

Western Victoria Primary Health Network Needs Assessment

Population Health and Planning Team

2023 Update



Supporting general practice, commissioning health services into gaps and driving service integration.

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Preface

Across Australia, thirty-one Primary Health Networks (PHNs) operate to improve the efficiency, effectiveness, and coordination of primary health services. To inform the planning and delivery of these endeavours, each PHN relies on a Needs Assessment, which identifies region-specific health and service needs. The team at Western Victoria PHN (WVPHN) is delighted to present our updated and revised Needs Assessment for 2023.

The WVPHN region is home to a myriad of diverse communities that contribute to the sought-after lifestyle offered across our inner- and outer-regional areas. To accurately depict the health and wellbeing challenges we face, data has been collected from a variety of publicly available sources as well as through consultations with staff, service providers, health experts, and communities. Some of the leading contributions made to this report are detailed in the Acknowledgements section.

The WVPHN Needs Assessment was fully revised and restructured for 2021. This is a result of the response to stakeholder feedback and changes in reporting requirements. As such, this Needs Assessment is focused on the insights that have been gathered by integrating the publicly available data with qualitative findings from a variety of stakeholders.

The 2023 WVPHN Needs Assessment Update Report begins with an overview of the WVPHN region and our communities in Chapter 1. The body of this report is then essentially broken up into five smaller Needs Assessment Reports; one for each of the four WVPHN subregions (Chapters 2, 3, 4, and 5), and a one that is specific to First Nations communities (Chapter 6). The internal version of this Report also contains our Prioritisation Process (Chapter 7) which discusses and integrates these findings to identify priorities specific to the WVPHN region. This is then used to guide our programs and activities.

The 2023 update includes some changes to improve readability and the addition of new data regarding:

- Socioeconomic indexes for areas (Census 2021)
- Crime rates
- Family violence rates
- Rates of chronic diseases
- Rates of potentially preventable hospitalisations
- Rates of avoidable mortality for chronic diseases
- Access to abortion services
- Access to long term contraceptives
- Additional insights from the region's Aboriginal Controlled Community Health Organisations

Throughout the Needs Assessment process, we have aimed to effectively inform all WVPHN activities and provide a key resource for anyone interested in the health and service needs of our region. There has been a particular focus on responding to the complexity of health and service needs across western Victoria. Some of our Priority Groups include First Nations communities, lesbian gay bisexual trans intersex asexual queer and other gender diverse people (LGBTIQA+), older Australians, and culturally and linguistically diverse (CALD) people.

Acknowledgements

Western Victoria Primary Health Network acknowledges the Traditional Owners and custodians of the unceded lands and waterways - the Wadda Wurrung, Gulidjan, Gadabanud, Keeray Wurrung, Peek Wurrung, Gunditjmara, Djab Wurrung, Wotjobaluk, Dja Dja Wurrung, Jadawadjarli, Wergaia, Jupagalk and Jaadwa peoples. We recognise their diversity, resilience, and the ongoing place that First Peoples hold in our communities. We pay our respects to the Elders, both past and present and commit to working together in the spirit of mutual understanding, respect, and reconciliation. We support self-determination for First Nations Peoples and organisations.

During the preparation of this Report, input and advice was sought and received from across the organisation and all staff are thanked for their contributions.

Publicly available data sets were used to compile a large portion of this Report. Although these have been referenced throughout, primary sources include the Australian Bureau of Statistics, Australian Institute of Health and Welfare, Australian Early Development Census, Crime Statistics Victoria, National Health Workforce Data Set, Public Health Information Development Unit, Regional Wellbeing Survey 2017, and the Victorian Health Information Surveillance System. In addition, many peer-reviewed journal articles were great sources of information for background and deeper understanding, as were the Grampians Health and Barwon Health Public Health Unit Catchment Plans.

Stakeholder and community engagement are central components of the WVPHN Strategic Plan and feedback from a myriad of stakeholders and consumers has significantly contributed to this report. Some of these contributions were made directly through our online engagement platform Meeting Place while others were indirectly compiled through the analysis of internal program evaluations. For the 2023 iteration of the WVPHN Needs Assessment, local stakeholders including our Clinical and Community Advisory Councils, mental health and alcohol and other drugs service providers, rural health services, general practices, Rural Workforce Agency Victoria, a range of community members, through workshops and individual meetings, provided valuable insights into the current health challenges facing local communities.

We are also grateful to all those not mentioned above who work to improve the efficiency, effectiveness, and coordination of primary health services in our region. As these ongoing efforts result in changes to health and service needs over time, the WVPHN Needs Assessment undergoes regular updates and revision. If you have any feedback on this document, or relevant data you would like to be considered for inclusion, please go to <https://www.meetingplacewestvicphn.com.au/>.

Rowena Clift

Chief Executive Officer

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Chapter 1 WVPHN overview

Our region

The Western Victoria Primary Health Network (WVPHN) region is 79,843km² in size and covers 35 per cent of Victoria, or just over 1 per cent of Australia.¹



8 ABORIGINAL COMMUNITY CONTROLLED HEALTH ORGANISATIONS



221 GENERAL PRACTICES



40 PUBLIC HOSPITALS



56 COMMUNITY HEALTH SERVICES



Figure 1.1. The WVPHN region and its health services

To engage with our wide range of health providers and consumers we have divided the WVPHN region into four subregions:

1. Geelong Otway
2. Ballarat Goldfields
3. Great South Coast
4. Wimmera Grampians

These are based around the major towns in western Victoria: Geelong, Ballarat, Warrnambool, and Horsham, respectively. Our region can also be divided into ten level-3 statistical areas (SA3s) or twenty-one Local Government Areas (LGAs). SA3s align exactly with the external WVPHN boundary and LGAs align closely with the subregion boundaries and Table 1.1).

Table 1.1. Area breakdown of the WVPHN region.

Subregions	SA3s[#]	LGAs
Geelong Otway	Geelong Barwon-West Surf Coast-Bellarine Peninsula	City of Greater Geelong Borough of Queenscliffe Colac-Otway Shire Golden Plains Shire Surf Coast Shire
Ballarat Goldfields	Ballarat Creswick-Daylesford-Ballan Maryborough-Pyrenees	City of Ballarat Central Goldfields Shire Hepburn Shire Moorabool Shire* Pyrenees Shire
Great South Coast	Warrnambool Colac-Corangamite Glenelg-Southern Grampians	Warrnambool City Corangamite Shire Glenelg Shire Moyne Shire Southern Grampians Shire
Wimmera Grampians	Grampians	Horsham Rural City Ararat Rural City Hindmarsh Shire Northern Grampians Shire West Wimmera Shire Yarriambiack Shire

*A portion of Moorabool Shire lays outside the Ballarat Goldfields subregion and WVPHN region. [#]SA3s do not align directly with subregion boundaries. LGAs do not align with PHN boundaries. SA3, Statistical area level 3; LGA, local government area.

In preparing this report, we have endeavoured to present the latest and most accurate data at the local level. Despite these efforts, there are a few limitations that should be kept in mind when interpreting our insights. Firstly, some data is not released for several years after the collection period which fails to capture any recent changes that may have occurred. Secondly, some data is based on a small proportion of the population or modelled estimates, and this produces large confidence intervals. In such cases, SA3 or even subregion level breakdowns have been used to increase statistical reliability. Thirdly, some data has been allocated from residential postcodes, which may not directly align with LGA or SA3 boundaries.

Other limitations relate to data availability. As a result, some sections of this report are more detailed than others, but this does not necessarily reflect the severity or personal impact of the topics nor our ongoing programs or activities. The coronavirus pandemic has also had a significant impact on every aspect of our lives, particularly those involving our health. In this regard, much of the data currently available was collected before the coronavirus pandemic and therefore may not reflect some of the health and service needs that have arisen since the introduction of stay-at-home orders and other restrictions. Moreover, the coronavirus pandemic has hindered our ability to undertake codesign and other stakeholder engagement that was going to inform this report.

Our communities

At the time of the last Census in 2021, the WVPHN region was home to 714,689 people. This includes around 270,000 (38 per cent) people living in the large regional city of Geelong as well as smaller and more isolated communities in LGAs such as West Wimmera, Hindmarsh, and Yarriambiack Shires.

Table 1.2 breaks down the population changes over a ten-year period between 2011 and 2021 of the various WVPHN LGAs and subregions.²

Table 1.2 Change in population over 10 years by local government area and subregion, 2011 to 2021.

Area	Total 2011	Total 2021	10-year change	% 10-year change
City of Greater Geelong	210,876	271,054	60,178	28.5%
Borough of Queenscliffe	3,006	3,286	280	9.3%
Colac-Otway Shire	20,353	22,419	2,066	10.2%
Golden Plains Shire	18,761	24,973	6,212	33.1%
Surf Coast Shire	25,864	37,695	11,831	45.7%
Geelong Otway	278,860	359,427	80,567	28.9%
City of Ballarat	93,501	113,763	20,262	21.7%
Central Goldfields Shire	12,497	13,476	979	7.8%
Hepburn Shire	14,378	16,603	2,225	15.5%
Moorabool Shire*	28,124	37,639	9,515	33.8%
Pyrenees Shire	6,667	7,676	1,009	15.1%
Ballarat Goldfields	155,167	189,157	33,990	21.9%
Warrnambool City	32,029	35,407	3,378	10.5%
Corangamite Shire	16,377	16,111	-266	-1.6%
Glenelg Shire	195,77	20,138	561	2.9%
Moyne Shire	15,950	17,372	1,422	8.9%
Southern Grampians Shire	16,354	16,580	226	1.4%
Great South Coast	100,287	105,608	5,321	5.3%
Horsham Rural City	19,276	20,434	1,158	6.0%
Ararat Rural City	11,181	11,865	684	6.1%
Hindmarsh Shire	5,788	5,690	-98	-1.7%
Northern Grampians Shire	11,852	11,945	93	0.8%
West Wimmera Shire	4,254	4,005	-249	-5.9%
Yarriambiack Shire	7,086	6,558	-528	-7.5%
Wimmera Grampians	59,437	60,497	1,060	1.8%
WVPHN region	593,751	714,689	120,938	20.4%

* The total ERP of Moorabool Shire is 35049 but only 7308 of this total live in the WVPHN region.

Local government areas do not directly align with WVPHN (outer subregion) boundaries.

While creating the unique lifestyle we enjoy, the diverse communities and geographical areas throughout our region have different health and service needs. Communities that have been identified as having unique health and service needs are discussed in more detail in the Priority Groups section for each subregion where data is available.

Chapter 2 Geelong Otway

Approximately half of the total population of the WVPHN region live in the Geelong Otway subregion, with more than a third in the City of Greater Geelong. The five local government areas (LGAs) comprising Geelong Otway include:

- Borough of Queenscliffe
- City of Greater Geelong
- Colac-Otway Shire
- Golden Plains Shire
- Surf Coast Shire

The level-3 statistical areas (SA3s) Geelong, Surf Coast-Bellarine Peninsula, and Colac Otway are also part of Geelong Otway (Table 1.1). The City of Greater Geelong is the most populated LGA in the WVPHN region, it is home to 271,054 of the Geelong Otway subregion's 359,427 residents.

