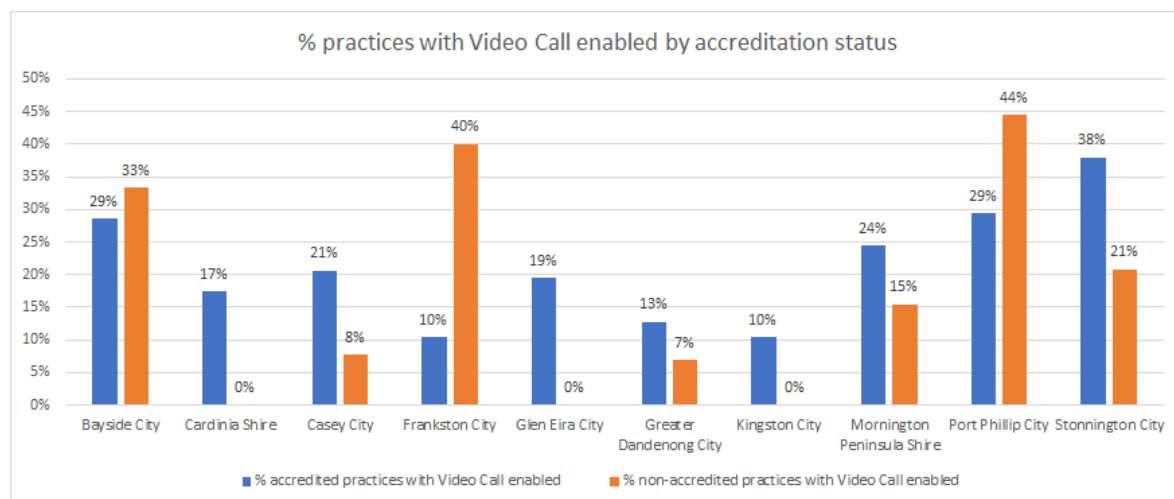
LGA	Rate of SmartForms use in non-accredited practices	Rate of conformant clinical software in non-accredited practices	Rate of HealthLink use in non-accredited practices	Rate of GP MyHr registration in non-accredited practices	Rate of GP Nellie use in non-accredited practices	Rate of POLAR use in non-accredited practices	Rate of Video Call enabled in GP in non-accredited practices	Overall rate of DH capability in non-accredited practices
Bayside	17%	50%	17%	50%	0%	0%	33%	24%
Cardinia	43%	71%	57%	57%	0%	14%	0%	35%
Casey	23%	85%	23%	31%	8%	38%	8%	31%
Frankston	60%	60%	60%	20%	0%	0%	40%	34%
Glen Eira	47%	60%	53%	27%	0%	13%	0%	29%
Greater Dandenong	38%	55%	48%	24%	0%	7%	7%	26%
Kingston	42%	75%	42%	42%	0%	33%	0%	33%
Mornington Peninsula	38%	54%	46%	38%	0%	23%	15%	31%
Port Phillip	56%	67%	56%	44%	11%	11%	44%	41%
Stonnington	29%	50%	38%	21%	0%	17%	21%	25%



## Digital health utilisation

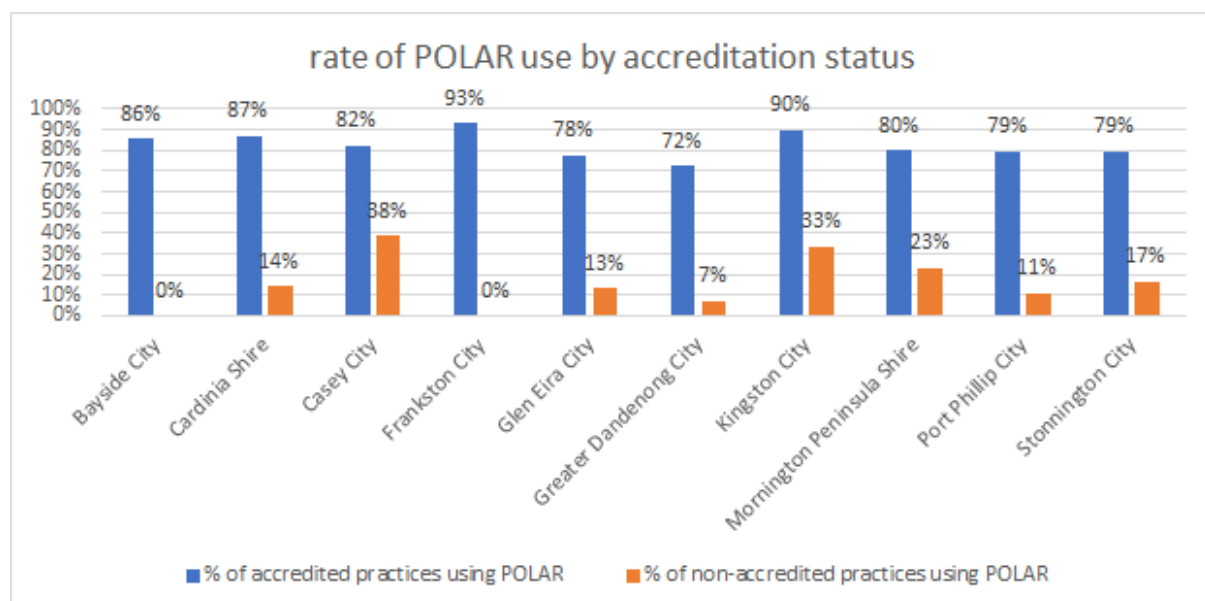
**Video call** utilisation is higher in general in accredited practices. Seven out of 10 LGAs within the SEMPHN region have higher video call use in accredited general practices compared with non-accredited practices (Figure 8.5). Frankston, however, has a 30 percentage point difference where utilisation is much higher in non-accredited practices.

