phn NORTH WESTERN MELBOURNE

An Australian Government Initiative

North Western Melbourne Primary Health Network

Needs Assessment for the care finder program

Prepared August 2022

Acknowledgements

North Western Melbourne Primary Health Network (NWMPHN) acknowledges the peoples of the Kulin nation as the Traditional Custodians of the land on which our work in the community takes place. We pay our respects to their Elders past and present.

We also recognise, respect and affirm the central role played in our work by people with lived experience, their families and/or carers.

NWMPHN gratefully acknowledges the contribution of the Community Council, Clinical Council, Expert Advisory Groups, community members and primary health care professionals, who participated in the engagement sessions to inform the development of the NWMPHN Health Needs Assessment (HNA), from which this supplementary assessment is derived. Similarly, the contribution of the Melbourne Primary Care Network (MPCN) Board and staff is also acknowledged, for their respective contributions to this important work.

About this document

This document has been developed in line with Australian Department of Health guidelines using data sources obtained from Australian Bureau of Statistics (ABS), Australian Institute of Health and Welfare (AIHW), and the Australian Department of Health (DoH). In addition, data has been provided by the Victorian Department of Health and over 400 General Practices in our region.

To access the *NWMPHN Health Needs Assessment 2022-2025* please visit the NWMPHN website.

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1. Introduction

This report was developed by North Western Melbourne Primary Health Network (NWMPHN) to inform the commissioning of care finder services. It draws on a range of population data sources and consultations with key stakeholders and community members to identify needs which the care finder service will address.

The document focuses primarily on the needs of these population cohorts:

1. People of culturally and linguistically diverse background aged 65 years and older
2. People with a disability aged 65 years and older
3. Carers aged 65 years and older
4. People of Aboriginal and Torres Strait Island origin aged 50 years and older
5. LGBTIQ+ people aged 65 years and older
6. People who spent time in foster care, residential care or other care as a child and who are now aged 65 years and older (referred to as 'care leavers' in this document)
7. Veterans aged 65 years and older.

The analysis of population data has been structured around the lines of enquiry used in the *NWMPHN Health Needs Assessment 2022-2025,* which was submitted to the Commonwealth Government in December 2021, namely:

1. Population
2. Social context
3. Determinants of health
4. Access to services
5. Health consequences.

Consultations with key stakeholder organisations and community members explored the needs of the population cohorts of interest and the impact of geography on service delivery. In addition, high-level mapping of the local service delivery landscape was undertaken.

Key insights and needs emerging from the population data analysis, consultations and service mapping have been synthesised around the following themes:

1. Health conditions
2. Population groups
3. Geographic locations
4. Health system and process.

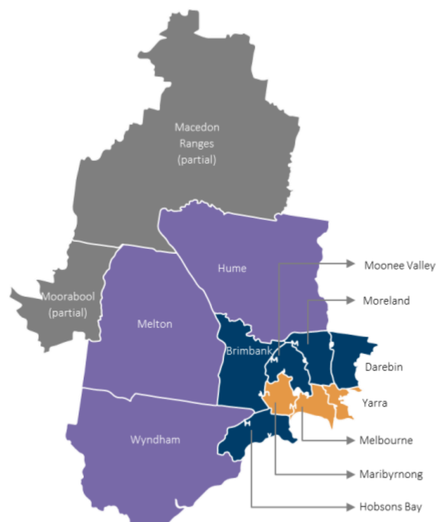
NWMPHN recognises the limitations of this report, most notably due to the limitations in accessing data and information for the focus populations. Some of the specific limitations are that some data sets are relatively dated, and therefore may not reflect recent changes to health status, despite being the most up-to-date data source available. Also access to data for specific populations was limited, for example, older people with refugee or asylum seeker backgrounds, or those experiencing homelessness.

Despite its limitations, this report provides a robust, evidence-based foundation to inform the initial commissioning of the care finder service. A version of this report was submitted to the Australian Government on 31 August 2022.

2. Data analysis

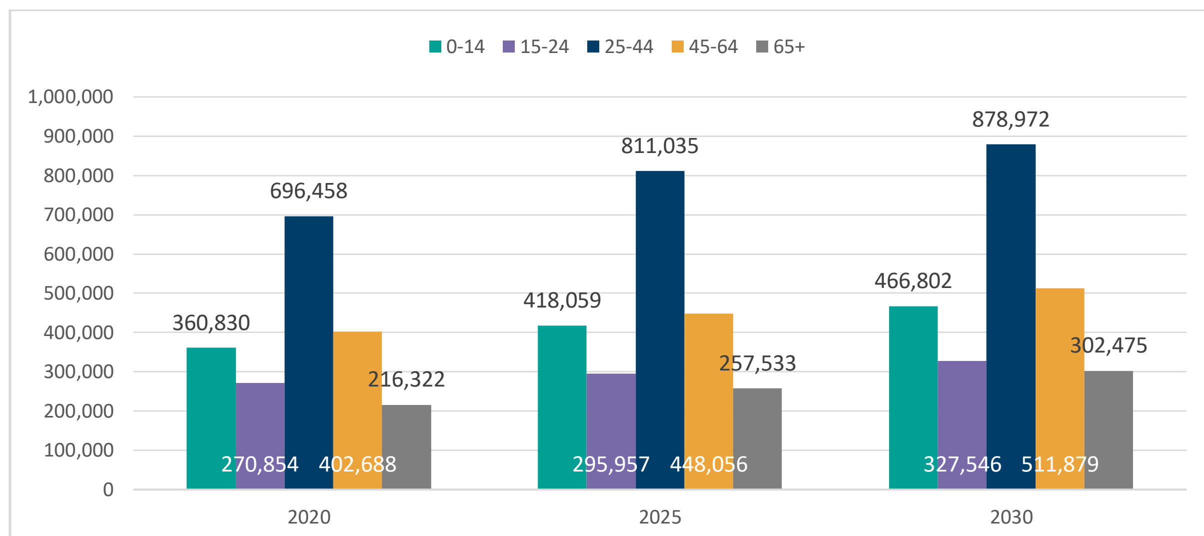
Population-level data analysis and consultation with key stakeholders and community members was undertaken to develop a deeper understanding of the needs of the target population.

2.1 Population

North Western Melbourne (NWMPHN) region overview
Our region is geographically diverse. The whole NWMPHN region covers 3,212 square kilometres and, although considered metropolitan, over half the region is classified rural (DoH, 2021a). **Our population is large.** The population of the NWMPHN region is large, with some areas more densely populated than others. The catchment is made up of 13 Local Government Areas (LGAs) that can be grouped into 4 areas reflecting the geographic diversity and distribution of the population: inner city (Melbourne, Maribyrnong and Yarra), suburban (Brimbank, Darebin, Hobsons Bay, Moonee Valley and Moreland), growth area (Hume, Wyndham and Melton) and peri-urban (Macedon Ranges and Moorabool).  **Our population is rapidly growing.** The population of the NWMPHN region is projected to increase to approximately 2.4 million people by 2030. This is a 28 per cent rate of growth (PHIDU, 2021). The areas of highest projected growth are the Wyndham and Melton LGAs, which together are expected to account for more than one-third of Victoria's population growth by 2036 (Department of Environment, Land, Water and Planning, 2019).

In 2020, there were 216,322 people aged 65 years and older living in the NWMPHN region, representing 20.9 per cent of the Victorian population of all people aged 65 years and older. By 2030, it is forecast that the population will grow 39.8 per cent to 302,475 people and will represent 22.6 per cent of all Victorians aged 65 years and older.

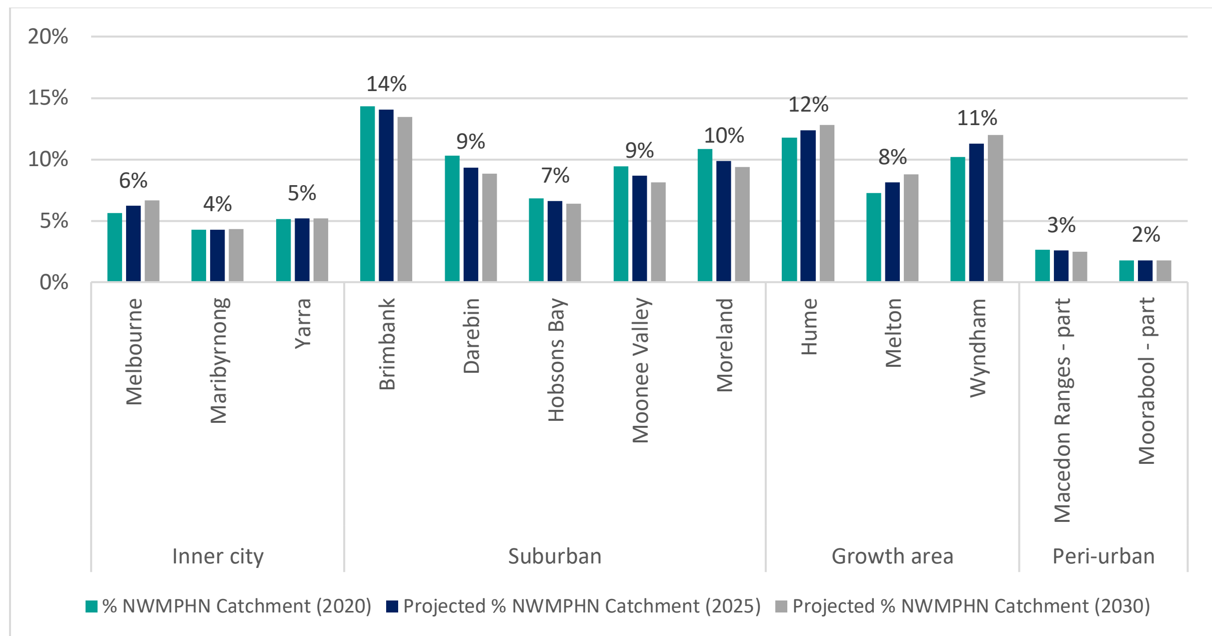
Figure 1. Population estimates and projections in NWMPHN by age, 2020-2030



Source: PHIDU (2021a)

In 2020, Brimbank had a significantly larger population of older people compared to other LGAs, followed by Hume, Moreland, Darebin and Wyndham. By 2030, it is forecast that Brimbank, Hume and Wyndham will have the largest populations, followed by Moreland, Darebin and Melton.