Social determinants of health

Geelong Otway has the highest average level of socioeconomic advantage in the WVPHN region as well as the largest pockets of disadvantage. This variation is most pronounced in the City of Greater Geelong where there are areas on the fifth quintile of disadvantage only a few kilometres from areas on the first quintile.³ This disadvantage is characterized by a high percentage of residents who are unemployed, renting, receiving rent assistance, and living in social housing.⁴ Pockets of disadvantage in Geelong include Corio, Norlane, Whittington, Newcomb and Breakwater.⁵ In Golden Plains, there is a large stretch of disadvantage from around Mt Mercer, through Dereel, Illabarook, Berringa, Cape Clear, Happy Valley, Staffordshire Reef, Linton, Chepstowe and Lake Goldsmith, all the way to Skipton. In Colac-Otway, the most disadvantaged area is in Colac. Most of the Surf Coast Shire and Borough of Queenscliffe are categorised as being on the least disadvantaged quintile.⁶

Crime rates across the sub-region are generally lower than the Victorian average, except in Greater Geelong and Colac-Otway where they are similar to the state average.⁷

Priority groups

Variations in cultural background and disability status (as well as age and socioeconomic advantage), highlight the need for targeted and culturally sensitive health services that can meet the needs of diverse communities. Other needs identified by stakeholders included targeted health education, social inclusion, and outreach services (all with a focus on codesign).

There are similar proportions of people with low English proficiency living in Geelong and Colac-Otway

Geelong Otway has the most culturally diverse population in western Victoria.

Indeed, the City of Greater Geelong is home to more than half the culturally and linguistically diverse population in the region. There are almost 3,500 people with poor English proficiency in Geelong.⁸ A

similar proportion of people in Colac-Otway have poor proficiency in English, equating to approximately 250 people. While the number of people identifying as lesbian, gay, bisexual, transgender, intersex, queer and/or asexual (LGBTIQ+) is not accurately measured in Australia, estimates have been made using the results of the Victorian Population Health Survey. The proportion of LGBTIQ+ people is estimated to be greater than the state average in Colac-Otway and Surf Coast Shires.⁹ Colac Otway and Greater Geelong both have rates of severe or profound disability higher than the state average.¹⁰ Additionally, the Geelong Employment Service Area has the third highest proportion of Disability Management Services for people with a psychiatric disability in Australia.¹¹

Children, women, and families

Illness and disease in Geelong Otway could be mitigated by reducing health risk factors in early life. Indicators of health in children, women and families vary across the subregion. Colac-Otway Shire has higher rates of family violence than the Victorian average, while Queenscliffe, Golden Plains and Surf Coast have the lowest rates in the WVPHN region.¹² The fertility rate in Geelong Otway is above the state average in all municipalities except for Queenscliffe.¹³ There are some positive indicators of maternal and child health. The proportion of low birthweight babies is lower or similar to the state average across the subregion and attendance at antenatal care is high. Breastfeeding rates at three months are similar to or above the state average, although this does not extend to six months on the Surf Coast. The adolescent birth rate is lower than the Victorian average across the subregion. However, there are some areas of concern. The percentage of mothers who smoked tobacco during pregnancy is high and the infant mortality rate is twice the state average in Colac-Otway Shire. Moreover, there are low childhood immunisation rates among two-year-old First Nations children in Colac-Otway Shire (50 per cent) and the City of Greater Geelong (85.7 per cent), but these LGAs recover with 100 per cent immunisation coverage among five-year-old children.¹⁴ Other mid- and late-childhood measures of health and wellbeing, such as childhood nutrition and vulnerability are above state averages throughout Geelong Otway, suggesting that health risk factors are more of a public health challenge in early life.

Chronic conditions

Stakeholders have identified a need for health education programs and health promotion with a focus on prevention, early intervention, exercise, and diet. While rates of many chronic diseases are similar to or lower than the state average, there are a few exceptions. The rate of mental and behavioural problems is higher across the region, particularly in Colac-Otway and Geelong. This aligns with the rate of self-reported mental health conditions being above the state average in Geelong, Golden Plains and Colac-Otway. Rates of asthma are higher than the state average across most of the subregion with the highest rates in Queenscliffe, Geelong and Golden Plains.

Rates of asthma and mental health and behavioural problems are higher than the Victorian average in Geelong-Otway

Potentially preventable hospitalisations are well above the state average in Colac-Otway Shire. This is

due to a higher rate of hospitalisation for both acute and chronic conditions. PPHs for asthma are high in Colac-Otway and Golden Plains, as are PPHs for COPD in Colac-Otway. Iron deficiency anaemia hospitalisations are high in Greater Geelong and Colac-Otway, with hospitalisations in Colac-Otway 2.4 times the state average.

Avoidable deaths due to cancer, ischaemic heart disease, respiratory diseases and circulatory diseases were higher than the state average in Colac-Otway, Greater Geelong, and Golden Plains. Avoidable death from diabetes was above state average in Greater Geelong, while deaths caused by cerebrovascular disease and COPD were higher in both Colac-Otway and Geelong. Deaths attributed to suicide and self-inflicted injury were well above the state average in Golden Plains Shire and the City of Greater Geelong but were also above the average in the Surf Coast Shire.

Cancer

Service providers¹⁵ and other stakeholders have identified a need for culturally sensitive public education and health promotion to assist people to undergo cancer screening and address issues they prioritise over their health.

There are high rates of breast, bowel, prostate, and stomach cancers in Geelong Otway. The Borough of Queenscliffe has the highest rates of breast cancer screening in the WVPHN region, and bowel and cervical cancer screening rates are highest in Surf Coast-Bellarine Peninsula (which includes the Borough of Queenscliffe).¹⁶ Similarly, breast, bowel and cervical cancer screening rates are also above the national average in Geelong and Barwon West. Despite this, however, breast cancer incidence and mortality counts are highest in the Borough of Queenscliffe.¹⁷ Furthermore, bowel cancer mortality rates are above the national average in Surf Coast-Bellarine Peninsula (and throughout Geelong Otway). Prostate cancer incidence and mortality rates show the same pattern. Similarly, incidence and mortality rates for stomach cancer are high in Surf Coast-Bellarine Peninsula.¹⁸

Alcohol and other drugs

Reducing the harmful use of alcohol and the cessation of smoking are areas of need in Geelong Otway. The Borough of Queenscliffe and Surf Coast Shire have the highest lifetime risk of alcohol-related harm for adults in the WVPHN region.¹⁹ In addition, the City of Greater Geelong and Colac Otway Shire have high rates alcohol-related ambulance attendances²⁰ and use of alcohol and drug services. Furthermore, the Borough of Queenscliffe and Colac Otway and Surf Coast Shires sell more litres of alcohol per

Despite low levels of disadvantage, the highest lifetime risk of alcohol-related harm was found in residents in Queenscliffe and Surf Coast Shire

person than the state average.²¹ This misuse of alcohol could be related to the high rate of stomach cancers discussed above. Moreover, the City of Greater Geelong and Colac Otway have high rates of smoking among adults. In this regard, incidence and mortality rates for lung cancer are above the national average among males and females throughout Geelong Otway. Health promotion including ongoing education of the potential side effects to improve social attitudes and better advertising of available services and their

efficacy have been suggested to address these needs.

Drug misuse is of particular concern in the City of Greater Geelong and Colac Otway Shire. The City of Greater Geelong and Colac Otway Shire have high rates of ambulance attendances related to analgesics and anti-depressants. Alcohol and drug services supporting people with illicit drug-related use are also high in Colac Otway Shire and the City of Greater Geelong. In addition, the City of Greater Geelong is the only LGA in the WVPHN region with rates of illicit drug related ambulance attendances above the national average. Furthermore, Geelong has the highest rate of both amphetamine and crystal meth-amphetamine related ambulance attendances in the WVPHN region. The City of Greater Geelong also has high rates of anti-psychotic related ambulance attendances and pharmaceutical related hospital admissions. Suggestions to address drug misuse include treating underlying trauma and/or other mental health issues, increased regulations around high-risk medications, improve access to non-pharmaceutical and face-to-face programs, and education for providers and consumers.

Mental health

The latest Census information identifies areas in the Geelong Otway subregion with the highest reported mental health conditions as middle and outer suburbs of Geelong.²² Using psychological distress to predict the need for professional help, Colac-Otway and Surf Coast Shires require additional mental health services. Furthermore, the proportion of residents who feel depressed sometimes or all the time (19.1 per cent) and think the friendliness of their community (20.6 per cent) and local economy is getting worse (25.1 per cent) are highest in the combined area of Colac Otway and Surf Coast Shires.²³ Options to access services outside Headspace and an increased uptake of digital health could be used to increase mental health treatment rates.²⁴

Similarly, the proportion of adults who sought professional help for a mental health problem is below the Victorian (16 per cent) and rural Victorian (18.1 per cent) averages in Colac Otway Shire (12.3 per cent). Despite increased mental health needs, access to mental health services is more likely to be considered poor in Colac Otway Shire (42.6 per cent) compared to the rural and regional average in Victoria (39.3 per cent). This highlights the need to improve access to mental health practitioners in Geelong Otway, particularly the option of free services. Other ways to increase mental health treatment rates identified by stakeholders include supporting the next generation of locally trained clinicians, collaborating with universities and research organisations, and ensuring all GPs know how to refer to appropriately.

Geelong has high rates of psychotropic use and suicidal behaviours. Residents under 18 years of age living in Geelong have the highest rate of prescriptions for antipsychotic medicines in the WVPHN region. Geelong also has the highest number of prescriptions dispensed for attention deficit hyperactivity disorder medicines to people under 18 years of age in Victoria.²⁵ Among all age groups, rates of overnight hospitalisations for bipolar and mood disorders are more than double the national average in Barwon-West.²⁶ In addition, the number of mental health treatment plans is above the Victorian and Australian averages in Geelong and Surf Coast-Bellarine Peninsula.²⁷ Geelong also has the highest rates of intentional self-harm hospitalisations for males and females in the WVPHN region.²⁸ As stated

earlier, deaths attributed to suicide and self-inflicted injury were well above the state average in Golden Plains Shire and the City of Greater Geelong but were also above the average in the Surf Coast Shire.

This demonstrates that above-average mental health treatment rates may still not meet the needs of

Suicide and self-inflicted injury were well above the state average in Golden Plains Shire and the City of Greater Geelong but were also above the average in the Surf Coast Shire

some communities with more significant challenges. In addition to improving access to mental health treatment (discussed above), there are several underlying issues that could be addressed. These include changing how we look at suicide, ensuring there is no wrong door (even in non-healthcare settings), social prescribing, addressing socioeconomic and other health risk factors, focusing on priority groups, and increasing telehealth and outreach programs.

Access to services

Access to services could be improved through a stronger focus on digital health technologies at high school and tertiary health education providers, support for private practitioners to support students, increased public awareness of how to access digital health, and the use of nurse practitioners in primary care.