Figure 8.5: Practices with video call enabled by accreditation status and LGA, 2021



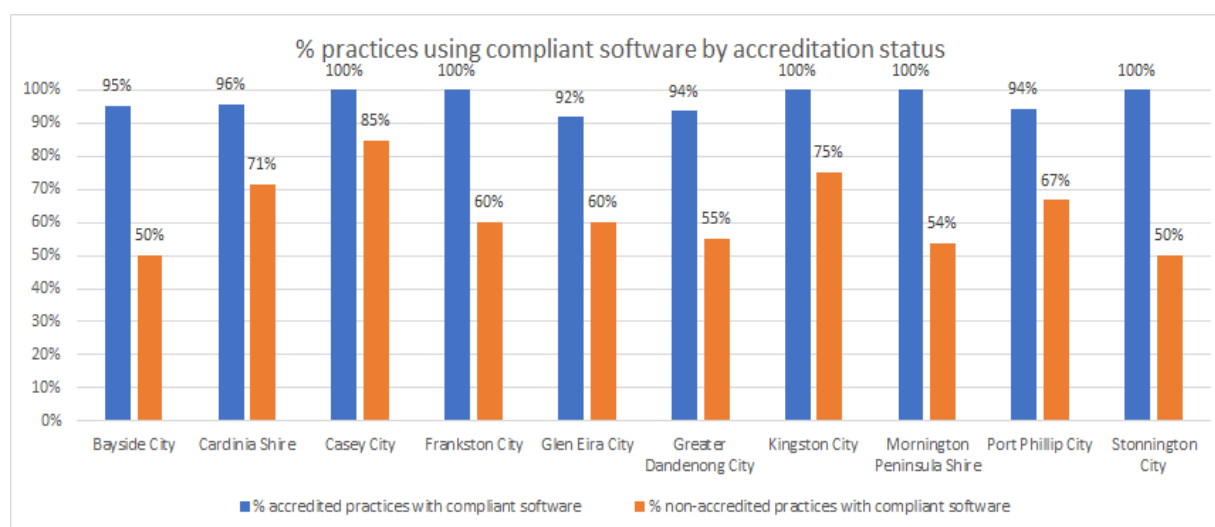
**POLAR** use is much higher among accredited practices. Across all LGAs within the SEMPHN region, a higher proportion of accredited practices use POLAR compared with non-accredited practices. More than half of LGAs have utilisation rates above 80% (Figure 8.5).

Figure 8.6: Rate of POLAR use by practice accreditation, 2021



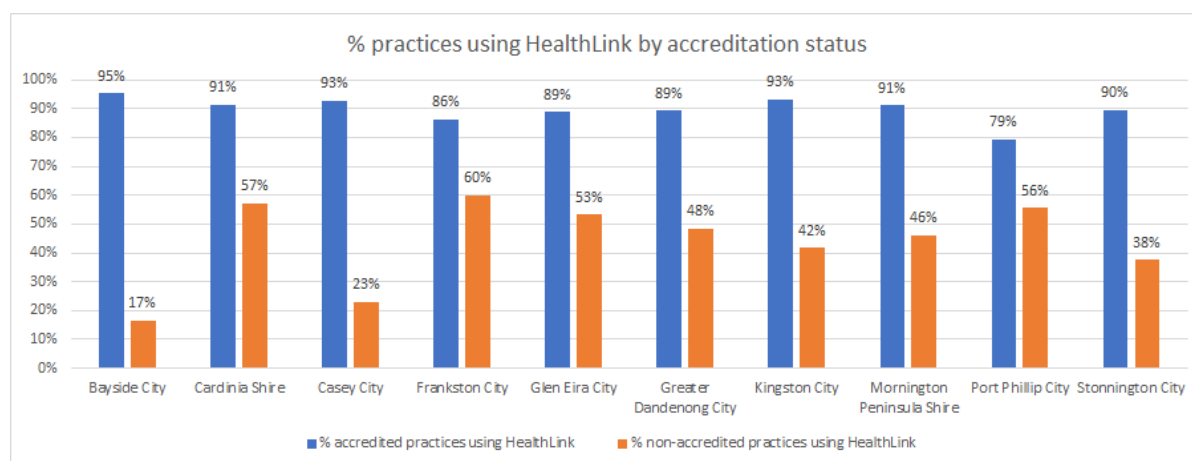
**Compliant Clinical Software** use mirrors that of accredited practices and their use of other digital technologies. Among accredited practices, half of all LGAs in the region have a utilisation rate for compliant software of 100% (Figure 8.7). Non-accredited practices have a lower proportion of compliant software use, with Casey having the highest proportion (85%). Only 50% of Bayside and Stonnington non-accredited practices use compliant software.