Figure 2. Projected percentage (%) growth by LGA - people aged 65 years and older (2020-2030)



Source: PHIDU, 2021; Projected % NWMPHN Catchment (2025) shown in figure.

Table 1. Population base need by geographic area - people aged 65 years and older

Region	LGA	km^2[1]	Total population density (Number of people per km^2, 2020)[2]	% NWMPHN Catchment[3]	Estimated Resident Population aged 65 years and older (2020)[4]	% NWMPHN older adult population (2020)[4,5]	Projected Population aged 65 years and older (2025)[5]	Projected % NWMPHN older adult population (2025)[4,5]	Projected Population aged 65 years and older (2030)[5]	Projected % NWMPHN older adult population (2030)[4,5]	Change older adult population 2020-2030[2,5]	Projected % Growth older adult population (2020-2030) [2,5]
Inner city	Melbourne	37	4,920	9.5%	12,227	5.7%	15,963	6.2%	20,222	6.7%	7,995	65.4%
	Maribyrnong	31	3,042	4.9%	9,226	4.3%	10,986	4.3%	13,054	4.3%	3,828	41.5%
	Yarra	20	5,277	5.3%	11,075	5.1%	13,360	5.2%	15,780	5.2%	4,705	42.5%
Suburban	Brimbank	123	1,688	10.8%	30,961	14.3%	36,203	14.1%	40,737	13.5%	9,776	31.6%
	Darebin	53	3,113	8.6%	22,240	10.3%	24,078	9.3%	26,776	8.9%	4,536	20.4%
	Hobsons Bay	64	1,528	5.1%	14,787	6.8%	16,951	6.6%	19,296	6.4%	4,509	30.5%
	Moonee Valley	43	3,054	6.8%	20,371	9.4%	22,283	8.7%	24,553	8.1%	4,182	20.5%
	Moreland	51	3,705	9.8%	23,480	10.9%	25,424	9.9%	28,417	9.4%	4,937	21.0%
Growth area	Hume	504	479	12.5%	25,399	11.7%	31,846	12.4%	38,710	12.8%	13,311	52.4%
	Melton	528	327	8.9%	15,660	7.2%	20,871	8.1%	26,600	8.8%	10,940	69.9%
	Wyndham	542	523	14.7%	22,032	10.2%	29,023	11.3%	36,248	12.0%	14,216	64.5%
Peri-urban	Macedon Ranges	1748	29	1.7%	5,749	2.7%	6,634	2.6%	7,474	2.5%	1,725	30.0%
	Moorabool	2111	17	1.2%	3,790	1.8%	4,584	1.8%	5,386	1.8%	1,596	42.1%
NWMPHN[5]				**100.0%**	**216,322**	**100%**	**257,533**	**100.0%**	**302,475**	**100.0%**	**86,153**	**39.8%**
Victoria					**1,067,644**		**1,223,161**		**1,338,056**		**281,449**	**26.6%**

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[1] Based on ABS (2021) Local Government Area Profiles. km^2 are for the whole of Macedon and Moorabool LGA, not just the NWMPHN proportion.

[2] Calculated based on total of Estimated Resident Population 2020 for each LGA (such as Macedon/Moorabool parts a and b) and km^2.

[3] Calculated based on PHIDU (2021a), *Estimated Resident* Population, 2020 for Victoria

[4] Based on PHIDU (2021a) *Estimated Resident Population (ERP), 2020*. Date accessed 25 November 202. Macedon part a and Moorabool part a to reflect the NWMPHN proportion. ERP is based on usual residence regardless of nationality, citizenship or legal status. It includes residents who are overseas for less than 12 months and excludes overseas visitors who are in Australia for less than 12 months.

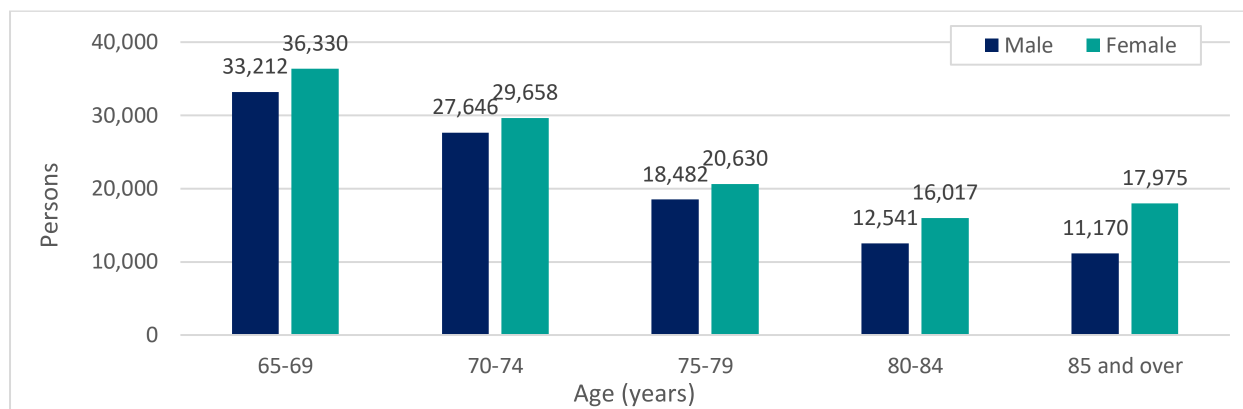
[5] As calculated by PHIDU (2021a), does not equate precisely to the total of LGAs presented in this table due to slight variance in geographical boundaries.

2.2 Social context

Demographic factors

Sex. In 2020, it was estimated that 53.9 per cent of people in the NWMPHN region aged 65 years and older were female, and 46.1 per cent were male. Females represent 52.2 per cent of people aged 65-69 years old, increasing to 61.7 per cent of people aged 85 years and older due to their longer life expectancy. Data for non-binary residents are not available.

Figure 3. NWMPHN - sex of people aged 65 years and older - 2020 ERP



Source: PHIDU, 2021a

Aboriginality. In 2016, there were 1,678 people aged 50 years or older who identified as being of Aboriginal or Torres Strait Island origin, representing 14 per cent of the total Aboriginal and Torres Strait Island population in the NWMPHN region. Fifty-six per cent were female and 44 per cent were male.

The highest number of older Aboriginal and Torres Strait Island people lived in the LGAs of Darebin (262 people), Hume (237), Wyndham (205), Melton (162) and Moreland (161).

In the 2021 Census, there was reportedly a significant increase in the number of people who identified as being of Aboriginal or Torres Strait Island origin. Further analysis will be required to determine the local implications for the care finder service when the Australian Bureau of Statistics (ABS) releases the data at a more granular geographic level.

Disability. In 2016, 44,465 people (24.9 per cent) aged 65 and over reported needing assistance with core activities, ranging from 10.9 per cent among people aged 65-69 years and progressively increasing to 64.1 per cent (1,005) among people aged 95-99 years. *(PHIDU, 2021 and* ABS, 2017*)*

In 2016, modelling by the ABS indicated there were 70,797 people aged 65 years and older who required assistance with one or more activities, representing 40.6 per cent of the age cohort at that time. This suggests there were 27,332 people who did not have a severe or profound disability who also required assistance for one or more activities.

ABS modelling also estimated that 8,370 people aged 65 years and over – or almost one-third of those requiring assistance who did not have a severe or profound disability – had unmet needs for assistance. The LGAs estimated to have the largest number of people with unmet needs were Brimbank (1,300 persons), Moonee Valley (1,203), Moreland (1,162) and Darebin (1,048).

The need for assistance broadly aligns with the geographic distribution of the population aged 65+ and older across each municipality.

Country of birth. In 2016, 55.1 per cent or 100,943 people aged 65 years and older in the NWMPHN region were born overseas, compared to the Victorian average of 22 per cent. Within the region, the proportion ranges from 5 per cent in Macedon Ranges to almost half the population in Melbourne (49.0 per cent) and Brimbank (44.7 per cent). *(PHIDU, 2021a and ABS, 2017).*

Birthplaces for older people in the NWMPHN catchment cover 152 countries. The top 10, other than Australia, accounted for 68,653 people or 36.4 per cent of all people aged 65 years and older.