Overall, service access is above the WVPHN and national averages in Geelong Otway. This may reflect the average level of socioeconomic advantage and the availability of services in this area. For instance, the percentage of people who received a general practitioner (GP) Chronic Disease Management Plan or allied health service was above the state averages in Surf Coast-Bellarine Peninsula and Geelong. Similarly, in the WVPHN region, the percentage of out-of-pocket costs were highest for GP, specialist, and non-hospital Medicare services in Surf Coast-Bellarine Peninsula followed by Barwon West.²⁹ Furthermore, Golden Plains Shire has relatively few nurses, GPs, and psychologists per population. It is possible, however, that many residents in these areas travel to Geelong regularly resulting in less demand for services. In support of this suggestion, majority of private dwellings have a motor vehicle in Surf Coast and Golden Plains Shires. In addition, the percentage of residents who rated their access to health services as poor is below the national average throughout Geelong Otway.

Despite these averages, however, there are still areas of service scarcity and pockets of disadvantaged groups who fall through the cracks. Access to medical abortion can be difficult in rural and regional areas. Women in the Surf Coast Shire are prescribed the medical abortion medication PBS 10211K at a greater rate than the Victorian average. People from across the region make use of prescribers and pharmacies in both Geelong and the Surf Coast, where the rate of prescribing professionals are similar to the state average and rates of dispensing of the drug are above average.

The demand for long term contraceptives is above the state average across the region. Women in Colac-Otway, Golden Plains, Greater Geelong and Queenscliffe use the contraceptive implant at rates higher than the state average. The implantation service is provided at a rate well above the state average in Queenscliffe, and a little above state average in Greater Geelong and Colac-Otway. The demand for the service appears to be unmet in Golden Plains with women travelling to nearby areas to access

contraceptive implants.

The demand for intra-uterine devices is above the state average throughout region. Professionals trained in IUD placement are primarily based in Geelong. There are below average rates of IUD placement in Surf Coast, Queenscliffe and Golden Plains.

We have heard from service providers and consumers that older people's engagement with services can be a complex issue. Stigma and older people's resilience can hinder access. Older people may be fearful about being put into care. At the same time, navigation support has ebbed away from assessment teams and local government. Services have told us that communication and coordination between the acute and community/residential sectors could be improved. Services with established trust and rapport, such as GPs and allied health, may be sought out for advice and support to connect.

Older people

Over the past ten years, the proportion of people aged 65 years and over in the Geelong Otway subregion has grown from 17 per cent to 20 per cent, an increase of just over 25,000 people. Moreover, the greatest variation in age is also found in Geelong Otway with 45.1 per cent of the population aged 65 years and over in the Borough of Queenscliffe but only 15.3 per cent in Golden Plains Shire.³⁰

45 per cent of the population are aged 65 years and over in the Borough of Queenscliffe but only 15 per cent in Golden Plains Shire

Service providers outlined that social isolation and loneliness is a key factor underlining poor health outcomes for older people. Geelong has the highest number of people aged 65 years and over, living alone in the WVPHN region, just over 10,000 people.³¹ Service providers outlined the particular vulnerability amongst people living alone who are women victim-survivors with long histories of abuse and people whose long-term partner had died.³² The City of Greater Geelong has the highest number of older people living in 'jeopardy' in WVPHN (and the highest rate in Geelong Otway subregion), which considers combinations of living alone, with disability, low income and renting.³³ Direct care workers also identified a cohort of older people with mental health issues whose isolation and anxiety have been exacerbated through the pandemic.

Housing insecurity can have a significant impact on older people's health outcomes. Older people who are renting will face increasing financial pressure, especially as the pandemic sees more people moving to coastal and regional areas, putting pressure on housing supply. The City of Greater Geelong has the highest number of older people in private rental in the WVPHN region.³⁴ Geelong's rate of older people in private rental (11.2 per cent) was also high in comparison to other local government areas in the Geelong Otway subregion (ranging from 4.2 per cent to 8.4 per cent).³⁵

The City of Greater Geelong has the highest number of people experiencing homelessness in the WVPHN region.³⁶ In Australia, the number of older women experiencing homelessness grew by 33 per cent over the last Census period, the fastest growing homelessness cohort.³⁷ The key reasons for older women accessing homelessness services are family violence, housing crises and financial difficulties.

The City of Greater Geelong has a much greater number (1,308) and proportion (3 per cent) of older people who were born overseas and who speak English not well or not at all in the Geelong Otway subregion. Other local government areas in the subregion have between 3 and 24 people, and proportions of between 0.2 per cent and 0.6 per cent.

Chapter 3 Ballarat Goldfields

The Ballarat Goldfields subregion is made up of the following local government areas (LGAs):

- City of Ballarat
- Central Goldfields Shire
- Hepburn Shire
- Pyrenees Shire
- Moorabool Shires (this does not include the city of Bacchus Marsh on the eastern fringe of Moorabool Shire).

The Ballarat, Creswick-Daylesford-Ballan, and Maryborough-Pyrenees statistical areas level-3 (SA3s) are also part of this subregion (Table 1.1).

The City of Ballarat is the second most populated LGA in the WVPHN region, home to 113,763 (60 per cent) of the total 189,157 residents living in the Ballarat Goldfields subregion.

Social determinants of health

Central Goldfields Shire has the highest level of socioeconomic disadvantage of any LGA in the WVPHN region and is the second most disadvantaged municipality in Victoria.³⁸ The Shire has a high unemployment rate³⁹, high crime rate,⁴⁰ lower educational attainment and lower incomes compared with other parts of the WVPHN region and Victoria.⁴¹

There are pockets of disadvantage throughout the Ballarat Goldfields region. While the Ballarat municipality is on the third quintile of disadvantage, there are significant proportions of the municipality

Central Goldfields Shire has the highest level of socioeconomic disadvantage of any LGA in the WVPHN region and is the second most disadvantaged municipality in Victoria

where disadvantage is much greater including the Wendouree, Sebastopol and Delacombe areas.⁴² The City of Ballarat also has the highest crime rate in the Ballarat Goldfields subregion.⁴³ In Hepburn Shire, there are pockets of disadvantage in Clunes and Creswick.⁴⁴ In Pyrenees Shire, there are areas of higher disadvantage in Avoca, Beaufort and in the Landsborough area. In Moorabool, there is higher disadvantage in the Lal Lal and Morrisons areas and in Ballan.⁴⁵

Priority groups

The City of Ballarat has a high percentage of residents living in privately rented dwellings, social housing, and dwellings rented from state or territory housing authority.⁴⁶

While the number of people identifying as lesbian, gay, bisexual, transgender, intersex, queer and/or asexual (LGBTIQ+) is not accurately measured in Australia, estimates have been made using the results of the Victorian Population Health Survey. The City of Ballarat (followed by Hepburn Shire) has the highest percentage of LGBTIQ+ people in the WVPHN region at rates above the Victorian average of 5.7 per cent.⁴⁷

The rate of profound or severe disability is greater than the state average in all parts of the subregion, except for Golden Plains. It is particularly high in Central Goldfields (11 per cent) and Pyrenees (8.3 per cent) compared with the state average of 6.1 per cent.⁴⁸ The combined area of the City of Ballarat, Ararat Rural City, Moorabool, Pyrenees, and Hepburn Shires has the highest percentage of employment management service commencements for people with intellectual disability in western Victoria.⁴⁹ This cohort often requires similar supports to individuals with cognitive decline.

Children, women, and families

Rates of family violence are higher than the Victorian average in Central Goldfields Shire and the City of Ballarat.⁵⁰ Central Goldfields Shire has the highest rates of domestic and/or family violence service usage,⁵¹ family members affected by family violence, domestic and/or family violence events,⁵² and residents who consider domestic violence a problem⁵³ in the WVPHN region. In addition, the City of Ballarat has rates of domestic and/or family violence service usage, family members affected by family violence, domestic and/or family violence events, and residents who consider domestic violence a problem above the state average.

Many maternal and child health risk factors are above the state average in Ballarat Goldfields which may increase the risk of poor health outcomes throughout life. Prenatal risk factors include adolescent pregnancy and inadequate prenatal care. Central Goldfields Shire and the City of Ballarat both have a high proportion of teenage mothers⁵⁴ and mothers who smoked during pregnancy.⁵⁵ The percentage of mothers who used midwifery services is below the national average throughout Ballarat Goldfields. Maryborough-Pyrenees has the lowest percentage of mothers who attended an antenatal visit in the first trimester in the WVPHN region.⁵⁶ The City of Ballarat, Moorabool Shire and Central Goldfields Shire each have rates of low birth weight babies greater than the Victorian average.⁵⁷

The annual infant death rate is above the national and state averages throughout Ballarat Goldfields

Indicators of child health vary across the subregion. The annual infant death rate is above the national and state averages throughout Ballarat Goldfields. The number of deaths among infants (<1 year of age) and young children (1-5 years of age) was highest in Ballarat and Maryborough-Pyrenees. The percentage of fully breastfed babies at three months of age was the lowest in Central Goldfields and below the Victorian average in Hepburn.⁵⁸ The Australian Early Development Census shows that more than a third of children in Central Goldfields Shire are developmentally vulnerable compared with 20 per cent across Victoria.⁵⁹ Conversely, childhood immunisation rates were close to, or above, the Victorian average across the Ballarat Goldfields subregion at one and five years of age, except in Hepburn Shire.

Chronic conditions

Chronic diseases are a population health challenge for Ballarat Goldfields. For instance, modelled estimates indicate that there is a high rate of asthma and above average rate of COPD throughout the Ballarat Goldfields region.⁶⁰ Self-reported rates of lung conditions and asthma are also above the

Rates of asthma, COPD and other lung conditions are above Victorian averages throughout the Ballarat Goldfields region

Victorian average in all municipalities within the sub-region. Almost one in five residents in Ballarat and Central Goldfields are estimated to have arthritis. Self-reported rates of mental health conditions are higher than the Victorian average across the Ballarat Goldfields subregion.

In this regard, rates of total potentially preventable hospitalisations (PPHs) are above the Victorian average across the entire Ballarat Goldfields subregion but PPHs due to chronic conditions are higher in Ballarat and Central Goldfields. Iron deficiency anaemia hospitalisations are higher than the Victorian average across the subregion. Asthma-related admissions are higher in the City of Ballarat and Hepburn Shire, diabetes-related admissions are higher in Central Goldfields Shire, and hypertension-related admissions are higher in Hepburn Shire. Hospitalisations related to chronic obstructive pulmonary disease are higher than the Victorian average in both Central Goldfields Shire and the City of Ballarat.