Figure 8.7: Practices using compliant software by accreditation status, 2021



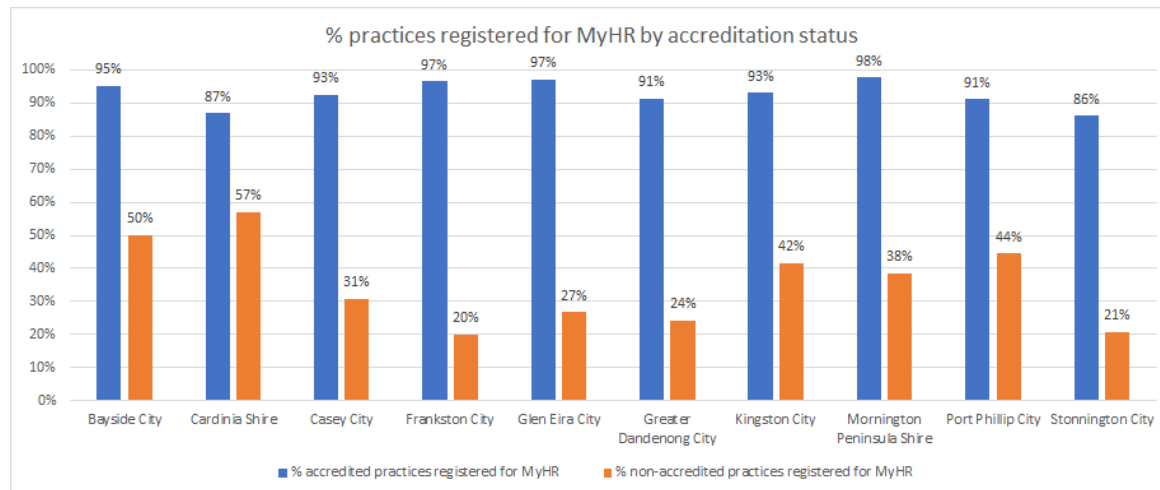
The **HealthLink Messaging System** enables health information such as discharge summaries and diagnostic test results to be sent to general practices. A similar pattern of digital health utilisation is seen for accredited practices using HealthLink compared with non-accredited practices (Figure 8.8). 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 8.8: Practices using HealthLink by accreditation status, 2021



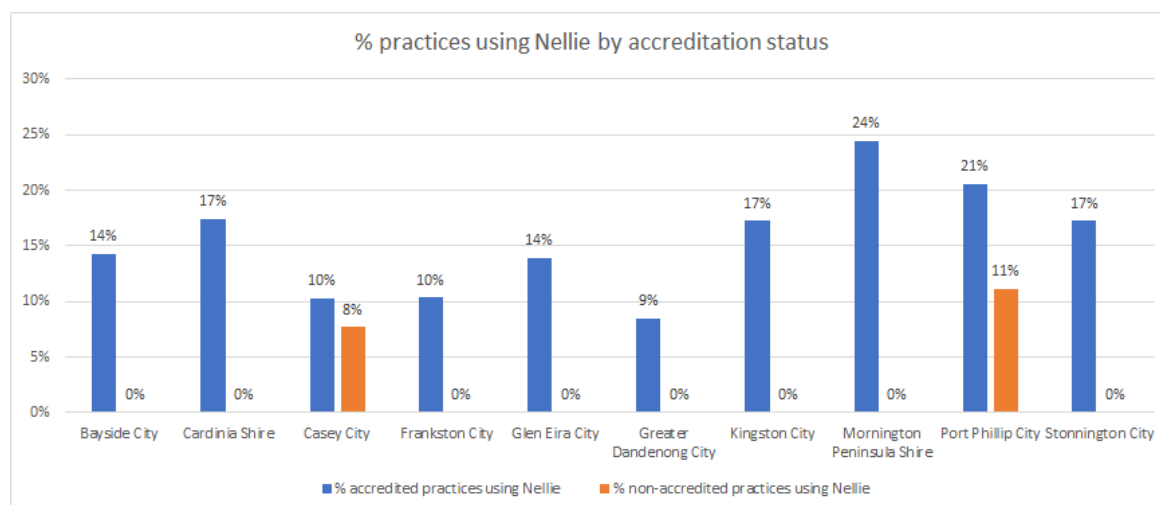
**My Health Record** registration among accredited practices is high, with eight of 10 LGAs recording registrations of more than 90% (Figure 8.9). The pattern of digital health utilisation within non-accredited practices mirrors that seen in other technologies, with a noticeably lower proportion registered for MyHR. Frankston, Stonnington and Greater Dandenong all recorded proportions of registrations under one-quarter.

Figure 8.9: Practices registered for My Health Record by accreditation status, 2021



**Nellie** usage within practices is much higher in accredited practices, particularly in Mornington Peninsula. Nellie is an automated SMS-based persona for promoting patient self-care provided to general practices by SEMPHN. Utilisation of Nellie across all general practices is relatively low (Figure 8.10). 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.