Table 2. Country of birth – people aged 65+ in the NWMPHN region – Top 10, 2016

Country of birth	People aged 65+ years	Percentage of all people aged 65+ years
Italy	22,275	11.8%
Greece	11,412	6.1%
England	8,204	4.4%
Malta	7,663	4.1%
Vietnam	4,648	2.5%
Croatia	3,425	1.8%
Germany	2,981	1.6%
The former Yugoslav Republic of Macedonia	2,804	1.5%
China (excludes SARs and Taiwan)	2,722	1.4%
India	2,519	1.3%
Total	68,653	36.4%

Source: Census 2016, ABS Tablebuilder

In 2016, 73,330 people or 38.9 per cent of all people aged 65 years and older and who were born overseas had migrated to Australia in or before 1975 *(ABS, 2017).*

Refugee and asylum seeker background. Since July 1977, more than 600,000 refugee and humanitarian entrants have arrived in Australia. Since 1995, annual refugee intakes have ranged from 12,000 to 20,000 per annum, and more than 80 per cent of current asylum seekers in Victoria are aged 45 years or younger *(Refugee Council of Australia, 2022).*

The Census does not capture whether a person is a refugee or humanitarian entrant and therefore data about where refugees live is limited. However, assuming that 70 per cent of refugees are still alive and pro-rated on the basis of population (2020 ERP), it is estimated that 32,518 people of refugee background may live in the NWMPHN region. It is likely that the actual number is higher given that the region is a more affordable place to live compared to much of Melbourne, as evidenced by the number of emerging communities that have chosen to establish themselves in the NWMPHN region. Pro-rated on the basis that 11.1 per cent of population is aged 65 and older (2020 ERP), it is conservatively estimated that 3,612 older refugees live in the NWMPHN region.

At December 2021, it was estimated that at least 2,163 or 42.9 per cent of people on a Bridging Visa E who lived in Victoria were in the NWMPHN region (Refugee Council of Australia, 2021).

Socio-economic factors

English language proficiency. In 2016, 80,043 or 42.5 per cent of people aged 65 years or older spoke a language other than English (LOTE) at home. Of this cohort, 40.1 per cent reported speaking English not well or not at all (equating to 17.2 per cent of the overall population of older people). *(*ABS, 2017*)*

The proportion of people aged 65 years who speak a language other than English and have low or no spoken English proficiency varies considerably. For example, 78 per cent of older people who speak Vietnamese at home have low or no spoken English proficiency, compared to 13 per cent among those who speak Maltese at home.

Furthermore, almost half (16,079 people) of the older people who speak a language other than English at home belong to language communities where the majority of older adults have a similar level of proficiency in spoken English. Language communities with a high proportion of older people with low spoken English proficiency may be further disadvantaged and marginalised due to limited community awareness of the aged care services available and how to access them.

The high proportion of people with low or no English language proficiency indicates the vital importance of health and aged care information and services being available in community languages, including the care finder service.

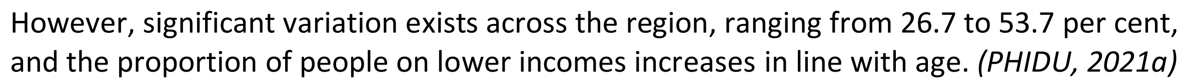
Education. The level of educational attainment is generally lower among people aged 65 years and older, compared to the wider population. This reflects the social and economic context at the time they attended school and were establishing their careers – a time of low unemployment and a robust manufacturing sector where people could readily secure employment. In 2016:

1. One in 20 people (10,207 or 5.4 per cent) aged 65 years or older in the NWMPHN region reported no educational attainment, while almost one quarter (43,942 or 23.3 per cent) achieved education below or up to Year 8.
2. One in 5 people completed Years 9-11 (19.8 per cent, 35,779).
3. One in 10 people completed Year 12 (9.1 per cent, 17,056).
4. Almost 15 per cent (14.7 per cent, 27,758) completed a vocational education qualification or a diploma.
5. Less than 10 per cent of people (18,539) aged 65 years or older completed a bachelor's degree or post-graduate qualification. *(*ABS, 2017*)*

The generally lower levels of education among older people and the implications for literacy, numeracy and critical thinking skills means that significant support is likely to be required to navigate the complex aged care system. This includes access to relevant information which is easy to understand; assistance with completing forms; and determining the most appropriate package of services within the available budget.

Furthermore, service delivery staff require the skills to be able to translate the complexity of the aged care system into simple, accessible language.

Income. In 2020, almost half of older adults (44.6 per cent or 82,951 people) aged 65 years or over were on a low income, consistent with the Victorian average of 43.7 per cent.



However, significant variation exists across the region, ranging from 26.7 to 53.7 per cent, and the proportion of people on lower incomes increases in line with age. *(PHIDU, 2021a)*

LGAs with the greatest number of older people on low incomes include Brimbank (13,166 people or 52.8 per cent), Moreland (10, 960 or 53.7 per cent), Darebin (10,117 or 52.9 per cent) and Hume (9,690 or 49.8 per cent). Melbourne (2,090 or 26.8 per cent) and Yarra (3,204 or 37.7 per cent) have the lowest proportion of older people on low incomes – however, significant variation is likely to exist within municipalities with populations living in public housing estates, such as Fitzroy, Richmond, Collingwood, Carlton and Flemington.

In 2020, three in 5 people (59.3 per cent) aged 65 years and older received an age pension, consistent with the Victorian average of 58.4 per cent. Again, significant variation existed across the NWMPHN region, ranging from 27 to 68.4 per cent, with Hume (68.4 per cent), Brimbank (67.7 per cent), Moreland (65.1 per cent), Melton (64.5 per cent) and Darebin (63.7 per cent) having the highest proportions.

The relatively high proportion of people who receive an age pension is likely a consequence of limited retirement savings due to the historical expectation that retirement income needs would be met primarily by the age pension. Compulsory superannuation began in the mid-1980s, and since then the Superannuation Guarantee has increased from 3 per cent, reaching 10 per cent on 1 July 2021.

The requirement for a co-payment to receive some aged care services is likely to be a barrier for older people who are living on low incomes. Furthermore, in some cases, other factors may be present (such as low English language proficiency, or disability) which may impact on their level of need or ability to access appropriate services.

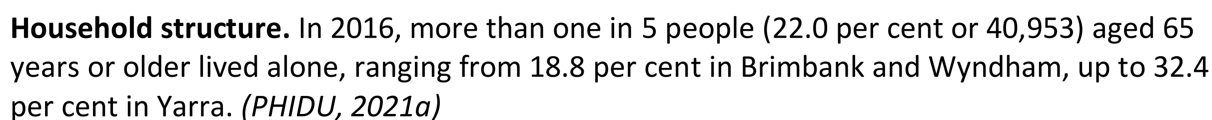
Employment and volunteering. In 2016, one in 10 (10.8 per cent or 20,291) people aged 65 years or over was employed or looking for work. Almost one quarter of people (22.9 per cent or 13,947) aged 65-69 years were working or looking for work. The ratio among people aged 70-74 years was one in 10 (9.9 per cent or 4,296), dropping to 3.7 per cent (1,250 people) for people aged 75-79. *(ABS, 2017)*

Longer life expectancy will result in more people working longer out of financial necessity, because they enjoy it, or a combination of both. In general, employment may be considered a protective factor for health among older people, given its cognitive, physical and social benefits and the potential health-affirming opportunities which increased income provides.

While the majority of people aged 65 years or over are retired, many remain active contributors to their community through volunteering.

In 2016, 21,035 or 11.5 per cent of people aged 65 years or older who lived in the NWMPHN region volunteered with an organisation or group, which was lower than the Victorian average of 18.3 per cent for the age cohort. The rate of volunteering ranged from 7.3 per cent in Brimbank to 22.4 per cent in Macedon Ranges. The true rate of volunteering is likely to be higher, given the cultural norms around caring for people in need which exist in many communities, and which are often undertaken outside formal volunteering arrangements.

14.4 per cent of people aged 65-69 years volunteered, with the proportion progressively reducing with age. One in 5 (18.0 per cent or 4,042 people) of those who volunteer were also employed or looking for work.



Household structure. In 2016, more than one in 5 people (22.0 per cent or 40,953) aged 65 years or older lived alone, ranging from 18.8 per cent in Brimbank and Wyndham, up to 32.4 per cent in Yarra. *(PHIDU, 2021a)*

The greater proportion of people living alone are female, due to their longer life expectancy. Older people living alone are more likely to experience social isolation and loneliness, as well as challenges in managing the demands of daily life. They are also at a greater risk of poorer health outcomes. *(CHSD, 2022)*

In 2016, 6,690 people (3.5 per cent) aged 65 years or older lived in a multi-family household. Older people living in these households may benefit from the resulting practical support and social connections that come with living with family. However, there may also be risks of elder abuse, particularly where the person is cared for by another member of the household, where there is an expectation that the older person will provide unpaid care (for instance, for grandchildren), or where financial risks exist (such as an adult child seeking to transfer Deed of Title from parent to self).

Household tenure. In 2016, 7 out of 10 people (71.3 per cent or 132,595) aged 65 years or older who lived in the NWMPHN region owned their own home, ranging from 61.6 per cent in Melbourne to 81.1 per cent in Moreland. More than 1 in 10 people (11.2 per cent or 20,760) in NWMPHN region aged 65 years or older were renting, which is higher than the Victorian average of 9.6 per cent. Again, significant variation existed, with almost a quarter (23.8 per cent) of older people living in Melbourne LGA renting, whilst 9-12 per cent of older people rented across most other LGAs. *(PHIDU, 2021a)*

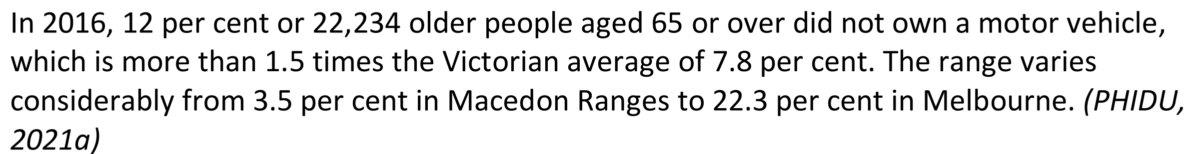
Outright home ownership increases security of tenure. An older person who is servicing a mortgage or renting may have reduced security if they are unable to meet their financial obligations.