There are high rates of avoidable deaths from a range of chronic diseases including:

- Diabetes (Central Goldfields and Ballarat)
- Circulatory system diseases (entire subregion especially Central Goldfields, Hepburn, and Pyrenees)
- Ischaemic heart disease (Ballarat, Central Goldfields, and Golden Plains)
- Cerebrovascular diseases (Ballarat, Central Goldfields, Hepburn, and Pyrenees)
- Respiratory system diseases (Central Goldfields, Ballarat, Hepburn, Moorabool, and Pyrenees)
- COPD (entire subregion especially Central Goldfields, Ballarat, and Pyrenees)
- Suicide and self-inflicted injuries (Ballarat, Golden Plains, Hepburn, and Moorabool)

To improve health outcomes and reduce premature deaths, there is a need to reduce health risk factors and manage those with existing chronic disease.⁶¹

Pyrenees Shire has the highest percentage of general practice (GP) patients with a chronic condition in Ballarat Goldfields. The percentage of people who received a GP Chronic Disease Management Plan is above the national average in Creswick-Daylesford-Ballan, particularly in Hepburn Shire⁶². Hepburn and Central Goldfields Shires have the highest percentage of active GP patients with chronic obstructive pulmonary disease. Similarly, Hepburn Shire has the highest rates of preparation (MBS item 721) and review (MBS item 731) of GP management plans for First Nations patients in the WVPHN region⁶².

Cancer

Rates of common cancers are high throughout Ballarat Goldfields⁶³ despite relatively high screening rates⁶⁴. Although still above the national average, Creswick-Daylesford-Ballan has the lowest breast and bowel cancer screening participation rates in western Victoria⁶⁴. Despite this, however, Maryborough-Pyrenees has rates of breast cancer above the national average⁶³. Similarly, bowel cancer incidence and mortality rates are above the national average throughout Ballarat Goldfields, particularly among males in Central Goldfields and Pyrenees Shires. In contrast, participation in the National Cervical

Screening Program (NCSP) is below the national average in Maryborough-Pyrenees and Ballarat⁶⁴. Hepburn Shire has the lowest rates of Human Papilloma Virus immunisation in western Victoria. Despite relatively low NCSP participation, rates of cervical cancer are below the national average in the WVPHN region.⁶⁴

Cancer incidence and mortality are key issues in Maryborough-Pyrenees which has the highest rates of 9 of the 19 most prevalent cancers in the WVPHN region. There are also several other cancers with high incidence rates in Ballarat Goldfields. These include uterine cancer (in Ballarat and Maryborough-Pyrenees), melanoma of the skin and lymphoma (in all SA3s) stomach cancer (in Creswick-Daylesford-Ballan), prostate cancer (incidence and mortality rates) (in all SA3s, especially Maryborough-Pyrenees), lung cancer (incidence and mortality rates) (in Maryborough-Pyrenees), bladder cancer (in Maryborough-Pyrenees), kidney cancer (in Maryborough-Pyrenees), leukaemia (in Maryborough-Pyrenees), and pancreatic cancer (in Maryborough-Pyrenees). In addition, all cancers besides thyroid and the female specific cancers effect males more than females in Ballarat Goldfields⁶³.

Alcohol and other drugs

Alcohol and smoking are important health risk factors in Ballarat Goldfields. The City of Ballarat, Central Goldfields and Pyrenees Shires have high rates of alcohol-related ambulance attendances⁶⁵. Liquor consumption per person for the most popular alcoholic beverages is above the state average in the City of Ballarat and Central Goldfields Shire⁶⁶. Furthermore, Central Goldfields Shire also has the highest rates of alcohol related deaths and alcohol related family violence events in the WVPHN region. Adult smoking rates are above the state average throughout Ballarat Goldfields, particularly in Central Goldfields and Pyrenees Shires. As a result, lung cancer incidence is highest in Maryborough-Pyrenees especially among males⁶³.

Drug misuse is another key health risk factor in Ballarat Goldfields. For instance, the City of Ballarat and Central Goldfields Shire have high rates of anti-depressant, anti-psychotic, pharmaceutical and analgesics-related ambulance attendances. Pyrenees has a high rate of amphetamine-related ambulance attendances. The City of Ballarat and Central Goldfields Shire have the highest rates of pharmaceutical-related hospital admissions and use of alcohol and drug services in the WVPHN region. Maryborough-Pyrenees has the eleventh highest dispensing rate of opioid prescriptions in Australia⁶⁷. In contrast, the percentage of people who received a Medication Management Review (residential) is above the national average throughout Ballarat Goldfields⁶⁸. Stakeholders have advocated for the importance of educating consumers and GPs around good pain management and non-pharmaceutical interventions⁶¹.

Mental health

Central Goldfields Shire has the highest proportion of adults who are not satisfied with their lives⁶⁹ and who seek professional help for a mental health problem. Access to mental health services was more likely to be considered poor in Pyrenees Shire compared to the rural and regional averages in both

Victoria and Australia⁶⁹.

Rates of mental health treatment plans are above the state and national averages in Ballarat Goldfields. Ballarat also has the tenth highest rate of prescriptions dispensed for anxiolytic medicines in Australia for people aged 18 to 64 years. Similarly, the number of antidepressant medications dispensed under the pharmaceutical benefits scheme to people aged 18 to 64 years is also above the Victorian and Australian averages throughout Ballarat Goldfields, particularly in Maryborough-Pyrenees⁷⁰. In addition, the proportion of people with a mental illness and a cardiovascular disease, type 2 diabetes, and/or chronic obstructive pulmonary disease comorbidity is also highest in Maryborough-Pyrenees⁷¹. Tragically, suicide is also a particular concern in Ballarat Goldfields. The male suicide rates are 51% higher than the national average in Maryborough Pyrenees and 33% higher in Ballarat⁷². Additionally, in late 2022 there was a cluster of suicides in Ballarat.

Suicide is also a particular concern in Ballarat Goldfields

Access to services

Rates of suicide, chronic diseases, cancers, and preventable deaths are above state and national averages in Ballarat Goldfields, particularly in Maryborough-Pyrenees. Although the prevalence of risk factors appears to be the primary challenge for Ballarat Goldfields, there is still a need to improve service access. For instance, Pyrenees Shire is one of the local government areas with the fewest GPs per 1,000 population in the WVPHN region⁷³. In addition, the percentage of adults with fair/poor self-reported dental health is also highest in Pyrenees and Central Goldfields Shires. Ballarat Goldfields has the highest percentage of adults who did not see or delayed seeing a dentist, hygienist, or dental specialist due to cost in western Victoria,⁷⁴ and lower urgency emergency department presentations are high in Ballarat⁷⁵. Moreover, the percentage of people who used an optometry service is lowest in Creswick-Daylesford-Ballan⁷⁶. Finally, average Medicare benefits expenditure per patient for non-hospital Medicare services was below the national average throughout Ballarat Goldfields and the whole WVPHN region⁷⁷.

Access to abortion has emerged as an issue across the WVPHN catchment. There are two public clinics providing abortion services in Ballarat, one in Creswick and one in Maryborough. Examination of data around prescriptions of 10211K shows that there is relatively high demand for the medication across the Ballarat Goldfields region but a reliance on prescribers in Central Goldfields and Ballarat to provide the service. Prescriptions are primarily filled in Ballarat. This indicates that women trying to access abortion services may need to attend a clinic in one area (and often not their local area) but may also need to travel to have their prescription filled.

Access to long-term contraceptives is another area where services are not meeting local demand in the Ballarat Goldfields subregion. Contraceptive implants and intra-uterine device (IUD) placement require health professionals to undergo additional training. Review of patient location and provider location demonstrates that access to both types of contraceptives is very limited in Pyrenees, Hepburn, and Moorabool. Demand and supply of service for contraceptive implants matches in Central Goldfields but

access to IUDs is limited. Ballarat seems to be providing services from the broader Central Goldfields and Wimmera Grampians subregions.

Older people

As people age, there is a greater risk of disability and ill health. Over the past ten years, the proportion of older people within the Ballarat Goldfields subregion has grown from 16% to 21%, an increase of almost 14,000 people. There is a high percentage of residents aged 65 years and over (27.3%) compared to the national (17.2%) and state (16.8%) averages in Pyrenees Shire. Despite this, Pyrenees Shire has the lowest number of beds at Residential Aged Care Facilities in the WVPHN region and the highest rate of homelessness in Ballarat Goldfields.

There is a high percentage of residents aged 65 years and over (27.3%) compared to the national (17.2%) and state (16.8%) averages in Pyrenees Shire

Ballarat and Central Goldfields have high proportions of older people renting. Ballarat has just over 2,000 older people renting private dwellings, with around 250 older renters in a 'jeopardy' situation living with disability and low income. Ballarat and Central Goldfields also have higher rates of older people living alone than the average in the WVPHN region. Central Goldfields has the lowest SEIFA score across WVPHN. Maryborough, Avoca, and Sebastopol have amongst the lowest levels of median personal income across SA2 areas in the WVPHN region.

Central Goldfields features across several key indicators, both at the subregional and WVPHN region levels. This includes a high rate of older people who need assistance with activities, and also people whose need for formal assistance is unmet. At the subregional level, Central Goldfields has the highest rate of people aged 65 years and over with two or more chronic conditions, five or more medications, people with a profound or severe disability, and people with a profound or severe disability and living in the community⁷⁸.

Chapter 4 Great South Coast

Although many residents live in large regional towns, the Great South Coast covers a large area and includes many isolated communities. The Great South Coast subregion is comprised of:

- Warrnambool City
- Corangamite Shire
- Glenelg Shire
- Moyne Shire
- Southern Grampians Shire

The Warrnambool, Glenelg-Southern Grampians, and Colac-Corangamite statistical area level-3s (SA3s) are also part of this subregion (Table 1.1). Warrnambool City is the most populated LGA in the Great South Coast subregion, it is home to 35,407 (34 per cent) people of the subregion's 105,608 residents.

Social determinants of health

Socioeconomic disadvantage and housing needs are health challenges in the Great South Coast. Moyne is the only LGA in the Great South Coast subregion with a level of socioeconomic advantage above the national average. In contrast, Glenelg Shire has the lowest level of socioeconomic advantage in the Great South Coast and falls into the second quintile of disadvantage. In addition, variation in socioeconomic advantage is greatest in Warrnambool City which contains areas of significant advantage and significant disadvantage. In Corangamite Shire, there are pockets of disadvantage in Cobden, Terang, Lismore, Derrinallum, Skipton and Camperdown. In Moyne Shire, there are areas of disadvantage around Purnim/Panmure, Macarthur, Woolsthorpe and Koroit. An SA1 in Camperdown is in the second percentile of disadvantage and is the most disadvantaged area in the Great South Coast. In Glenelg, disadvantage is clustered around Casterton, Merino, Dartmoor, Heywood, and Portland, while in Southern Grampians Shire there are pockets of disadvantage in Hamilton, Coleraine, Balmoral and Penshurst.

The proportion of people living in social housing is above the state average in Warrnambool, Glenelg, and Southern Grampians. The rate of households in rental stress is higher than the state average in Glenelg and Warrnambool while the rate of low-income households is high across the subregion. The rates of homelessness are higher than the Victorian average in Warrnambool and Glenelg.

Health risk factors

There are several risk factors, such as low rates of healthy eating and physical exercise, that contribute to some of the poor health outcomes in the Great South Coast. For instance, there is a high percentage of overweight and obese adults (in Corangamite Shire) and adults who consumed take-away food more than once per week (in Glenelg Shire). In addition, the percentage of adults who complied with fruit consumption guidelines was below the Victorian average in all LGAs of the Great South Coast⁷⁹.