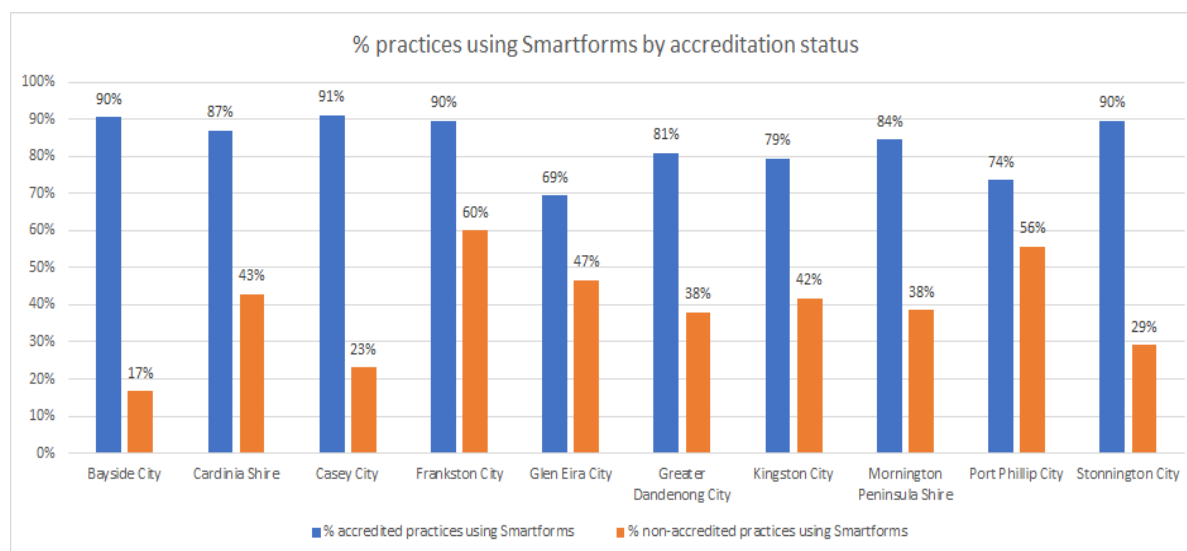
Figure 8.10: Practices using Nellie by accreditation status and LGA, 2021



**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 8.11). 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 8.11: Practices using Smart Forms by accreditation status, 2021



## Market analysis

Market analysis insights through SEMPHN and service provider consultations show that there are clear themes emerging with relation to the accelerated digitisation of healthcare service provision. These are presented in Table 8.2.

Table 8.2: Market analysis of digital technology utilisation

Theme	Insights
<b>Digital surge</b>	<p>COVID-19's impact on the healthcare sector has accelerated the digitisation of healthcare. It has driven digitally enabled models of care that use various digital tools:</p> <ul style="list-style-type: none"> <li>• telehealth</li> <li>• mobile health (mHealth)</li> <li>• remote patient monitoring</li> <li>• electronic prescriptions</li> <li>• e-diagnostics</li> <li>• e-referrals.</li> </ul> <p>With the increase in telehealth, e-scripts and home deliveries of prescriptions, there are fewer face-to-face touch points for patients with their healthcare providers. This</p>

Theme	Insights
	could lead to an increase in consumers who unintentionally do not follow the instructions for their medical treatment.
<b>Funding uncertainty</b>	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.
<b>Co-design</b>	It is important to continue SEMPHN's work in 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.
<b>Inquiries</b>	Recently conducted 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.
<b>New technologies</b>	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.

Theme	Insights
<b>Reporting</b>	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.
<b>Engagement</b>	<p>Commissioned service providers are highly engaged. In particular, GP liaison teams at local hospital networks are highly engaged, but there is a need to engage more with other teams within the hospital networks to support more integrated models of care.</p> <p>Further engagement is vital with allied health providers, specialists and non-traditional service providers (for example, for social prescribing where SEMPHN engaged with a Neighbourhood House to help develop a Nellie protocol during COVID-19 to address social isolation among its users).</p> <p>There are ongoing challenges in engaging with non-accredited general practices.</p>

## References

- AIHW. (2019). *Mental health workforce 2019*. Australian Institute of Health and Welfare.
- AIHW. (2020). *National Drug Strategy Household Survey 2019*. Australian Institute of Health and Welfare,. <https://www.aihw.gov.au/reports/illicit-use-of-drugs/national-drug-strategy-household-survey-2019/contents/summary>.
- Australian Bureau of Statistics. (2015). *At risk populations: persons with disability*. Australian Bureau of Statistics,.
- Australian Bureau of Statistics. (2016a). *Australian Statistical Geography Standard (ASGS): Volume 1 - Main Structure and Greater Capital City Statistical Areas, July 2016*. Australian Bureau of Statistics,.
- Australian Bureau of Statistics. (2016b, 28/06/2017 ). *Census of Population and Housing: Reflecting Australia - Stories from the Census, 2016*. Australian Bureau of Statistics,.
- Australian Bureau of Statistics. (2016c). *Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA) Australia 2016*. Australian Bureau of Statistics,.
- Australian Bureau of Statistics. (2016d). *Census of Population and Housing: Understanding the Increase in Aboriginal and Torres Strait Islander Counts*. Australian Bureau of Statistics,.
- Australian Bureau of Statistics. (2016e). *Greater Dandenong Community Profile*,. Australian Bureau of Statistics,.
- Australian Bureau of Statistics. (2016f). *QuickStats*. Australian Bureau of Statistics,.
- Australian Bureau of Statistics. (2017a). *Census of Population and Housing: Reflecting Australia - Stories from the Census, 2016*. Australian Bureau of Statistics,.
- Australian Bureau of Statistics. (2018a). *At risk populations: health conditions distribution*. Australian Bureau of Statistics,.
- Australian Bureau of Statistics. (2018b). *Estimated Resident Population*,. Australian Bureau of Statistics,
- Australian Bureau of Statistics. (2018c). *Household use of information technology*. Australian Bureau of Statistics,.
- Australian Bureau of Statistics. (2019a). *4324.0.55.001 - Microdata: National Health Survey, 2017-18*. Australian Bureau of Statistics,.
- Australian Bureau of Statistics. (2019b). *National Aboriginal and Torres Strait Islander Health Survey*. Australian Bureau of Statistics,.
- Australian Bureau of Statistics. (2020a). *At risk populations: persons with disability*. Australian Bureau of Statistics,.
- Australian Bureau of Statistics. (2020b). *Household Impacts of COVID-19 Survey. 29 Apr - 4 May 2020*. Australian Bureau of Statistics,.
- Australian Bureau of Statistics. (2020c). *National Aboriginal and Torres Strait Islander Health Survey*. Australian Bureau of Statistics,.
- Australian Bureau of Statistics. (2021a). *Healthy community indicators: South Eastern Melbourne (Vic) - Primary health care*. Australian Bureau of Statistics,.