Despite the high level of home ownership, the majority of older people in the NWMPHN region live on low incomes. Even though they may be relatively asset-rich, based on the value of their residence, they may experience difficulty in paying for significant expenses such as property maintenance or council rates. Furthermore, they may experience difficulty in paying for other items such as co-payments for health and aged care services.

Housing instability and homelessness is a significant risk, particularly among older single women who are the fastest growing cohort in need of social and public housing. Divorced older women were often the primary carers in their family and, as a result, often worked lower paid part-time roles in order manage around the needs of their families. Consequently, their accumulated retirement savings are often limited or non-existent, and divorce can leave them financially vulnerable.

A chronic shortage of housing stock coupled with rising interest rates continues to apply upward pressure on rents, which is likely to further increase housing stress particularly among older people who generally live on lower, fixed incomes. This may result in housing instability and the risk of homelessness, food insecurity, mental health impacts, and reduced ability to pay for aged care services – especially among people who are renting.

Car ownership and transportation. Fewer people drive the older they get. This can because of health reasons – such as deteriorating eyesight – or changes cognition or road confidence. Older people are therefore more reliant on family and friends, the use of taxis, ride-share services such as Uber, and public transport.



In 2016, 12 per cent or 22,234 older people aged 65 or over did not own a motor vehicle, which is more than 1.5 times the Victorian average of 7.8 per cent. The range varies considerably from 3.5 per cent in Macedon Ranges to 22.3 per cent in Melbourne. *(PHIDU, 2021a)*

Older people living in inner city areas are less likely to require a car due to the proximity of services and public transport. However, it is important to consider that personal mobility and other issues associated with ageing (such as cognitive decline) may reduce the suitability of public transport and increase reliance on more expensive forms of personal transport.

Older people living in growth areas and peri-urban areas are much more likely to require a car in order to access day-to-day services such as a supermarket, given the poorer public transport network and greater distances involved. In such areas, the costs of taxis and ride-share services are likely to be greater and may be less available due to the lower population density. This is likely to result in more transportation issues for older people, particularly where a family member or friend is not always available to help out.

Internet access. In 2016, 54.8 per cent or 101,810 people aged 65 years and older had internet access at home, ranging from 47.6 per cent in Darebin to 71.5 per cent Macedon Ranges. *(PHIDU, 2021a)*

However, limited digital literacy means that older people may be less comfortable compared to younger people accessing the same types of services online. For example, most older people may feel comfortable using social media to stay connected with friends and family, while some may be comfortable managing their finances and life administration online or via telephone. However, older people are much less likely to be comfortable accessing telehealth services online.

Limited English language reading proficiency among older people from non-English speaking backgrounds or with limited education attainment is likely to reduce their ability to use the internet to research and connect with the services they require. Furthermore, the experience of using an interpreter during an online meeting such as a telehealth consultation can be extremely challenging.

Almost half of older people (45.2 per cent) aged 65 years or more do not have access to the internet at home. This suggests there is likely to be a need among many for face-to-face engagement when exploring access to aged care and other services.

Carer responsibilities. In 2016, 11.9 per cent or 21,726 people aged 65 years and older provided unpaid assistance to people with a disability, matching the Victorian average. The proportion of older people providing assistance was broadly consistent across all LGAs. *(PHIDU, 2021a)*

A higher proportion of those aged 65-74 years (13.9 per cent or 14,007 people) provided care, reducing slightly among 75-84 year-olds (11.2 per cent or 6,416) and then significantly, to 5.3 per cent, among people aged 85 and older.

Further investigation is required to understand the recipients of unpaid care provided by older people – who may be their partner, children, or others. The need for an older person to provide unpaid care represents a significant burden, particularly when they have their own health and wellbeing needs to manage.

Intersectional vulnerability. The intersection of disability with housing tenure, age and low income creates additional vulnerability and increased need to access aged care services.

Table 3. Intersectional vulnerabilities

Risk factors	Persons	% of people living in private dwellings
Triple jeopardy (a) – living alone, disability, low income	6,796	3.7%
Triple jeopardy (b) – renters, disability, low income	3,413	1.8%
Quadruple jeopardy – renters, living alone, disability, low income	1,333	0.7%

Source: PHIDU, 2021a

More than 1 in 20 older residents living in Moreland (6 per cent), Darebin (5.5 per cent) and Maribyrnong (5.7 per cent) experience these intersectional vulnerabilities.

Community and physical environment

Feelings of trust. In 2019, 72.3 per cent of people aged 18 years and older who lived in the NWMPHN region reported that other people could never, rarely or only sometimes be trusted. This is consistent with the Victorian average of 71.9 per cent. However, a greater proportion of females (75.2 per cent) than males (69.9 per cent) felt this way. Across Victoria, males aged 65 years and older were more likely to definitely trust others compared to younger males and females. *(VAHI, 2021)*

The figure for non-binary people is not available.

Perceptions of safety. In 2019, 46.5 per cent people aged 18 years and older who lived in the NWMPHN region reported they never, not often or only sometimes felt safe walking alone down their street after dark, which was higher than the Victorian average of 41.5 per cent. Almost two-thirds (64.3 per cent) of females felt this way, compared to less than one-third of males (29.9 per cent) *(VAHI, 2021)*. The figure for non-binary people is not available.

Across Victoria, compared to younger people, those aged 65 years and older – especially females – were much less likely to feel safe walking alone down their street after dark. *(VAHI, 2021)*

Relative Socio-Economic Disadvantage

People living in more disadvantaged LGAs have generally experienced greater insecurity, uncertainty, and more frequent stressful events. Together, these factors shape social hierarchies and create a socioeconomic position that is the root cause of inequities in health.

In 2016, the ABS Index of Relative Socio-economic Disadvantage (IRSD) was created based on census data to reflect the economic and social conditions of people and households within an area. IRSD summarised variables including income, employment, education and English proficiency. A low IRSD score indicates relatively more disadvantage in general *(ABS, 2016)*.

NWMPHN had an IRSD score of 994 based on the 2016 Census, which indicated more disadvantage compared with Victoria (1010) and Australia (1000). Among all the 31 PHNs in Australia, NWMPHN ranked at 60th percentile, which was just above average.

With an IRSD score of 921, Brimbank was ranked as the most disadvantaged LGA in NWMPHN and the 4th most disadvantaged in Victoria. Other disadvantaged LGAs were Hume (947), Melton (994) and Maribyrnong (995).

The IRSD scores for LGAs were calculated by taking population-weighted averages of the IRSD scores in SA1s[6]. Despite the relatively good scores in Melbourne, Yarra and Moonee Valley overall, they contained some pockets that were extremely disadvantaged, recording IRSD scores of less than 400.

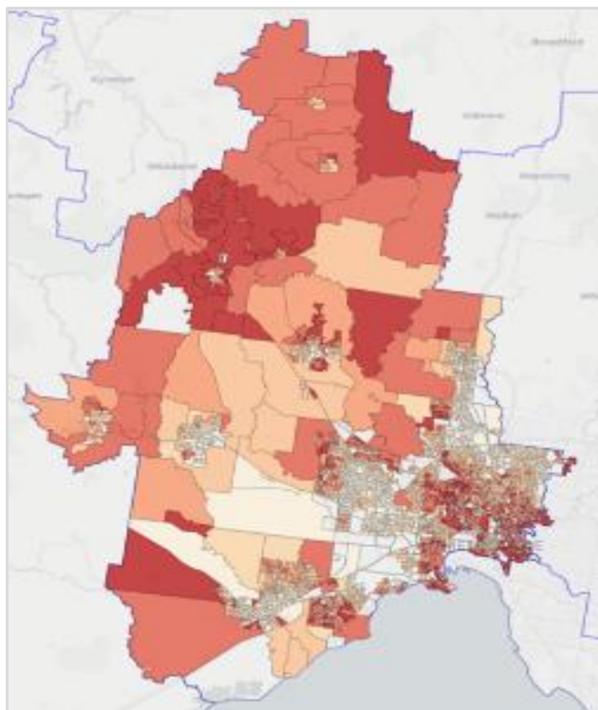


Figure 4 illustrates the inequalities in terms of disadvantage across the NWMPHN catchment. Darker tones indicate more disadvantage.

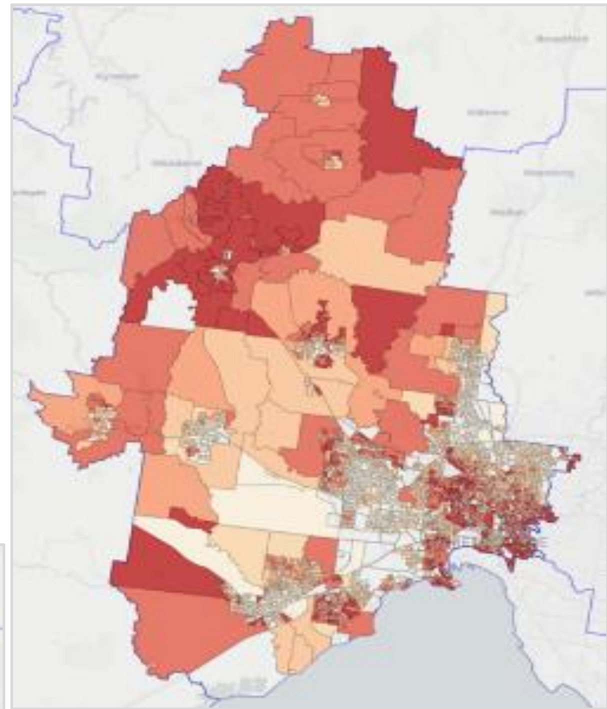


Figure 4. Map showing IRSD scores for SA1 in NWMPHN region.