Moreover, Warrnambool City has the highest rates of family violence specialist services⁸⁰ and the second highest rate of family members affected by family violence in the WVPHN region⁸¹.

Priority Groups

Glenelg Shire has the highest percentage of First Nations residents in the WVPHN region, and the health and wellbeing of these communities is discussed in Chapter 6. The rate of severe or profound disability is higher than the state average in all municipalities in the subregion (except for Moyne), particularly in Glenelg.⁸² Among residents with disability in the WVPHN region, the rate of employment support services for disability employment services was highest in Glenelg and Southern Grampians Shires. Similarly, the proportion of disability management services is above state and national averages throughout the Great South Coast. Furthermore, the combined LGAs of Warrnambool City, Moyne, Corangamite, and Colac-Otway Shires has the highest proportion of disability management services for people with physical disability in western Victoria⁸³.

The rate of severe or profound disability is higher than the state average in all municipalities in the subregion (except for Moyne), particularly in Glenelg

Children, women, and families

The fertility rate is higher than the Victorian average in all LGAs in the Great South Coast and there are a range of maternal and child health risk factors. The rates of family violence are higher than the state average in Glenelg, Warrnambool and Colac-Otway.⁸⁴ Glenelg and Southern Grampians Shires have the highest rates of adolescent pregnancy, also above the state average. The rate of low birthweight babies is high in Southern Grampians Shire, and there are high rates of smoking in pregnancy across the whole subregion. In addition, there is a low percentage of mothers who attended an antenatal visit in the first trimester (in Glenelg-Southern Grampians and Colac-Corangamite), attended 5 or more antenatal visits (in Colac-Corangamite), and used midwifery services (in all SA3s).⁸⁵ Furthermore, the annual infant death rate is above the national average throughout the Great South Coast. There are also high rates of developmentally vulnerable children in Corangamite, Glenelg and Southern Grampians Shires. Finally, childhood immunisation rates are above the national average throughout the Great South Coast and are higher among First Nations children (except in Southern Grampians Shire) for two-year-olds.⁸⁶

Chronic conditions

Rates of chronic disease are similar to the state average in the Great South Coast in most cases, with a few exceptions. The incidence of asthma, arthritis and mental health conditions are higher than the state average across most of the subregion, and the estimated incidence of diabetes is higher in Glenelg Shire. Similarly, rates of self-reported asthma are higher than state average across the subregion, as are the rates of arthritis in Glenelg, Southern Grampians, and Warrnambool.

Despite similar rates of chronic disease, PPHs for both acute and chronic conditions are higher in all municipalities in the Great South Coast. PPHs due to angina are higher across all LGAs except Warrnambool City. PPHs due to asthma are more than double the state average in Moyne Shire, and are also higher in Corangamite, Southern Grampians and Warrnambool. Rates of avoidable

Despite similar rates of chronic disease, PPHs and avoidable mortality from a range of chronic conditions are above the state average

hospitalisations for COPD are high across the subregion, particularly in Glenelg, Southern Grampians, and Warrnambool. PPHs for chronic hypertension are lower than the average across the subregion except for Glenelg, where they are more than twice the state average. Iron-deficiency anaemia is responsible for a higher rate of hospitalisations than the state average in Corangamite and Warrnambool.

Similar to rates of PPHs, avoidable mortality is high for a range of chronic diseases even though incidence of these diseases is similar to the state average. Avoidable mortality from cancer, diabetes, circulatory diseases, ischaemic heart disease, cerebrovascular disease, respiratory system disease, COPD, suicide, and self-inflicted injury are all above the state average.

Deaths from cancer, diabetes, circulatory diseases, ischaemic heart disease, cerebrovascular disease, respiratory system diseases, COPD, suicide, and self-inflicted injury above average

The Great South Coast has the highest rates of potentially preventable hospitalisations (PPHs) for chronic conditions in the WVPHN region. There are high rates of PPHs across the subregion due to COPD, angina (except for Warrnambool), asthma (except for Glenelg), There are higher than average rates of PPHs for heart failure in Glenelg and Corangamite, hypertension in Glenelg and iron deficiency anaemia in Warrnambool and Corangamite.

Local stakeholders have voiced the need for better education and health promotion to encourage safe physical activity, healthy diet, and better self-management of existing chronic conditions.^{87,88}

Cancer

There are high rates of participation in cancer screening programs in the Great South Coast. This is accompanied by a generally higher incidence of breast, bowel, and cervical cancers. Breastscreen participation rates are similar to WVPHN and national averages in the Great South Coast.⁸⁹ Despite this, mortality rates for breast cancer are above the WVPHN and national averages in Glenelg-Southern Grampians and Colac-Corangamite.⁹⁰ Participation in the National Bowel Cancer Screening Program is above the national average throughout the Great South Coast (except for the Moyne-East statistical area level 2 which has below 40% participation rates). However, the percentage of people aged 50 years and over who have ever had a faecal occult blood test is below the state average in Glenelg and Moyne Shires. Bowel cancer incidence rates are above the national average throughout the Great South Coast, particularly in Southern Grampians. Furthermore, Colac-Corangamite is the only SA3 in the WVPHN region in which females have higher rates of bowel cancer than males. Participation in the National Cervical Screening Program is also above the national and WVPHN averages throughout the Great South Coast, and cervical cancer incidence and mortality rates are slightly above the national rates in

the WVPHN region. There are also high incidence rates of bladder cancer (in Glenelg-Southern Grampians), leukaemia (in Colac-Corangamite), prostate cancer (in Glenelg-Southern Grampians) and prostate cancer mortality rates (in Colac-Corangamite and Glenelg-Southern Grampians), and kidney cancer (in all SA3s).

Alcohol and other drugs

There are high rates of alcohol related harm and alcohol and other drug services being delivered in the Great South Coast. The average liquor consumption per person for the most popular alcoholic beverages is above the state average in Warrnambool City as well as Southern Grampians and Corangamite Shires.⁹¹ In addition, Warrnambool City has the third highest lifetime risk of alcohol-related harm in the WVPHN region and is the only LGA with alcohol-related use of DirectLine telephone services above the state average. Alcohol-related use of alcohol and drug services is high in Glenelg Shire, Warrnambool City, and Moyne Shire. There are high rates of alcohol-related assaults (in Warrnambool City), family violence events (in Glenelg Shire and Warrnambool City),⁹² hospital admissions (in Glenelg Shire), serious road injuries (in Corangamite and Moyne Shires) and ambulance attendances (in Southern Grampians and Glenelg Shires) related to alcohol. Consultations with local stakeholders have suggested community education programs focused on the harms of alcohol misuse along with a decrease in alcohol advertising and promotion.

Smoking and drug misuse are key areas of need on the Great South Coast. There are high rates of adult smokers and rates of lung cancer (especially among males) throughout the Great South Coast. Service providers and local stakeholders call for health awareness campaigns to receive more funding from tobacco tax. There are also high rates of ambulance attendances related to analgesics (in Moyne and Southern

There are high rates of adult smokers and rates of lung cancer (especially among males) throughout the Great South Coast

Grampians Shires), anti-depressants (in Southern Grampians Shire), anti-psychotics (in Glenelg Shire), pharmaceuticals (in Glenelg Shire, Warrnambool City, and Moyne Shire), and crystal methamphetamine (in Warrnambool City and Glenelg Shire). Stakeholders have suggested the need to promote non-drug therapies and suppress the manufacture of, and underlying incentives for, addictive drugs. In this regard, Glenelg Shire, Warrnambool City, and Southern Grampians Shire have high rates of drug dealing and trafficking, as well as drug and illicit drug-related use of alcohol and drug services. Furthermore, Warrnambool City has the highest illicit drug-related hospital admissions in the WVPHN region. In addition, there are high rates of hospital admissions related to pharmaceuticals (in Glenelg Shire) and illicit drugs (in Glenelg Shire and Warrnambool City).

Mental health

More residents in Southern Grampians Shire consider their access to mental health services poor than anywhere else in the WVPHN region. In this regard, the number of MBS-funded services for the preparation of mental health treatment plans by GPs in Glenelg-Southern Grampians is below the

national average.⁹³ In addition, the percentage of residents who felt worried and unhappy is highest in Glenelg and Southern Grampians Shires. Furthermore, Moyne Shire has the lowest number of GPs and psychologists per 1,000 population in the WVPHN catchment.⁹⁴ Moreover, the proportion of adults who sought professional help for a mental health problem is below the Victorian and rural Victorian averages in Moyne, Glenelg, and Southern Grampians Shires. Suicide is also a major health challenge in the Great South Coast. Male suicide rates are 43 per cent higher in Colac Corangamite and 39 per cent higher in Warrnambool compared to the Australian average.⁹⁵ Ambulance attendance rates for suicidal ideation are also high in Warrnambool City.⁹⁶ To address these serious challenges, stakeholders have highlighted the need for an increase in psychiatrists and other mental health workers providing services with no gap payments. The community would also benefit from all clinicians undergoing training in the identification of mental illness and the ability to make referrals to psychologists with the relevant expertise.

Access to services

Access to affordable services has been reported as a problem on the Great South Coast. For instance, Warrnambool has rates of lower urgency emergency department presentations (at all hours) above the state average.⁹⁷ In addition, the percentage of patients with out-of-pocket costs for specialist attendances, diagnostic imaging, and non-hospital Medicare services are highest in the Great South Coast. Similarly, the percentage of males and females who saw a medical specialist is also above the national average throughout the Great South Coast⁹⁸. To address service needs, stakeholders have called to increase the number of GPs with workplace incentives and/or mandatory training in outer regional and rural areas. It has also been suggested that addressing hospital overspend would free up funding for non-hospital programs, such as increased training in telehealth for nurses and specialists. This idea is particularly relevant due to the outer regional geography of the Great South Coast and the poor perception many residents have about the quality of local roads and transport.

The number of women receiving the medical abortion medication PBS 10211K prescriptions for medical abortion is above the state average in both Warrnambool City and Southern Grampians Shire. Prescribers are primarily based in Warrnambool, where the rate of prescribers is just above the state average. Throughout the rest of the subregion, prescriber rates are lower than the state average. Similarly, dispensing of the medication is primarily in Warrnambool, with below average rates across the rest of the subregion. There was no dispensing of PBS 10211K in Glenelg or Moyne at all during 2021. Surgical abortion is only available in Warrnambool. This indicates that women frequently need to travel outside of their local area to access medical and surgical abortion.

There are higher than average rates of women using the contraceptive implant across the Great South Coast, particularly in Warrnambool, Southern Grampians, and Moyne. Placement of the implant is above the state average in Warrnambool and Southern Grampians but well below the state average in Moyne, despite high demand. The number of women using IUDs is above average across the subregion, particularly in Moyne, Glenelg, Southern Grampians and Corangamite. Placement of IUDs appears to be clustered in Warrnambool and Southern Grampians, which both have provider rates above the

Victorian average.