- Australian Bureau of Statistics. (2021b). *Household impacts of COVID-19 survey*. Australian Bureau of Statistics,.
- Australian Bureau of Statistics. (2021c). *Household impacts of COVID-19 survey*.
- Australian Department of Health. (2004). *Assessment and Schaeffer's model*. Australian Department of Health,.
- Australian Department of Health. (2021a). *COVID-19 vaccination – Local Government Area (LGA)*. Australian Department of Health,.
- Australian Department of Health. (2021b). *Immunisation coverage data, surveys and reports*. Australian Department of Health,.
- Australian Department of Health. (2021c). *Immunisation coverage rates for Aboriginal and Torres Strait Islander children*. Australian Department of Health,.
- Australian Department of Health. (2021d). *Immunisation coverage rates for all children*. Australian Department of Health,.
- Australian Government Department of Health. (2018). *Joint Regional Planning for Integrated Mental Health and Suicide Prevention Services*.
- Australian Government Department of Health. (2020a). *GP workforce statistics 2014 to 2019*. Australian Government Department of Health,.
- Australian Government Department of Health. (2020b). *Standard drinks guide*. Australian Government Department of Health,.
- Australian Government Department of Health. (2021a). *PHN Childhood immunisation coverage data*. Australian Government Department of Health,.
- Australian Government Department of Health. (2021b). *PHN Program Needs Assessment Policy Guide*. Canberra
- Australian Government Productivity Commission. (2020). *Mental health inquiry report*.
- Australian Institute of Health and Welfare - National Indigenous Australian Agency. (2020). *Aboriginal and Torres Strait Islander Health Performance Framework - summary report*. Australian Institute of Health and Welfare - National Indigenous Australian Agency,.
- Australian Institute of Health and Welfare. (2015). *Australian Burden of Disease Study*. Australian Institute of Health and Welfare,.
- Australian Institute of Health and Welfare. (2017). *Aboriginal and Torres Strait Islander Health Performance Framework 2017 Report*.
- Australian Institute of Health and Welfare. (2018a). *2.4 Digital health, Chapter 2 Australia's health system (Australia's health 2018)*. Australian Institute of Health and Welfare.
- Australian Institute of Health and Welfare. (2018b). *Australia's Health* (Australia's health series no. 16, Issue).
- Australian Institute of Health and Welfare. (2018c, 19 December 2018). *Healthy community indicators by Primary Health Network*. Australian Institute of Health and Welfare,.
- Australian Institute of Health and Welfare. (2018d). *Primary Health Networks*.
- Australian Institute of Health and Welfare. (2019). *Alcohol and other drug use in regional and remote Australia: consumption, harms and access to treatment, 2016–17*. (Cat. no. HSE 212). Canberra



- Australian Institute of Health and Welfare. (2020a). *Cancer screening and COVID-19 in Australia*. Australian Institute of Health and Welfare,.
- Australian Institute of Health and Welfare. (2020b). *Chronic musculoskeletal conditions - arthritis*. Australian Institute of Health and Welfare,.
- Australian Institute of Health and Welfare. (2020c). *Chronic obstructive pulmonary disease (COPD)*. Australian Institute of Health and Welfare,.
- Australian Institute of Health and Welfare. (2020d). *The first year of COVID-19 in Australia: direct and indirect health effects*.
- Australian Institute of Health and Welfare. (2020e). *Impacts of COVID-19 on Medicare Benefits Scheme and Pharmaceutical Benefits Scheme service use*. Australian Institute of Health and Welfare,.
- Australian Institute of Health and Welfare. (2020f). *My aged care region*. Australian Institute of Health and Welfare,.
- Australian Institute of Health and Welfare. (2020g). *People with disability in Australia*. Australian Institute of Health and Welfare,.
- Australian Institute of Health and Welfare. (2020h). *Total Medicare services and benefit by Primary Health Network*. Australian Institute of Health and Welfare,.
- Australian Institute of Health and Welfare. (2020i). *Tracking progress against the Implementation Plan goals for the Aboriginal and Torres Strait Islander Health Plan 2013–2023*. Australian Institute of Health and Welfare,.
- Australian Institute of Health and Welfare. (2021a). *Aged care*. Australian Institute of Health and Welfare,.
- Australian Institute of Health and Welfare. (2021b). *Alcohol and other drug treatment services in Australia annual report*. Australian Institute of Health and Welfare,.
- Australian Institute of Health and Welfare. (2021c). *Alcohol, tobacco & other drugs in Australia*. Australian Institute of Health and Welfare,.
- Australian Institute of Health and Welfare. (2021d). *Behaviours and risk factors - smoking*. Australian Institute of Health and Welfare,.
- Australian Institute of Health and Welfare. (2021e). *Cancer screening programs: quarterly data*. Australian Institute of Health and Welfare,.
- Australian Institute of Health and Welfare. (2021f). *Children & youth - Australia's children*. Australian Institute of Health and Welfare,.
- Australian Institute of Health and Welfare. (2021g). *Chronic disease*. Australian Institute of Health and Welfare,.
- Australian Institute of Health and Welfare. (2021h). *COVID-19 impact on mental health*. Australian Institute of Health and Welfare,.
- Australian Institute of Health and Welfare. (2021i). *Cultural safety in health care for Indigenous Australians: monitoring framework*. Australian Institute of Health and Welfare,.
- Australian Institute of Health and Welfare. (2021j). *Deaths by suicide, by local areas*. Australian Institute of Health and Welfare,.
- Australian Institute of Health and Welfare. (2021k). *Elective surgery*.