2.3 Determinants of health status

Behavioural risk factors

Tobacco use. Older adults were less likely to smoke daily compared to other age groups. The 2019 Victorian Population Health Survey (VPHS) estimated that 8.1 per cent of Victorians aged 65-74 and 4.2 per cent of those aged 75-84 years smoke every day, which was less than the average for the total population: 12.3 per cent for people 18 and over. *(VAHI, 2021).*

[6] Statistical Areas Level 1 (SA1s) are geographic areas consisting of between 200 and 800 people, and an average population of around 400 people. SA1s are designed to maximise the geographic detail available for Census of Population and Housing data.

Nutrition. The 2019 VPHS estimated that:

- Only 3.6 per cent of Victorian adults aged 18 years and older met the recommended consumption guidelines for both fruit and vegetables. The figure was higher among older people, with 5.0 per cent of Victorians aged 65-74 years and 6.1 per cent of those aged 75-84 years meeting the guidelines *(Source: VAHI, 2021)*
- Older adults were more likely to meet the recommended consumption guidelines for fruit alone compared to the general population. 40.9 per cent of Victorian adults aged 18 years or older met the fruit consumption guidelines (but not the vegetable consumption guidelines) and this figure increased to 48.1 per cent among those aged 65-74 years, 50.0 per cent among people aged 75-84 years old, and 57.7 per cent among people aged 85 years and older.
- A similar trend existed in relation to the proportion of adults who met the consumption guidelines for vegetables alone. 5.7 per cent of Victorian adults aged 18 years or older met the vegetable consumption guidelines (but not the fruit consumption guidelines) and this figure increased to 7.6 per cent among those aged 65-74 years and 9.8 per cent among people aged 75-84 years old. Data was unavailable for people aged 85 years and older.

Alcohol. Across Victoria, the proportion of Victorian adults across all age groups drinking at increased lifetime risk was higher than the proportion at risky levels on a single occasion (59.4 per cent and 42.2 per cent respectively). Older adults were less likely to be at increased lifetime risk of alcohol-related harm. 48.9 per cent of Victorians aged 65-74 years, 36.5 per cent of those aged 75-84 years and 38.5 per cent of those aged 85 years or older were at increased risk, which was below the rate for the total population. People aged 85 and older were more likely to drink a smaller quantity on a regular basis, rather than to drink more than 4 standard drinks on a single occasion. *(VAHI, 2021)*

Physical activity. For people aged 65 years or over, Department of Health and Aged Care *(2021)* recommends at least 30 minutes of moderate intensity physical activity on most, preferably all, days. The 2019 VPHS estimated that more than 80 per cent of 65–74 year-olds met these guidelines. However, this decreases in older age groups: 31.9 per cent of Victorians aged 85+ had an insufficient level of physical activity. *(VAHI, 2021)*

Biomedical risk factors

Obesity. In 2017 in Victoria, older males were more likely than females to be overweight or obese (defined as having a Body Mass Index of equal to or greater than 25). However the proportion decreased with age for males and females.

- 69.3 per cent of males aged 65-74 years were overweight or obese, reducing to 37.8 per cent among males aged 85+ years.
- 52.4 per cent of females aged 65-74 years were overweight or obese, reducing to 29.0 per cent among females aged 85+ years. *(VAHI, 2021)*

Figures for non-binary people are not available.

The proportion of all adults who were overweight in Moorabool was 59.6 per cent, followed by Hume with 58.3 per cent, and Wyndham with 57.9 per cent. All were statistically greater than the overall Victorian prevalence, 50.8 per cent.

The 2019 VPHS identified significant risk factors related to bodyweight status. People who did not complete high school or who rented their home showed a significantly higher proportion of obesity, compared with the proportion in all Victorian adults *(VAHI, 2021)*.

Hypertension. In 2017 in the NWMPHN region, 28.5 per cent of adult men had hypertension compared to 20.9 per cent of adult women. Compared with other PHN catchments, men in NWMPHN had the second highest rate, and prevalence among women is the lowest. *(VAHI, 2019)*

In Victoria, it is estimated 53.1 per cent of people aged 65 to 74 have hypertension rising to around 60 per cent in people aged 75 and older. *(VAHI, 2021)*

The proportion of adults whose blood pressure has been recently checked also increases with age. Around 80 per cent of adults overall reported having a blood pressure check in the past 2 years, compared to 95.2 per cent in the 65–74-year age group.

Cholesterol. Data from the 2017-18 National Health Survey *(ABS, 2018)* indicated that there was no significant difference between the proportion of males and females with high cholesterol (6.1 per cent). In Victoria, 7.2 per cent of males and 6.7 per cent of females were estimated to have high cholesterol. The prevalence of high cholesterol increases significantly with age, with 1.1 per cent among people aged 25-44, rising to 12.9 per cent among those aged 45-64, and up to 24.1 per cent among those aged 65 years and over.

Cancer screening. Screening programs can help detect cancer early and enable better outcomes and survival rates. Screening is a population-based and systematic process of testing for pre-cancerous conditions without obvious symptoms. In Australia, there are national screening programs for breast, cervical and bowel cancers (DoHAC, 2021a; 2021b and 2021c).

Established in 1991, BreastScreen Australia provides free 2-yearly mammograms to women aged 40 and over, and actively targets women aged 50-74.

The National Cervical Screening Program (NCSP) was renewed following the improvements in technology and understanding of human papillomavirus (HPV). Since 2017, the program has provided a Cervical Screening Test (CST) every 5 years for women and other people with a cervix aged 25-74. Previously, it targeted women aged 20-69 for a 2-yearly Papanicolaou (Pap) smear to detect precancerous abnormalities of the cervix.

Since 2020, the National Bowel Cancer Screening Program (NBCSP) has invited people aged 50-74 to screen for bowel cancer using a free immunochemical faecal occult blood test (iFOBT).

In 2018-2019, the participation rates in these screening programs for people living in NWMPHN region were below the Victorian and national rates (AIHW, 2021a).

Table 4. Participation rates (%) in national cancer screening programs, 2018-2019

Region	Breast cancer	Cervical cancer	Bowel cancer
NWMPHN	50%	43.2%	42.8%
Victoria	53.5%	46.8%	46%
Australia	54.8%	46.5%	43.5%

Source: AIHW, 2021a

2.4 Access to services

Primary care

Chronic Disease Management Plans. The number of Aboriginal and Torres Strait Islander people aged 50 years and older, and the number of non-Aboriginal people aged 65 years and older, with Chronic Disease Management Plans (MBS Item 721: CDM-GPMP) increased by 129.3 per cent from 59,726 to 137,048 in the four years between 2017-18 and 2020-21.

In 2020-21, 63.1 per cent of older Aboriginal people and 62.8 per cent of older non-Aboriginal people had a Chronic Disease Management Plan *(NWMPHN PAT BI database).*

Medication Management Review. The number of people aged 50 years and older who were of Aboriginal and Torres Strait Island origin and the number of non-Aboriginal people aged 65 years and older who had a Medication Management Review increased by 53 per cent from 8,996 to 13,716 in the four years between 2017-18 and 2020-21.

This included:

1. a 92.5 per cent increase from 2,809 to 5,409 in the number of people in residential aged care who had Residential Medication Management Review (MBS Item 903).
2. a 34.8 per cent increase from 6,148 to 8,287 in the number of people living in community settings who had a Domiciliary Medication Management Review (MBS Item 900).

Overall in the NWMPHN region, 5.1 per cent of the Aboriginal population aged 50 years and older, and 6.3 per cent of non-Aboriginal people aged 65 years and older had a Medication Management Review in 2020-21 (*NWMPHN PAT BI database).*

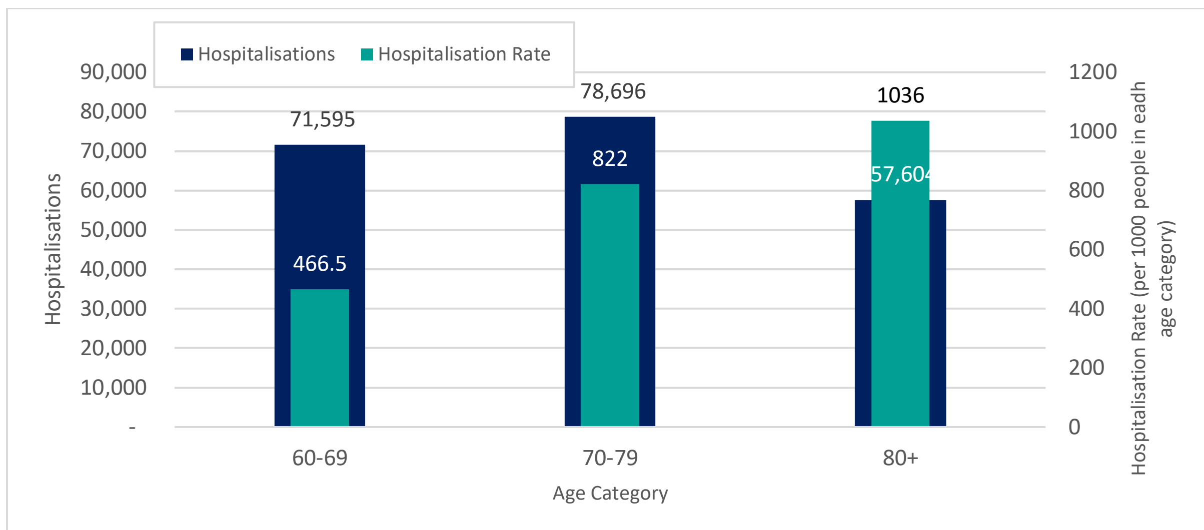
Mental Health Care Plans. The number of people of Aboriginal and Torres Strait Island origin aged 50 years and older and non-Aboriginal people aged 65 years and older who had a Mental Health Care Plan increased by 44.3 per cent from 13,705 to 19,910 in the four years between 2017-18 and 2020-21.