Older people

Over the past ten years, the proportion of people aged over 65 years in the Great South Coast subregion has grown from 18 per cent to 23 per cent, an increase of just over 7,000 people. Glenelg has the highest median age (49 years) in the Great South Coast subregion, followed by Corangamite (48 years), Southern Grampians (47 years), Moyne (45 years) and Warrnambool (42 years). All local government areas in the Great South Coast have higher proportions of residents aged 65 years and over than the national and Victorian averages.⁹⁹ Despite high proportions of older people, Glenelg and Moyne Shires have the lowest number of Home Care Package providers in the WVPHN region.¹⁰⁰ Southern Grampians has the second highest rate of older people living alone in the WVPHN catchment. Warrnambool, Glenelg and Corangamite also have higher rates of older people living alone than the average across the WVPHN region. Across the Great South Coast subregion, there are over 5,300 older people living alone. Warrnambool LGA has a higher rate of older people in private rental.

All local government areas in the Great South Coast have higher proportions of residents aged 65 years and over than the national and Victorian averages

In the Great South Coast subregion, Southern Grampians has the highest rates of older people with two or more chronic conditions and with five or more medications. Service providers outlined that older people in the Great South Coast subregion are being impacted by cost-of-living pressures, housing insecurity, and have reported the emergence of rough sleeping in Warrnambool.

Chapter 5 Wimmera Grampians

Wimmera Grampians is the most rural WVPHN subregion, covering the largest area. The Wimmera Grampians subregion aligns with the Grampians statistical area level-3 (SA3) and contains the local government areas (LGAs) of:

- Horsham Rural City
- Ararat Rural City
- Hindmarsh Shire
- Northern Grampians Shire
- West Wimmera Shire
- Yarriambiack Shire

Horsham Rural City Council is the most populated LGA in the Wimmera Grampians subregion, it is home to 20,434 (34 per cent) of the subregion's 60,497 residents.

Social determinants of health

Wimmera Grampians has the lowest average level of socioeconomic advantage in the WVPHN region, with all LGAs ranked below the national average. The least advantaged of these include Northern Grampians, Hindmarsh and Yarriambiack Shires. There are pockets of greater disadvantage throughout the subregion, including in Stawell and St Arnaud in Northern Grampians Shire, and in central and west Ararat and Willaura in Ararat Rural City. Minyip, Murtoa, Warracknabeal, Hopetoun, Beulah and Rupanyup townships in Yarriambiack Shire have areas of high disadvantage, along with significant portions of Horsham City. Jeparit, Rainbow, Dimboola and Nhill in Hindmarsh Shire are areas of higher disadvantage, as are Goroke and Edenhope in West Wimmera Shire.

Hindmarsh, West Wimmera, and Yarriambiack Shires have the lowest proportion of residents in the WVPHN region who reported their financial status as prosperous or very comfortable. In addition, these LGAs have the highest proportion of residents who rated their internet access and mobile phone reception as poor.¹⁰¹

Horsham has the highest rate of criminal incidents in the WVPHN catchment with a rate 50 per cent higher than the Victorian average. Ararat also has a high crime rate, 35 per cent higher than the Victorian average. The crime rate in the Northern Grampians Shire is also higher than the Victorian average.¹⁰²

Priority groups

Family violence is a significant issue in the Wimmera Grampians subregion rates of family violence significantly above the Victorian average in Horsham, Northern Grampians, and Ararat.¹⁰³ Overall, the percentage of people from culturally and linguistically diverse backgrounds is lowest in Wimmera Grampians. Hindmarsh Shire, however, has the highest percentage of people who were born in predominantly non-English speaking countries and living in multi-family households (31.6 per cent) and/or crowded dwellings (29.3 per cent) in the WVPHN region.¹⁰⁴ This likely reflects the large Karen

population in Hindmarsh Shire.¹⁰⁵ Wimmera Grampians is also home to many First Nations people and the health of these communities is discussed in Chapter 6. Disability employment services usage is high in Grampians, particularly the total employment specialist services caseloads relative to the number of disability management service clients.¹⁰⁶ The rate of severe or profound disability is higher than the state average (6 per cent) across the subregion, particularly in Yarriambiack (10 per cent), Hindmarsh (8.7 per cent) and Ararat (8.1 per cent).¹⁰⁷ Local service providers and stakeholders have identified the importance of access to GPs and health professionals who understand the local community.¹⁰⁸

The rate of severe or profound disability is higher than the state average (6 per cent) across the subregion, particularly in Yarriambiack (10 per cent), Hindmarsh (8.7 per cent) and Ararat (8.1 per cent)

Health risk factors

There are several risk factors, such as low rates of healthy eating and exercise, that contribute to some of the poor health outcomes in Wimmera Grampians. For instance, Wimmera Grampians has the lowest rates of vegetable consumption among adults and fruit consumption among children in western Victoria. In addition, the percentage of adults who are insufficiently physically active is highest in West Wimmera Shire, followed by Ararat Rural City and Yarriambiack Shire.¹⁰⁹ Despite this, Grampians SA3 has the lowest percentage of people who used exercise physiology, physiotherapy, and dietetics services in the WVPHN region¹¹⁰. Healthy eating is also a challenge in Wimmera Grampians, which has the highest percentage of adults who regularly consume sugar sweetened soft drinks and take-away food in western Victoria¹⁰⁹. Possibly because of these increased risk factors, self-reported health is most likely to be considered 'poor' in Wimmera Grampians.

Children, women, and families

Maternal and child health is also of particular interest in the Wimmera Grampians subregion. For instance, Grampians SA3 has the highest fertility rate, percentage of teenage mothers, and percentage of women who smoked tobacco during pregnancy in the WVPHN region. Rates of smoking in pregnancy are particularly high in Ararat and Horsham. In addition, the annual infant death rate in Grampians is above the national and state averages. These poor outcomes occur in the context of lower antenatal service usage. Grampians SA3 has the lowest percentage of mothers who used midwifery services and/or attended 5 or more antenatal visits in the WVPHN region.¹¹¹ Furthermore, the percentage of patients with out-of-pocket cost per obstetric attendance was above the national average in Grampians. Similarly, the percentage of fully breastfed babies at 6 months of age is highest in Hindmarsh, West Wimmera, and Yarriambiack Shires. In terms of childhood immunisation there are relatively low immunisation rates among 1- and 2-year-old children in Northern Grampians Shire and among 5-year-old children in West Wimmera Shire. Childhood immunisation rates among First Nations children higher than those for all children throughout Wimmera Grampians.¹¹² Finally, there is a high percentage of developmentally vulnerable and at-risk children in Hindmarsh, West Wimmera, and Yarriambiack Shires

as well as Ararat Rural City.¹¹³ In this regard, local service providers and stakeholders have highlighted the need to strengthen the maternal and child health workforce (discussed below) in Wimmera Grampians.

Chronic conditions

Municipalities in Wimmera Grampians have a population that is more likely to have one or more chronic conditions.¹¹⁴ Estimated rates of chronic disease in Wimmera Grampians are similar to the Victorian average in many cases, except for uniformly higher rates of arthritis across the subregion. Self-reported asthma, lung conditions and mental health conditions are higher than the Victorian average.

There is a high percentage of general practice (GP) patients with cardiovascular disease and/or diabetes presenting to GPs throughout Wimmera Grampians, with the highest rates in Hindmarsh Shire. There

Despite few remarkable differences in the rates of chronic conditions, PPHS and avoidable mortality from a range of diseases is significantly higher in some parts of Wimmera Grampians than the Victorian average

is also a high percentage of active GP patients with asthma (in Yarriambiack and Hindmarsh Shires), chronic kidney disease (in Hindmarsh and West Wimmera Shires) and COPD (in Hindmarsh Shire, Northern Grampians Shire, and Ararat Rural City).¹¹⁵ Chronic conditions have been identified as an ongoing issue for many years in Wimmera Grampians.

Despite few remarkable differences in the rates of chronic conditions, potentially preventable hospitalisations, and avoidable mortality from a range of diseases is significantly higher in some parts of Wimmera Grampians than the Victorian average. Admissions for potentially preventable conditions are higher across the subregion, particularly in Hindmarsh, West Wimmera and Yarriambiack. Admissions are higher than the state average for:

- Cardiac failure (Hindmarsh, Horsham, West Wimmera and Yarriambiack)
- Angina (Hindmarsh, Horsham, West Wimmera and Yarriambiack)
- Asthma (Hindmarsh, West Wimmera and Yarriambiack)
- Congestive heart failure (Hindmarsh, Horsham, West Wimmera and Yarriambiack)
- COPD (across the region but especially in West Wimmera and Yarriambiack)
- Hypertension (Hindmarsh, West Wimmera and Yarriambiack)
- Iron deficiency anaemia (across the region but especially in Horsham, Ararat, and Northern Grampians)

Avoidable mortality from circulatory diseases is particularly high, especially in Hindmarsh Shire where the rate is almost 2.5 times that of the Victorian average. Avoidable deaths from heart disease are generally higher, with the rate in Northern Grampians Shire twice that of the Victorian average. Avoidable mortality due to cerebrovascular disease is also higher throughout the subregion, particularly in Hindmarsh and Yarriambiack Shires that have rates 2.7 and 3.7 times that of the Victorian average, respectively. Mortality from diabetes, respiratory system diseases, COPD and selected external causes is also higher than the state average.

The mitigation of health risk factors (discussed above) and wider promotion of early interventions are seen as necessary changes to address this ongoing health challenge.¹¹⁶

Cancer

Grampians SA3 has the second highest mortality rates for all cancers in western Victoria. Indeed, rates of lung cancer, head, and neck (with lip) cancer, kidney cancer, leukaemia, lymphoma, pancreatic cancer, and prostate cancer in Grampians are above the national average.¹¹⁷ Breastscreen participation rates are similar to state and national averages in Wimmera Grampians. Despite this, however, Yarriambiack Shire has the highest incidence counts¹¹⁸, and Hindmarsh Shire the highest mortality counts, for breast cancer in western Victoria. Similarly, bowel cancer incidence rates are high in West Wimmera, Yarriambiack, and Hindmarsh Shires.¹¹⁷ This is despite bowel cancer screening rates being above the national average in Grampians.¹¹⁸ In addition, out of all SA3s and LGAs in the WVPHN region, Grampians and West Wimmera Shire have the highest mortality counts for bowel cancer.¹¹⁷ In contrast, participation in the National Cervical Screening Program is below the national average in Grampians¹¹⁸. While cervical cancer incidence and mortality rates are not available for Grampians, they are slightly above the national average in the WVPHN region.^{117,118}

Grampians SA3 has the second highest mortality rates for all cancers in western Victoria

Alcohol and other drugs

Reducing alcohol related harm is an area of need, particularly in Horsham Rural City, Northern Grampians Shire, and Ararat Rural City. Smoking rates are also a health concern throughout Wimmera Grampians. Indeed, Wimmera Grampians has the highest number of estimated adult smokers in western Victoria along with high rates of lung cancer incidence and mortality. Furthermore, in all LGAs in Wimmera Grampians (particularly Horsham), liquor consumption per person (litres) for the most popular alcoholic beverages (combined) is above the state average.¹¹⁹ Similarly, Horsham Rural City has the highest rate of alcohol intoxication related ambulance attendances in the WVPHN region. In addition, Northern Grampians has high rates of alcohol related serious road injuries in western Victoria.¹²⁰ Horsham and Ararat Rural Cities have the highest rates of alcohol related assaults in the WVPHN region.¹²¹ There are also high rates of alcohol related family violence events and alcohol-related use of alcohol and drug information services in Horsham Rural City, Ararat Rural City, and Northern Grampians Shire.¹²² Consultations have suggested that this alcohol and other drug misuse may result, or at least be exacerbated by, untreated mental ill-health and self-esteem issues.