- Australian Institute of Health and Welfare. (2021l). *Emergency department care*. Australian Institute of Health and Welfare,.
- Australian Institute of Health and Welfare. (2021m). *Emergency department mental health services*. Australian Institute of Health and Welfare,.
- Australian Institute of Health and Welfare. (2021n). *Illicit drug use*. Australian Institute of Health and Welfare,.
- Australian Institute of Health and Welfare. (2021o). *Impacts of COVID-19 on Medicare Benefits Scheme and Pharmaceutical Benefits Scheme: quarterly data*. Australian Institute of Health and Welfare,.
- Australian Institute of Health and Welfare. (2021p). *Medicare-subsidised mental health-specific services*. Australian Institute of Health and Welfare,.
- Australian Institute of Health and Welfare. (2021q). *Mental health services in Australia*. Australian Institute of Health and Welfare,.
- Australian Institute of Health and Welfare. (2021r). *Mortality Over Regions and Time (MORT) books*. Australian Institute of Health and Welfare,.
- Australian Institute of Health and Welfare. (2021s). *Suicide & self-harm monitoring - Deaths by suicide among young people*. Australian Institute of Health and Welfare,.
- Australian Primary Healthcare Nurses Association (APNA). (2021). *General practice nursing*. Australian Primary Healthcare Nurses Association (APNA),.
- Beyond Blue. (2014). *From Blues to Rainbows - The mental health and well-being of gender diverse and transgender young people in Australia*.
- beyondblue. (2015). *Stigma and discrimination associated with depression and anxiety*.
- Biddle, N., Edwards, B., Gray, M., & Sollis, K., (2020). *Alcohol consumption during the COVID-19 period: May 2020*.
- Briggs, A. M. (2016). Musculoskeletal health conditions represent a global threat to healthy aging: a report for the 2015 World Health Organization world report on ageing and health. *The Gerontologist*, 56(Suppl\_2), S243-S255.
- Brown, L., Mossabir, R., Harrison, N., Brundle, C., Smith, J., & Clegg, A. (2021). Life in lockdown: a telephone survey to investigate the impact of COVID-19 lockdown measures on the lives of older people ( $\geq 75$  years). *Age and Ageing*, 50(2), 341-346.
- Clark, T. C., Lucassen, M. F., Bullen, P., Denny, S. J., Fleming, T. M., Robinson, E. M., & Rossen, F. V. (2014). The health and well-being of transgender high school students: results from the New Zealand adolescent health survey (Youth'12). *Journal of Adolescent Health*, 55(1), 93-99.
- Commission for Children and Young People. (2021). *Impact of COVID-19 on children and young people*.
- Compton, M. T., & Shim, R. S. (2015). The social determinants of mental health. *Focus*, 13(4), 419-425.
- Coroners Court of Victoria. (2021). *Victorian Overdose Deaths 2011-2020*. Coroners Court of Victoria,.
- Crime Statistics Agency. (2021a). *Crime by Location - Data Visualisation*. Crime Statistics Agency,.
- Crime Statistics Agency. (2021b). *Recorded Criminal Incidents*,. Crime Statistics Agency,.
- Croakey Health Media. (2020). *A Primary Health Network redesign to address the 'missing middle' in mental health*. Croakey Health Media,.