In 2020-21, 26.8 per cent of people aged 50 years or older who were of Aboriginal and Torres Strait Island origin had a Mental Health Care Plan, compared to 9 per cent among other people aged 65 years and older *(NWMPHN PAT BI database).*

Acute care: In-patient (admitted) hospitalisations

In 2020-21, people aged 60 years and older accounted for 207,895 or 43.3 per cent of all in-patient hospitalisations in the NWMPHN region, with people aged 70-79 years having the most in-patient hospitalisations of any age cohort (78,696 or 16.4 per cent).

Figure 5. NWMPHN - Number of hospitalisations and hospitalisation rate per 1000 population - FY2020-21



Source: VAHI, 2021a

The rate of hospitalisation increased with age. In 2020-21, almost there were 466.5 hospitalisations per 1,000 people aged 60-69 years, increasing to 822 per 1000 among people aged 70-79 years, and 1036 per 1000 among people aged 80 years and older. Older males were hospitalised at significantly higher rates than females. A figure is not available for non-binary people. The rate is derived from de-identified admissions data. It cannot tell us the number of times any patient was hospitalised. Therefore, it cannot tell us the proportion of each age cohort hospitalised during the period.

Table 5. NWMPHN - Hospitalisations per 1000 population in each age group, by gender - FY2020-21

Age group	Males	Females	Total
60 – 69	547	386	933
70 – 79	961	683	1,644
80 +	1,248	824	2,072

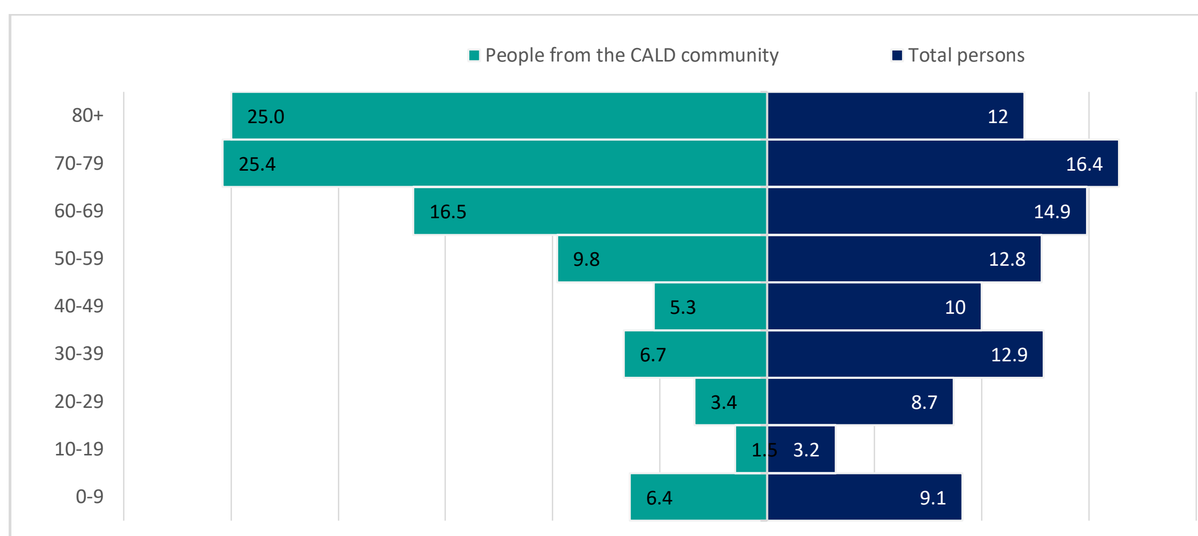
Source: VAHI, 2021a

People from culturally diverse backgrounds. Compared to the total population in the NWMPHN region, the cultural and linguistically diverse (CALD) communities had a significantly higher proportion of hospitalisations among people aged 70 years and over.

Of the total hospitalisations among people from CALD communities, 13 per cent each were Greek and Arabic speakers, 12 per cent were Vietnamese speakers and 11 per cent were Italian speakers.

Hume accounted for 19 per cent of the total hospitalisations among CALD communities in the region. Brimbank, Wyndham and Melbourne saw an increase in the number of hospitalisations among CALD communities from 2019-20 to 2020-21.

Figure 6. Hospitalisation proportion (per cent) by age among total population and CALD communities in NWMPHN in FY2020-21

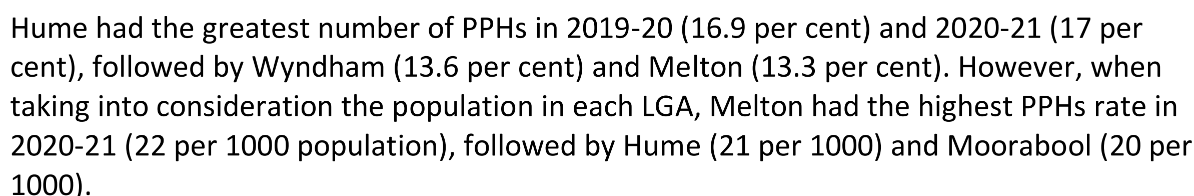


Source: VAHI, 2021a

Acute care: Potentially Preventable Hospitalisations (PPHs)

From July 2019 to June 2021 across the NWMPHN region, 65,585 potentially preventable hospitalisations (PPHs) were recorded across all age categories. These accounted for 6.7 per cent of hospitalisations in the region. More than half (55.4 per cent) of the PPHs were due to chronic conditions. The number of PPHs in 2020-21 dropped by 18 per cent compared to 2019-2020, most likely due to lockdowns and behaviour changes in response to the COVID-19 pandemic. *(VAHI, 2021a)*

In 2020-21, the 80 years and older age group had the greatest number of PPHs (17.7 per cent), followed by the 70-79 age group (16 per cent). Considering the population in each age group in the region, the PPHs rate increased with age. Men aged 80+ years were the most likely group to experience PPHs (103 per 1000 population).



Hume had the greatest number of PPHs in 2019-20 (16.9 per cent) and 2020-21 (17 per cent), followed by Wyndham (13.6 per cent) and Melton (13.3 per cent). However, when taking into consideration the population in each LGA, Melton had the highest PPHs rate in 2020-21 (22 per 1000 population), followed by Hume (21 per 1000) and Moorabool (20 per 1000).

Acute care: Emergency Department (ED) presentations

Older people present to hospital emergency departments (ED) at a higher rate compared to younger people. In 2020-21, there were 664 ED presentations per 1000 males aged 80 years and older, and 563 ED presentations per 1000 females. Data for non-binary people is not available. Hume had the greatest number of ED presentations among people aged 65-79 years, whereas Moreland shared the most ED presentations among those aged 80 years and older. *(VAHI, 2021b)*

People aged 85 years and older were the most likely to present to ED, especially those in Melton where, in 2020-21, the rate was 1,095 presentations per 1000 people aged 85+ years, indicating a significant rate of repeat presentations.

Acute care: Avoidable Emergency Department (ED) presentations

The definition of avoidable ED presentations used as the basis for this analysis is:

"No treatment and discharged: patients who were 'self-referred'; was an initial (rather than follow-up) attendance for this condition; received no investigation and either no treatment or 'guidance/advice only'; and were sent home with either no follow-up or follow-up with primary care." (McHale et al ,2013)

According to this definition, in 2020-21 almost 6 per cent of ED presentations in the NWMPHN catchment were avoidable, of which 2,548 were among people aged 60+ years, accounting for 9.9 per cent of all avoidable ED presentations.

Aged care

Older people across the NWMPHN catchment access a range of aged care services through the Commonwealth Home Support Program, Home Care Package and Residential Aged Care programs.

Commonwealth Home Support Program (CHSP) and Home Care Package (HCP). Regional Assessment Services (RAS) assess an older person's eligibility to receive the Commonwealth Home Support Program. Those deemed eligible are provided with a funding envelope which reflects their level of assessed need in order to purchase appropriate support services. A co-payment is frequently required. If more intensive support is needed, the person is referred to an Aged Care Assessment Team to determine their eligibility to receive a Home Care Package or Residential Aged Care (RAC).

In NWMPHN's region in 2020-21, 21.7 per cent of people aged 65 years and older received services through the CHSP, ranging from 12.0 per cent in Melbourne to 28.6 per cent in Moreland. Five per cent received services through the CHP, ranging from 2.4 per cent in Macedon Ranges to 7.1 per cent in Maribyrnong.