There are various drug-related issues in Wimmera Grampians. For instance, illicit drug use and possession rates are high in Horsham and Ararat Rural Cities, as well as Northern Grampians Shire. Moreover, there are high rates of drug dealing and trafficking rates in Ararat and Horsham Rural Cities as well as Northern Grampians and West Wimmera Shires. Indeed, West Wimmera Shire has the second highest rate of drug cultivation and manufacturing in the WVPHN region. There are shared concerns among stakeholders for the safety of close family and friends who support and maintain contact with clients and the need to help carers. There are also high rates of ambulance attendances related to analgesics (in all LGAs for which data is available), anti-depressants (in Northern Grampians and Yarriambiack Shires), and pharmaceuticals (in Horsham and Ararat Rural Cities as well as Northern

Grampians Shire). Grampians has the third highest rates of opioid prescriptions dispensed in Victoria¹²³ and Hindmarsh Shire has the highest pharmaceutical related hospital admissions in the WVPHN region. Indeed, stakeholders have voiced the need to stop high-risk pharmaceuticals being offered in the first place. In this regard, the percentage of people who received a Medication Management Review (residential) is above the national average in Grampians.¹²⁴

Mental health

Like other outer regional areas, there is an increased risk of mental ill-health in Wimmera Grampians. This could be attributed to social isolation as well as reduced access to educational and economic opportunities. For instance, Wimmera Grampians has the highest proportion of residents who don't keep in touch with friends and don't spend time with family members who are not living with them. In addition, Wimmera Grampians has the highest proportion of residents in the WVPHN region who do not feel their life is meaningful or the things they do are worthwhile and who have low life satisfaction or low confidence to achieve the things they want. Wimmera Grampians also has the highest proportion of residents who don't feel welcome in their community, would not recommend their community as a good place to live, would live in another community if they could and, somewhat paradoxically, think people moving away from their local area is a big problem.

Regarding more robust indicators of mental ill health, rates of psychological distress are high in Hindmarsh, West Wimmera, Yarriambiack Shires. In addition, the number of hospitalisations for depressive episodes is above the national average in Grampians. Furthermore, there are high rates of ambulance attendances for suicidal ideation (in Horsham and Ararat Rural Cities) and suicide attempts (in Horsham Rural City and Yarriambiack Shire).¹²⁵ Although suicide rates are not significantly higher than the national average in Grampians, suicide was a key issue discussed at community and service provider consultations throughout the Wimmera region¹²⁶.

Wimmera Grampians has relatively low access to mental health services, which is a risk factor for mental ill-health. For instance, residents in Wimmera Grampians are more likely to report access to mental health services as poor than those across Victoria and Australia. In this regard, the number of full-time equivalent psychologists per 10,000 persons is the lowest in Hindmarsh, West Wimmera and Yarriambiack Shires out of all LGAs in Western Victoria PHN.¹²⁷ In addition, Grampians has the lowest number of MBS-funded services for the preparation of mental health treatment plans by GPs in western Victoria.¹²⁸ Outreach programs could be set up for people reluctant to seek help, but this would be dependent on having appropriate workforce capacity (discussed below). Despite low mental health treatment rates, Grampians has the eleventh highest rate in Australia for prescriptions dispensed for anxiolytic medicines to people aged 18 to 64 years¹²⁹.

Access to services

Workforce shortages across the entire primary health sector is an ongoing problem reported by consumers and providers in Wimmera Grampians. Suggestions to address this include looking for

interesting alternatives to short-term staff contracts, student training in communities, and support for workforce redistribution to areas of need. Indeed, it has been suggested that there will be no solution to local public health challenges and clients will continue to give up until practitioners are in place who are able to respond to needs. Publicly available data is also consistent with these concerns. For instance, the percentage of people who received a GP Health Assessment is below the national average throughout the WVPHN region. In addition, the percentage of people who received any allied health service is lowest in Grampians (except for optometry services). Average Medicare benefits expenditure per patient for non-hospital Medicare services is below the national average in Grampians. In contrast, the percentage of males and females who saw a specialist and the percentage of patients with out-of-pocket cost per diagnostic imaging service is above the national average.

Confidentiality is a particular concern for clients in smaller communities with limited services where privacy is harder to maintain. As such, it has been suggested that support needs to be delivered in a setting and by providers appropriate for the client. The most common example of this was access to a regular GP. Another key suggestion to address outer regional workforce shortages in Wimmera Grampians is to improve the opinion and understanding of telehealth. This could be achieved with advocacy from health professionals and community education programs but may be dependent on digital infrastructure which is often poorest in rural areas where it is most needed.

Access to abortion is limited in Wimmera-Grampians. Women in Ararat had the PBS10211K drug prescribed at more than twice the state average despite there being no clinics prescribing the drug and no pharmacies dispensing the drug in the municipality

Access to abortion services is also an issue in the Wimmera Grampians subregion. A review of 2021 prescription data for medical abortion medication PBS10211K shows that the drug was only prescribed and dispensed in Northern Grampians and Horsham, despite there being higher rates of demand than the state average in Horsham, Northern Grampians, and Ararat. Ararat-based women had the drug prescribed at more than twice the state average despite there being no clinics prescribing the drug and no pharmacies dispensing the drug in the municipality.

Access to long-term contraception is also limited in Wimmera Grampians. Rates of use of the contraceptive implant were higher than the state average in women in West Wimmera, Yarriambiack and Ararat. However, the level of local insertion was lower than the demand across the entire region except for Horsham and Ararat, indicating that women often need to travel beyond their local area to access health professionals that are training in contraceptive implant procedure. Access to IUD insertion is even more difficult across the subregion. Health professionals providing this service were based primarily in Horsham with a low rate of insertion by providers in Northern Grampians and Ararat.

Older people

Wimmera Grampians has the highest proportion of people aged 65 years and over across WVPHN, growing from 21 per cent (2011) to 25 per cent (2021).¹³⁰ This represents an increase of 2,810 people. The median age in most local government areas (LGAs) in Wimmera Grampians is relatively higher

amongst WVPHN LGAs.

Service providers reported that isolation and loneliness is a common concern for older people in Wimmera Grampians. Older people in the Wimmera Grampians subregion are living alone at higher rates than average across the WVPHN region, with more than a third of older people in West Wimmera living alone.¹³¹

While lack of transport can be a major access barrier regardless of where people were located, the impact of losing transport options can be felt acutely by older people living in rural areas. Without transport support or capacity to drive, they would have to move into town or residential care. Some stakeholders have told us that they know of many people driving longer than they should, because they feel there are no transport options available to them if they stop driving. Additionally, not being able to get around was viewed as a barrier to keeping yourself well and connected, both for your medical needs and participation in community activities.

Older people in Wimmera Grampians are less likely to be living in private rental than in other LGAs in the WVPHN region, with two exceptions. Horsham has the second highest rate of older people renting in the region, and Northern Grampians has the second highest rate of older people renting outside of WVPHN's regional centres. Horsham has high rates of older people living in 'jeopardy' which indicates a person is renting, living alone, with disability, on a low income.¹³² Horsham and Northern Grampians also have the highest rate of older people whose needs for formal assistance are unmet, and all six LGAs in the subregion are the highest across WVPHN.

In terms of medical care in Wimmera Grampians, the Hindmarsh LGA has high rates of older people with two or more chronic diseases, with five or more medications and people with a profound or severe disability. Northern Grampians and Horsham LGAs also have high rates of older people taking five or more medications, and West Wimmera has a relatively high rate of people with two or more chronic conditions.

Chapter 6 First Nations communities

WVPHN acknowledges and supports self-determination principles for First Nations people and the importance of engaging with local First Nations people to understand local challenges. Self-determination in health needs assessments is a human right for First Nations peoples¹³³ but also essential to ensure First Nations social and emotional wellbeing (SEWB) is integral to assessing programs and priorities. SEWB is a First Nations concept of wellbeing that differs in important ways to western concepts of mental health¹³⁴ and is the foundation for physical and mental health for First Nations peoples.¹³⁵ SEWB is a holistic concept which considers the critical role of relationships between individuals, family, kin, and community in which the importance of connection to land, culture, spirituality, and ancestry are relevant to health and wellbeing. This model shows the inter-connected and holistic nature of social and emotional wellbeing for a First Nations individual as function of seven domains of connection impacted by complex social, political, and historical determinants (Figure 6.1) that all require consideration in the commissioning cycle.

The health needs and health priorities of First Nations people can only be determined by First Nations people and WVPHN looks to the local eight Aboriginal Controlled Community Health Organisations (ACCHOs) as the experts in leading this work. WVPHN currently receives specific funding to support First Nations health (Integrated Team Care and First Nations specific funding within Mental Health and alcohol and other drug programs). It is our intention to use a self-determination approach to this funding through a First Nations led program design process. The future model we support is direct funding to ACCHOs with WVPHN working in partnership to support ACCHOs rather than WVPHN determining First Nations needs or funding distributions.



Figure 6.1. A Model of Social and Emotional Wellbeing¹³⁶

Unfortunately, the coronavirus pandemic hindered our ability to gather recent insights from First Nations communities. As a result, this Chapter is a summary of the quantitative data available at the time of writing and not the comprehensive overview we had planned. This information forms part of our current understanding of First Nations health and will be used to help guide upcoming First Nations led program design and other engagement activities with First Nations communities.

WVPHN have also noted the engagement with Aboriginal Community Controlled Health Organisations (ACCHOs) that was undertaken by Grampians Health in the development of the [Population Health Catchment Plan 2023-2029](#). This has been included in the report in a chapter titled 'In our own words.' A number of issues and assertions have been put forward including:

- Self-determination and community control are key to closing the gap in health and social outcomes. This includes payment of funds directly to ACCHOs to address health and social issues and provide services.
- Funding equity for addressing health and social issues in a population that is over-represented many areas of disadvantage.
- Acknowledgement that smaller rural ACCHOs service 45 per cent of the Victorian Aboriginal population living outside of major cities and do so with limited resources.
- Complexities and high cost of providing services over a large catchment area needs to be reflected in funding models. Along with the costs borne by ACCHOs to get clients to appointments often hundreds of kilometres away.
- Aboriginal workforce development.
- Additional investment in the development of an Aboriginal workforce.
- Difficulties in attracting and retaining staff, particularly in more rural and remote locations.