- Davy, C., Harfield, S., McArthur, A., Munn, Z., & Brown, A. (2016). Access to primary health care services for Indigenous peoples: A framework synthesis. . *International Journal for Equity in Health*, 15(1), 1-9.
- Deloitte. (2012). *Butterfly Report: Paying the Price - The impact of eating disorders in Australia*. Deloitte,.
- Deloitte. (2017). *Smart everything, everywhere - Mobile Consumer Survey 2017 - The Australian Cut*.
- Department of Environment, L., Water and Planning (2019). *Victoria in Future 2019 – Population Projections*, .
- Department of Environment Land Water and Planning. (2019). *Victoria in Future 2019: Population Projections 2016 to 2056*. Department of Environment Land Water and Planning,
- Department of Health and Human Services. (2017). *Balit Murrup - Aboriginal social and emotional wellbeing framework 2017–2027*.
- Department of Health and Human Services. (2020). *Korin Korin Balit-Djak*. Department of Health and Human Services,.
- Department of Health and Human Services. (2021). *COVID-19 Cases by LGA*.
- Department of Health, V. (2020). *Aboriginal and Torres Strait Islander Victorians*. Department of Health, Victoria,.
- Department of Health Victoria. (2018). *Infectious diseases surveillance in Victoria - Local Government areas surveillance report*.
- Eating Disorders Victoria. (2016). *Eating disorders - statistics and key research*. Eating Disorders Victoria,.
- Firth J, S. N., Koyanagi A, Siskind D, Rosenbaum S, Galletly C, Allan S, Caneo C, Carney R, Carvalho AF, Chatterton ML (2019). The Lancet Psychiatry Commission: a blueprint for protecting physical health in people with mental illness. *The Lancet Psychiatry*, 6(8), 675-712.
- Gee, G., Dudgeon, P., Schultz, C., Hart, A., & Kelly, K. (2014). Aboriginal and Torres Strait Islander social and emotional wellbeing. *Working together: Aboriginal and Torres Strait Islander mental health and wellbeing principles and practice*, 2, 55-68.
- Health Link. (2021). *HealthLink Smart Forms*. Health Link,.
- Isaacs, A. N., Pyett, P., Oakley-Browne, M. A., Gruis, H., & Waples-Crowe, P. . (2010). Barriers and facilitators to the utilization of adult mental health services by Australia's Indigenous people: seeking a way forward. . *International journal of mental health nursing*, 19(2), 75-82.
- Javed, B., Sarwer, A., Soto, E. B., & Mashwani, Z. U., (2020 ). The coronavirus (COVID-19) pandemic's impact on mental health. *The International journal of health planning and management*, 35(5), 993–996.
- Kaine, C. L., S. (2021). *The 'Missing Middle' Lived Experience Perspectives*. L. E. A. L. Marden.
- Kirmayer, L. J., Narasiah, L., Munoz, M., Rashid, M., Ryder, A.G., Guzder, J., Hassan, G., Rousseau, C. and Pottie, K. (2011). Common mental health problems in immigrants and refugees: general approach in primary care. *Cmaj*, 183(12), E959-E967.
- Leonard, W., & Metcalf, A., . (2014). *Going upstream: A framework for promoting the mental health of lesbian, gay, bisexual, transgender and intersex (LGBTI) people*. A. N. L. H. Alliance.
- LGBTIQ+ Health Australia. (2021a). *The 2021 update*. LGBTIQ+ Health Australia,.

- LGBTIQ+ Health Australia. (2021b, 13 May 2021). *SNAPSHOT OF MENTAL HEALTH AND SUICIDE PREVENTION STATISTICS FOR LGBTIQ+ PEOPLE: The 2021 update*. LGBTIQ+ Health Australia,.
- Liu B, J. D., Pye V, Dobbins T, Dore GJ, Matthews G et al. (2021). Whole of population-based cohort study of recovery time from COVID-19 in New South Wales Australia, . *The Lancet Regional Health—Western Pacific*, 12, 100193.
- McKenzie, S. K., Collings, S., Jenkin, G., & River, J.,. (2018). Masculinity, social connectedness, and mental health: Men's diverse patterns of practice, . *American journal of men's health*, 12(5), 1247-1261.
- MHIMA. (2014). *Framework for Mental Health in Multicultural Australia: Towards culturally inclusive service delivery*.
- Minas, H., Kakuma, R., San Too, L., Vayani, H., Orapeleng, S., Prasad-Ildes, R., Turner, G., Procter, N. and Oehm, D. (2013). Mental health research and evaluation in multicultural Australia: developing a culture of inclusion. [ *International journal of mental health systems*, 7(1), 1-25.
- Mission Australia. (2020). *Youth survey report*.
- Monash Health. (2020). *Royal Commission into Victoria's Mental Health System - Monash Health's submission*.
- [amazonaws.com/hdp.au.prod.app.vic-rcvmhs.files/8215/6711/5784/Monash\\_Health.pdf](https://amazonaws.com/hdp.au.prod.app.vic-rcvmhs.files/8215/6711/5784/Monash_Health.pdf)
- Nalbandian A, S. K., Gupta A, Madhavan MV, McGroder C, Stevens JS et al. (2021). Post-acute COVID-19 syndrome. *Nature Medicine*, 27, 601-615.
- National Eating Disorders Collaboration. (2020). *Comorbidity*. National Eating Disorders Collaboration,.
- National Mental Health Commission. (2018). *Fifth National Mental Health and Suicide Prevention Plan*.
- Outcome Health. (2021). *Population Level Analysis & Reporting (POLAR) Reports*.
- Parliament of Victoria. (2018). *Victorian Crime Statistics by LGAs*. Parliament of Victoria,.
- Penington Institute. (2020). *Australia's Annual Overdose Report*.
- Pricewaterhouse Coopers. (2018). *Chronic Disease Service Mapping Project for SEMPHN* Unpublished Data set.
- Public Health Information Development Unit. (2021a). *Aboriginal & Torres Strait Islander Social Atlas of Australia*.
- Public Health Information Development Unit. (2021b). *Social Health Atlas of Australia - Data by Primary Health Network*
- Public Health Information Development Unit (PHIDU). (2016). *Humanitarian Program, Family Stream and Skill Stream*. Public Health Information Development Unit (PHIDU),.
- Research Australia. (2017). *Australia Speaks!*
- Richter, L., & Heidinger, T. (2021). Hitting Close to Home: The Effect of COVID-19 Illness in the Social Environment on Psychological Burden in Older Adults. . *Frontiers in Psychology*, 4160.
- Rosenstreich, G. (2013). *LGBTI People Mental Health and Suicide. Revised 2nd Edition*. N. L. H. Alliance.
- SEMPHN and DHHS. (2018). *AOD Sector Forum 2018*.
- Slade, T., Johnston, A., Teesson, M., Whiteford, H., Burgess, P., Pirkis, J., & Saw, S.,. (2009). *The Mental Health of Australians 2. Report on the 2007 National Survey of Mental Health and Wellbeing*, .