Table 6. CHSP and CHP recipients by LGA in FY2020-21

LGA Name	Population (2020 ERP)	CHSP	per cent population receiving CHSP	HCP	% population receiving HCP
Brimbank (C)	30,961	6,258	20.2%	1,722	5.6%
Darebin (C)	22,240	5,745	25.8%	1,355	6.1%
Hobsons Bay (C)	14,787	3,038	20.5%	544	3.7%
Hume (C)	25,399	6,515	25.7%	1,106	4.4%
Macedon Ranges (S)	5,749	1,061	18.4%	140	2.4%
Maribyrnong (C)	9,226	2,221	24.1%	653	7.1%
Melbourne (C)	12,227	1,466	12.0%	465	3.8%
Melton (C)	15,660	3,196	20.4%	675	4.3%
Moonee Valley (C)	20,371	3,826	18.8%	1,168	5.7%
Moorabool (S)	3,790	955	25.2%	125	3.3%
Moreland (C)	23,480	6,706	28.6%	1,530	6.5%
Wyndham (C)	22,032	3,691	16.8%	594	2.7%
Yarra (C)	11,075	2,440	22.0%	769	6.9%
NWMPHN	**216,997**	**47,118**	**21.7%**	**10,847**	**5.0%**

Source: AIHW, 2022

Residential Aged Care (RAC). In 2021, in the Northern and Western Aged Care Planning Regions[7]:

- 11,280 people were in residential aged care.
- Two-thirds (65.8 per cent or 7,418 people) were female, ranging from 43.7 per cent at 65-69 years and increasing linearly to 85.1 per cent for 100+ years.
- The majority (70.4 per cent or 7,943 people) spoke English as their preferred language.
- Almost half (43.4 per cent or 4,896 people) were born in a predominantly non-English speaking country.
- 38 people (0.3 per cent) were of Aboriginal or Torres Strait Island origin. *(AIHW 2021b)*

2.5 Health consequences

The association between social position and mortality is well established. At any given moment, a person's risk of death is associated with factors related to low or high social position. Longer exposure to these factors will increase or decrease the risk of death. Accordingly, this kind of lifetime accumulation of social position may be an important factor behind mortality, as well as the outcomes of health-compromising conditions and disease (collectively known as morbidity). *(Mackenbach and Maas, 1989)*

Prevalence of chronic conditions

In 2017 in Victoria, people aged 65 years and over were more impacted than other age groups by chronic conditions, with more than half the cohort having two or more chronic

[7] The Western Aged Care Planning Region (ACPR) falls within the NWMPHN catchment, however only approximately half of the Northern ACPR falls within it.

diseases. The proportion increases with age (65-74 years: 51.5 per cent; 85+ years: 62.9 per cent). *(VAHI, 2019)*

For the first time, Census 2021 captured information from respondents regarding a range of chronic conditions, including arthritis, dementia, heart disease and lung conditions. At the time of undertaking this assessment, this information is only available by LGA for people aged 15+ years.

Prevalence of chronic conditions in the NWMPHN region (15+ years)

Arthritis

- The most common chronic condition in the NWMPHN region among people aged 15 years and older is arthritis (110,298 people, age standardised rate (ASR): 9.4 per 100 people).
- Hume (16,103), Brimbank (13,584), Wyndham (13,271), Moreland (11,659), Darebin (10,744) and Melton (10,189) had the highest number of people living with arthritis. Moorabool (12 per 100) had the highest ASR, followed by Hume (10.8 per 100) and Melton (10.6 per 100). (PHIDU, 2021a)

Heart Disease

- The ASR for heart disease in the NWMPHN region among people aged 15 years and older (50,536 people, ASR: 4.5 per 100) is consistent with the Victorian average of 4.6 per 100.
- Hume (5.3 per 100), Melton (5.1 per 100), Moorabool (5.1 per 100) and Wyndham (4.9 per 100) have a significantly higher incidence than other LGAs, while the higher numbers are in Hume (7,359 people), Brimbank (6,546) and Wyndham (6,175). *(PHIDU, 2021a)*

Dementia (including Alzheimer's disease)

- The ASR for dementia (including Alzheimer's disease) in the region among people aged 15 years and older is equal to the Victorian average of 0.9 per 100 people.
- Brimbank (1,462), Moreland (1,404), Hume (1,188), Darebin (1,158) and Moonee Valley (1,083) have the greatest number of people living with dementia. Maribyrnong has the highest ASR in the region: 1.1 per 100, or 532 people. *(PHIDU, 2021a)*

Lung conditions (including chronic obstructive pulmonary diseases, including emphysema)

- NWMPHN region has a slightly lower incidence of lung conditions (ASR: 1.6 per 100 people) compared to Victoria (1.8 per 100). However, there are some significant outliers: Moorabool (2.9 per 100), Melton (2.2 per 100) and Macedon Ranges (2.1 per 100).
- LGAs with the largest numbers of people with lung conditions include Hume (2,787), Wyndham (2,409) and Melton (2,035), and Brimbank (2,220). *(PHIDU, 2021a)*

Multiple chronic conditions

- The need to manage multiple chronic conditions creates day-to-day living challenges, results in additional health care costs, additional support requirements, and may negatively impact quality of life.
- NWMPHN region has a lower incidence of people living with two chronic conditions (6.7 per 100, or 84,877 people) compared to Victoria. However, it ranges from 5 per 100 in Melbourne to 8.4 per 100 in Moorabool. LGAs with the highest number of people living with two chronic conditions include Hume (11,584), Wyndham (10,092), Brimbank (9,559), Moreland (9,402) and Darebin (8,191). (*PHIDU, 2021a*)
- Across Victoria, the prevalence of having ever been diagnosed with two or more chronic conditions was significantly higher in LGBTIQ+ adults (36.1 per cent) compared with non-LGBTIQ+ adults (25.1 per cent). (*VicHealth, 2017*)

Prevalence of chronic conditions in the NWMPHN region (15+ years)
• NWMPHN region has a similar incidence of people living with three or more chronic conditions: 3.5 per 100, or 40,555 people, compared to 3.6 per 100 for Victoria. However, significant variation exists, with Moorabool (at 4.5 per 100), Melton and Hume (both 4.4 per 100) having a significantly higher incidence than the regional and Victorian average. LGAs with the largest number of people living with three or more chronic conditions include Hume (6,236), Wyndham (5,011), Brimbank (5,384), Moreland (4,283) and Melton (4,022). *(PHIDU, 2021a)*

Emergency Department presentations and hospitalisations

Chronic conditions and acute care. People aged 60 years and older accounted for 21,199 or 59.2 per cent of hospitalisations related to chronic conditions in 2019-2021. Hospitalisations increased with age, with people aged 60-69 years accounting for 14.7 per cent, compared to 20.6 per cent for 70-79 years, and 24.0 per cent at 80+. *(VAHI, 2021a)*

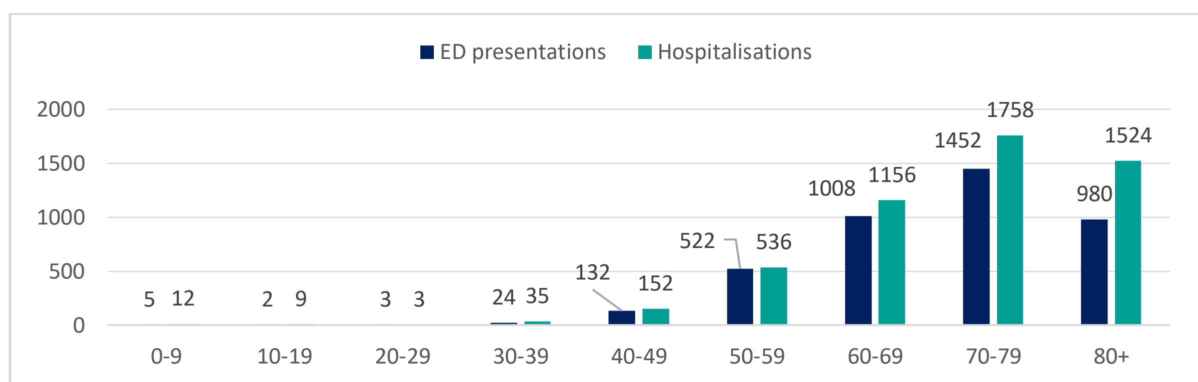
Males aged 50-69 years were significantly more likely than females to be hospitalised in relation to chronic conditions. Whereas older females were slightly more likely to be hospitalised at 80+.

Hume (18 per cent), Wyndham (13 per cent) and Melton (13 per cent) had the greatest number of hospitalisations related to chronic conditions among people of all ages. Melton, Hume and Moorabool had the highest rate of hospitalisations for chronic conditions among people of all ages. *(VAHI, 2021a)*

Specific chronic conditions are detailed below.

Chronic obstructive pulmonary disease (COPD). In 2020-21, people aged 60 years and older accounted for 83.3 per cent (3,440) of ED presentations and 85.6 per cent (4,438) of hospitalisations related to COPD. People aged 70-79 years accounted for the largest number of ED presentations and hospitalisations (3,210 or 34.5 per cent). *(VAHI, 2021a and 2021b)*

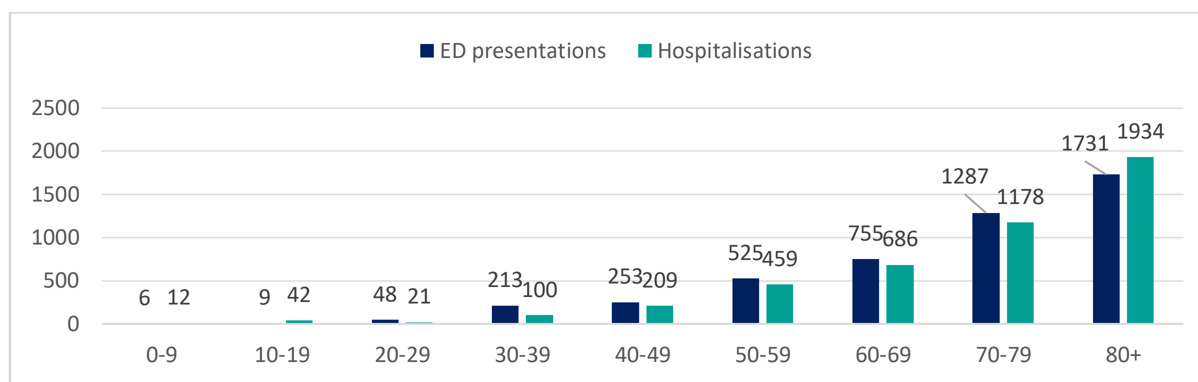
Figure 7. ED presentations and hospitalisations due to COPD by age in NWMPHN (FY2020-21)



Source: VAHI, 2021a and 2021b (ICD: J40 – J44)

Cardiovascular disease. In 2020-21, people aged 60 years and older accounted for 78.2 per cent (3,373) of ED presentations and 81.8 per cent (3,798) of hospitalisations related to cardiovascular disease. People aged 80 years and older accounted for the largest number of ED presentations and hospitalisations (3,665 or 38.7 per cent). *(VAHI, 2021a and 2021b)*

Figure 8. ED presentations and hospitalisations due to CVD related conditions by age in NWMPHN



Source: VAHI, 2021a and 2021b

Cancer

The incidence of cancer increases with age. In 2020-21, people aged 60 years and older had a much higher rate of ED presentations and hospitalisations due to cancers, compared to younger age cohorts.