Social determinants of health

As a result of the ongoing impact of colonisation, intergenerational trauma and structural racism have led to First Nations people having lower average levels of education, employment, income, and housing quality compared to the rest of the Australian population. These and other social determinants of health are estimated to be responsible for 34 per cent of the health gap.¹³⁷ Southern Grampians-Glenelg, Wimmera, Warrnambool, and Ballarat all have a level of socioeconomic disadvantage above the Victorian average. Indeed, Warrnambool has the highest unemployment rate and the percentage of unemployed First Nations people. This is closely followed by Wimmera, which has the highest female unemployment rate, and Southern Grampians-Glenelg, which has the highest male unemployment rate. The percentage of low-income Indigenous families is highest in Warrnambool. The same pattern is found among single-parent First Nations families with children aged less than 15 years. The percentage of children aged less than 15 years in jobless families is highest in the Wimmera as is the total percentage of jobless First Nations families. Despite Geelong-Queenscliffe and South-West Central Victoria having a level of socioeconomic advantage above the

Social determinants of health are estimated to be responsible for 34 per cent of the health gap between First Nations and non-Indigenous Australians

state average, there is still a high percentage (14.4 per cent and 10.7 per cent respectively) of low-income First Nations families in these areas.¹³⁸

Health risk factors

There is greater likelihood of smoking and alcohol misuse (discussed below), inadequate physical activity and hypertension in First Nations people than non-Indigenous Australians. Such health risk factors are estimated to account for 19 per cent of the health gap. The percentage of Indigenous people living in social housing is highest in Moyne Shire, while First Nations people receiving rent assistance, living in crowded housing, living in owned dwellings and rented dwellings is highest in Glenelg Shire.¹³⁹ In contrast, Warrnambool is the only Indigenous Area in the WVPHN region where internet access is higher among Indigenous Australians, whereas Aboriginal households with children and internet access is lowest in Ballarat. Ballarat SA3 also has the highest proportion of homeless Aboriginal people (2.73 per cent) in the WVPHN region. Indigenous home and community care clients as a percentage of the total Indigenous population and as a percentage of total clients are highest in Warrnambool. Furthermore, the percentage of First Nations people with disability is highest in Wimmera and Warrnambool. Despite these higher rates, however, the percentage of First Nations people providing disability assistance is lowest in Warrnambool. Stakeholders have advocated for the need to accept the differences between Indigenous and mainstream cultures and to trust Indigenous wisdom to find solutions to health risk factors.¹⁴⁰

Children, women, and families

Given the growing population and high percentage of young First Nations people, as well as the increased prevalence of health risk factors, maternal and child health is a focus for WVPHN. The rate of First Nations mothers receiving antenatal care in the first trimester is lower than the national average.¹⁴¹ In addition, smoking rates among First Nations mothers during pregnancy is highest in the Wimmera followed by Warrnambool and Glenelg-Southern Grampians. Hospital admissions for conditions originating in the perinatal period among First Nations women are highest in Glenelg-Southern Grampians followed by Geelong-Queenscliffe and Ballarat. These trends can continue into childhood. For instance, Ballarat has the highest percentage of First Nations children who are developmentally vulnerable on the social, cognitive, and emotional domains. Similarly, Southern Grampians-Glenelg has the highest percentage of Indigenous children who are vulnerable on the physical and communication domains. Despite these challenges, however, childhood immunisation rates are higher among First Nations children (except in the City of Ballarat) for one-year-olds, and the City of Greater Geelong, Colac-Otway Shire, and Southern Grampians Shire for two-year-olds. There is 100% immunisation coverage in these LGAs among five-year-old First Nations children.¹⁴²

Potentially preventable hospitalisations and hospital admissions

Warrnambool and Wimmera have the highest rates of total PPHs of First Nations people in the WVPHN region, but these rates are still below the national average. Total hospital admissions for First Nations people in the WVPHN region are highest in the Wimmera Indigenous Area, especially among those aged 65 years and over. This includes hospital admissions for chronic conditions, skin and subcutaneous tissue diseases, circulatory system disease, diabetes complications, pregnancy, childbirth, and the puerperium, dental conditions, and nervous system diseases. In addition, hospital admissions for First Nations people are above the national average in Warrnambool for cellulitis, chronic conditions, diabetes complications, ear, nose, and throat infections, and mental health conditions. Glenelg-Southern Grampians has high rates of hospital admissions for nervous system diseases, dental conditions, diabetes complications, and urinary tract infections including pyelonephritis. Hospital admissions among Indigenous people for circulatory system diseases and dental conditions are high in Ballarat. Creswick-Daylesford-Ballan had the highest rate of hospitalisations among First Nations people for diseases of the eye and adnexa in western Victoria. Throughout the WVPHN region, Indigenous females had higher rates of hospital admission than Indigenous males.

General practice patients

General Practice data is limited through relatively low rates of Aboriginal and / or Torres Strait Islander identity recording at a practice level. Aboriginal and Torres Strait Islander identity is missing in up to 40 per cent of records.¹⁴³ Notwithstanding the limitations of the data, the following observations have been made. Glenelg-Southern Grampians and Warrnambool SA3s also had a relatively high percentage of Indigenous people who had a GP health assessment. The percentage of GP patients with a chronic condition is highest in Wimmera-Grampians (particularly Hindmarsh Shire). This includes cardiovascular disease (highest in Hindmarsh and Yarriambiack Shires) and chronic kidney disease (highest in West Wimmera with relatively high rates in the Ararat Rural City and Hindmarsh Shire). Rates of COPD are highest in Yarriambiack Shire (followed by Ararat Rural City), as are rates of type 2 diabetes (particularly Hindmarsh Shire followed by Ararat Rural City). Despite this however, the percent of First Nations GP patients with type 2 diabetes and HbA1C levels recorded in previous 24 months was lowest in Ararat Rural City followed by Hindmarsh Shire. Furthermore, the preparation (MBS item 721) and review (MBS item 731) of a GP management plan for First Nations GP patients was lowest in the Wimmera-Grampians subregion. In contrast, the percentage of First Nations GP patients who had a GP health assessment (MBS item 715) is highest in Yarriambiack Shire. There are also high percentages of GP patients with cardiovascular disease and chronic kidney disease (in Central Goldfields and Hepburn Shires) and COPD (in Pyrenees and Central Goldfields Shires). The preparation (MBS item 721) and review (MBS item 731) of a GP management plan for First Nations patients was highest in Hepburn Shire.

Mental health

The percentage of First Nations general practice patients with mental ill-health was highest in the Wimmera-Grampians subregion in general, and Ararat Rural City and Yarriambiack Shire in particular. The percentage of First Nations GP patients with anxiety and depression showed similar patterns. The percentage of First Nations GP patients with mental ill-health is highest in the Wimmera Grampians subregion; however, the percentage of First Nations GP patients with a mental health treatment plan is lowest in Wimmera-Grampians. Alcohol and drug misuse (discussed below), poor physical health, and generational trauma were the key mental health concerns identified at consultations.¹⁴⁴

Alcohol and other drugs

Local consultations with service providers identified alcohol and other drug misuse as one of the top three health issues for Aboriginal communities in the WVPHN region. The percentage of First Nations people in western Victoria who smoke tobacco daily (including during pregnancy) is more than twice as high as WVPHN average. In addition, lifetime risk of alcohol-related harm and cannabis use are higher among First Nations people. Accidental drug-related deaths in 2016 were more than three times higher

Local consultations with service providers identified alcohol and other drug misuse as one of the top three health issues for Aboriginal communities in the WVPHN region

for Aboriginal and Torres Strait Islander people compared to non-Indigenous Australians. The number one underlying factor identified by service providers and stakeholders was generational trauma and the need to support First Nations communities to generate the best solutions. Cultural priorities and reconciliation were also key themes discussed to address alcohol and other drug misuse.

Access to services

Access to appropriate health services is another factor that contributes to the health gap between First Nations people and the rest of the Australian population. First Nations people are more likely to report difficulty in accessing affordable health services that are nearby compared to other Australians. One key theme raised in various consultations was the need for better access to culturally appropriate and holistic healthcare. To achieve this, the primary suggestion was to work with First Nations organisations to support First Nations clients to better manage their health and complete treatments.

Older people

The table below shows the number of First Nations people aged 50 years and over living in the WVPHN region, by local government area.

Table 2.1 Number of First Nations people aged 50 years and over.

Local Government Area	# First Nations people aged 50+ years
Greater Geelong	611
Ballarat	323
Warrnambool	129
Glenelg	125
Moorabool	102
Southern Grampians	82
Golden Plains	76
Central Goldfields	72
Colac Otway	70
Horsham	66
Moyne	66
Northern Grampians	63
Surf Coast	62
Ararat	56
Corangamite	53
Hepburn	50
Yarriambiack	37
Pyrenees	34
Hindmarsh	28
West Wimmera	19
Queenscliffe	8
WVPHN Region	2,132

Population data

In the WVPHN region, there were just over 11,000 First Nations residents on Census night in 2021. This represents an 81 per cent increase over the previous ten years. There was an increase of 3,200 people from the previous Census (41 per cent) over the past five years.

Geelong has the highest number of Aboriginal and Torres Strait Islander residents of any LGA in Victoria. The First Nations population in Geelong doubled over the past ten years. Over the past five years, the number of First Nations people living in Geelong grew by 48 per cent.

The proportion of First Nations people in the total population of the WVPHN region is 1.5 per cent., compared to the Victorian average of 1 per cent. Glenelg Shire has the highest proportion of First Nations people at 2.9 per cent, Southern Grampians Shire and Central Goldfields Shire have the second highest proportion of First Nations people at 2.3 per cent.

Table 2.2 Population change of First Nations people in WVPHN region over 10 years.

Area	2011	2021	10-year change	% 10-year change	% First Nations people of area total population
Greater Geelong (C)	1788	3562	1774	99%	1.3%
Queenscliffe (B)	16	11	-5	-31%	0.3%
Colac-Otway (S)	182	309	127	70%	1.4%
Golden Plains (S)	129	376	247	191%	1.5%
Surf Coast (S)	143	239	96	67%	0.6%
Geelong Otway	2258	4497	2239	99%	1.3%
Ballarat (C)	1140	2094	954	84%	1.8%
Central Goldfields (S)	146	304	158	108%	2.3%
Hepburn (S)	91	180	89	98%	1.1%
Moorabool (S)	259	558	299	115%	1.5%
Pyrenees (S)	63	144	81	129%	1.9%
Ballarat Goldfields	1699	3280	1581	93%	1.7%
Warrnambool (C)	496	699	203	41%	2.0%
Corangamite (S)	121	200	79	65%	1.2%
Glenelg (S)	406	588	182	45%	2.9%
Moyne (S)	191	300	109	57%	1.7%
Southern Grampians (S)	188	389	201	107%	2.3%
Great South Coast	1402	2176	774	55%	2.1%
Horsham (RC)	282	361	79	28%	1.8%
Ararat (RC)	109	225	116	106%	1.9%
Hindmarsh (S)	87	91	4	5%	1.6%
Northern Grampians (S)	146	229	83	57%	1.9%
West Wimmera (S)	27	46	19	70%	1.1%
Yarriambiack (S)	75	111	36	48%	1.7%
Wimmera Grampians	726	1063	337	46%	1.8%
WVPHN Region	6,085	11,016	4,931	81%	1.5%

Endnotes

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