- Snoswell, C. L., Caffery, L. J., Haydon, H. M., Thomas, E. E., & Smith, A. C. . (2020). Telehealth uptake in general practice as a result of the coronavirus (COVID-19) pandemic. *Australian Health Review*, 44(5), 737-740.
- South-Eastern Melbourne Primary Health Network. (2016). *Needs Assessment Stakeholder Survey*.
- South-Eastern Melbourne Primary Health Network. (2019). *Alcohol and other Drugs Consultation Forum*, .
- South-Eastern Melbourne Primary Health Network. (2019,). *Frankston Mornington Peninsula Suicide Prevention Advisory Group, South-Eastern Melbourne Primary Health Network*,.
- South Eastern Melbourne PHN. (2016). *PHN Stakeholder Engagement Survey November 2016* Unpublished Data set.
- South Eastern Melbourne PHN. (2019). *SEMPHN AOD Consumers and Carers Consultation October 2019*.
- South Eastern Melbourne PHN. (2020). *Needs Assessment Reporting Template - Core*.
- South Eastern Melbourne PHN. (2021a). *Microsoft Dynamics Customer Relationship Management (CRM) SEMPHN Dataset 2021*.
- South Eastern Melbourne PHN. (2021b). *Primary Mental Health Care Minimum Data Set FY20-21*.
- South Eastern Melbourne Primary Health Network (SEMPHN). (2017). *Mental Health Stepped Care Model*
- South Eastern Melbourne Primary Health Network (SEMPHN). (2019). *Consumers and Carers consultation*.
- Southern Academic Primary Care Research Unit (SAPCRU). (2011). *A report by the Southern Academic Primary Care Research Unit to the Refugee Health Research Consortium, Dandenong*.
- State of Victoria. (2020). *Dual diagnosis*.
- Stolk, Y., Minas, I. H., & Klimidis, S. (2008). Access to mental health services in Victoria: A focus on ethnic communities. *Fitzroy VIC: Victorian Transcultural Psychiatry Unit*.
- Strutt PA, J. C., Chen J, Muir C, Maurice O, Dawes P, Siette J, Botelho Dias C, Hillebrandt H, Wuthrich VM. . (2021). Stress and Coping in Older Australians During COVID-19: Health, Service Utilization, Grandparenting, and Technology Use. . *Clin Gerontol.* , 24, 1-13. .
- Ten to Men. (2020). *Alcohol use among Australian men - Chapter 2*. Ten to Men - The Australian Longitude Study on Male Health,.
- The University of Melbourne. (2020). *The impact of COVID-19 on GPs and non-GP specialists in private practice*, .
- Thomas, E. E., Haydon, H. M., Mehrotra, A., Caffery, L. J., Snoswell, C. L., Banbury, A., & Smith, A. C. . (2020). Building on the momentum: Sustaining telehealth beyond COVID-19. *Journal of telemedicine and telecare*.
- Turning Point. (2020). *Alcohol and drug-related telephone counselling and referral services in Victoria*.
- Turning Point. (2021a). *Alcohol and drug-related ambulance attendances in Victoria*. Turning Point,.
- Turning Point. (2021b). *Alcohol and drug-related hospitalisations (Victorian Admitted Episodes Dataset)*. Turning Point,.
- Turning Point. (2021c). *Alcohol and drug-related online treatment sessions in Victoria*. Turning Point,.

- Turning Point. (2021d). *Alcohol and drug-related telephone counselling and referral services in Victoria*. Turning Point,.
- Tyrrell, L., Duell-Piening, P., Morris, M., & Casey, S. (2016). *Talking about health and experiences of using health services with people from refugee backgrounds*, .
- UN High Commissioner for Refugees (UNHCR). (2013). *Asylum-seekers on bridging visas in Australia: Protection Gaps UNHCR Consultation*, . UN High Commissioner for Refugees (UNHCR).
- University of Sydney. (2020). Submission 655 Mental Health In.
- Victoria Department of Health. (2021). *Victorian Population Health Survey*. Victoria Department of Health,.
- Victorian Agency for Health Information. (2019a). *Victorian Population Health Survey*. Victorian Agency for Health Information,.
- Victorian Agency for Health Information. (2019b). *Victorian Public Health Survey*.
- Victorian Agency for Health Information. (2021). *Child and adolescent mental health services*. Victorian Agency for Health Information,.
- Victorian Agency for Health Information (VAHI). (2019). *Victorian Population Health Survey 2019 – Summary of results*. Victorian Agency for Health Information (VAHI),.
- Victorian Department of Human Services. (2008). *Refugee health and wellbeing action plan 2008-2010: Current and future initiatives*. Melbourne
- VTPHNA. (2021). *Head to Help IAR (Initial Assessment and Referral) Data Set* Unpublished data set.
- Whiteford, H., & Groves, A. . (2009). Policy implications of the 2007 Australian National Survey of Mental Health and Wellbeing. *Australian & New Zealand Journal of Psychiatry*, 43(7), 644-651.