Table 7. ED presentations and hospitalisations due to cancers by age group in FY2020-21

Age group	ED presentations			Hospitalisations		
	Number	%	Rate per 10,000 population	Number	%	Rate per 10,000 population
00-09	12	2.0%	0.5	374	2.4%	15.2
10-19	7	1.2%	0.3	179	1.2%	8.8
20-29	20	3.3%	0.6	357	2.3%	10.1
30-39	30	5.0%	0.8	783	5.0%	21.3
40-49	47	7.8%	1.9	1,172	7.5%	47.2
50-59	111	18.5%	5.5	2,449	15.7%	121.4
60-69	122	20.3%	7.9	3,733	23.9%	241.6
70-79	149	24.8%	15.5	3,922	25.1%	406.8
80+	103	17.1%	17.9	2,651	17.0%	459.4
Total	**601**	**100%**	**3.1**	**15,620**	**100%**	**80.98**

Source: VAHI, 2021a and 2021b

Alzheimer's Disease and other forms of Dementia

Dementia is a term used to describe a group of conditions characterised by the progressive decline and impairment of brain function. It is a broad term used to describe a loss of memory, intellect, rationality, social skills and physical functioning. Dementia is more common among people aged 65 years and older. It is also more common with advancing age and is a major cause of disability and dependency.

Alzheimer's is the most common form and affects up to 70 per cent of all people with dementia. It is a degenerative brain disease caused by nerve cell death resulting in shrinkage of the brain.

An individual with Alzheimer's disease or another form of dementia experiences growing dependence on care providers for daily living, impacting themselves, families and carers. It is estimated that in 2021 almost 1.6 million people in Australia were involved in the care of someone living with dementia (*Dementia Australia, 2022*).

It is estimated that nationally in 2021 there were more than 27,000 people with dementia who were aged less than 65 years, and more than 350,000 people with dementia aged 65 years and older. With an ageing population it is expected that the number of people in Australia with dementia will increase. Among the Aboriginal and Torres Strait Island communities, the rate of people with dementia is estimated to be 3 to 5 times as high as the Australian population overall. *(AIHW, 2021c)*

Research commissioned by Dementia Australia (2021) estimated the prevalence of the condition across LGAs. As expected, in the NWMPHN catchment the estimated number of people currently with dementia is proportionally highest within LGAs where more older people reside, including Macedon Ranges, Moonee Valley, and Hobsons Bay, with considerably lower prevalence within the Melbourne and Wyndham areas.

By 2058 the number of people in Victoria with dementia is estimated to increase by 2.5 times, and 3.5 times within the NWMPHN region. This estimated rate of increased prevalence is greatest in 'growth areas', such as Wyndham and Melton. These areas are expected to have more than 5.5 times the number of people with dementia in the next few decades. The number in Melbourne and Hume is expected to increase more than 4 times.

Table 8. Estimated prevalence of dementia in NWMPHN by LGA in 2020-21 and 2058

Region	LGA	2021 estimated number of persons	2058 estimated number of persons	Estimated % of population 2020-21
Inner city	Melbourne	1,243	5,472	0.68
	Maribyrnong	1,132	3,713	1.19
	Yarra	1,234	4,379	1.20
Suburban	Brimbank	3,432	8,715	1.65
	Darebin	2,863	6,960	1.72
	Hobsons Bay	1,754	4,585	1.79
	Moonee Valley	2,495	6,197	1.89
	Moreland	3,108	7,061	1.65
Growth area	Hume	2,798	11,967	1.16
	Melton	1,586	8,936	0.92
	Wyndham	2,326	13,447	0.82
Peri-urban	Macedon Ranges – part	9,74	2,234	1.91
	Moorabool – part	614	1,655	1.70
NWMPHN		24,325	85,321	1.24
Victoria		120,900	301,000	1.80

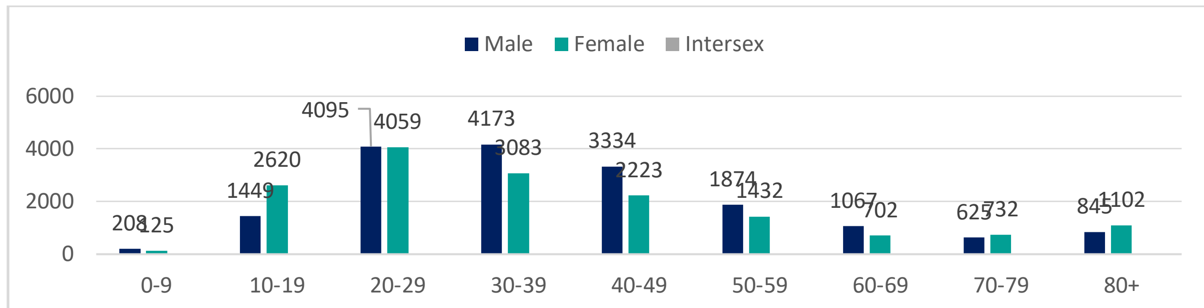
Source: Dementia Australia (2021)

Modelled based on PHIDU (2021a) ERP for 2020; estimates included all of Moorabool and Macedon Ranges LGAs, not just NWPHN parts.

Mental health

ED presentations due to mental and behavioural disorders. From 2019 to 2021, people aged 60 years and older accounted for 5,073 or 15 per cent of ED presentations for mental and behavioural disorders. Among people aged 70 years and older, females presented at a higher rate than males. Data for non-binary people is unavailable. *(VAHI, 2021b)*

Figure 9. ED presentations due to mental and behavioural disorders in NWMPHN 2019-2021

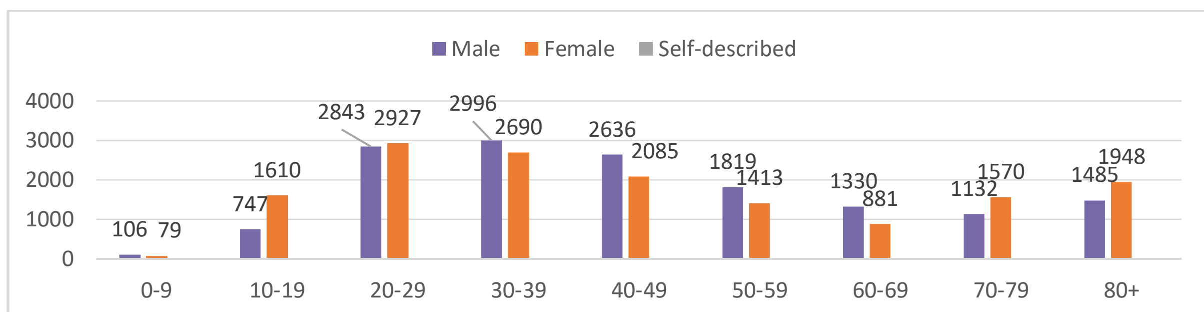


Source: VAHI, 2021c

In 2020-21, the highest rates of ED presentations among all age cohorts were in Melbourne, Yarra, Moreland, Darebin and Moonee Valley.

Hospitalisations due to mental and behavioural disorders. From 2020-2021, people aged 60 years and older accounted for 8,346 or 27.5 per cent of hospitalisations for mental and behavioural disorders. Among people aged 70 years and older, females were hospitalised at a higher rate than males. Data for non-binary people is unavailable. *(VAHI, 2021a)*

Figure 10. Hospitalisations due to mental and behavioural disorders in NWMPHN 2019-2021

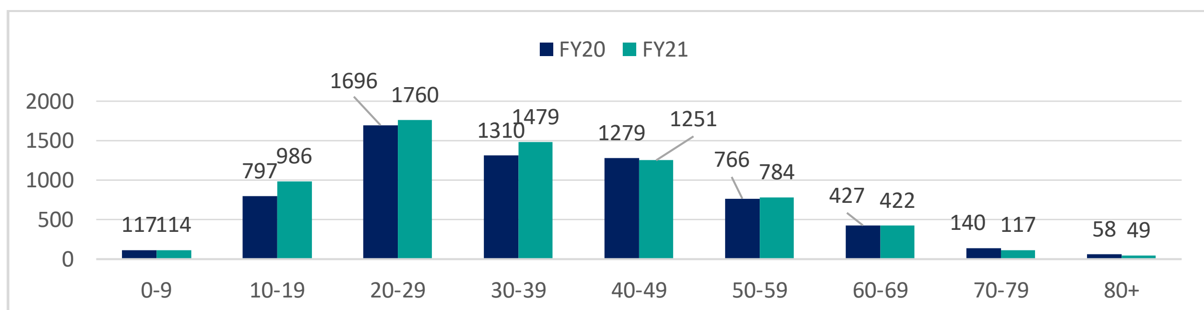


Source: VAHI, 2021a

Alcohol and Other Drugs (AOD)

ED presentations primarily due to AOD. From 1 July 2019 to 30 June 2021, people aged 60 years and older accounted for 1,213 or 9 per cent of ED presentations primarily due to AOD. *(VAHI, 2021b)*

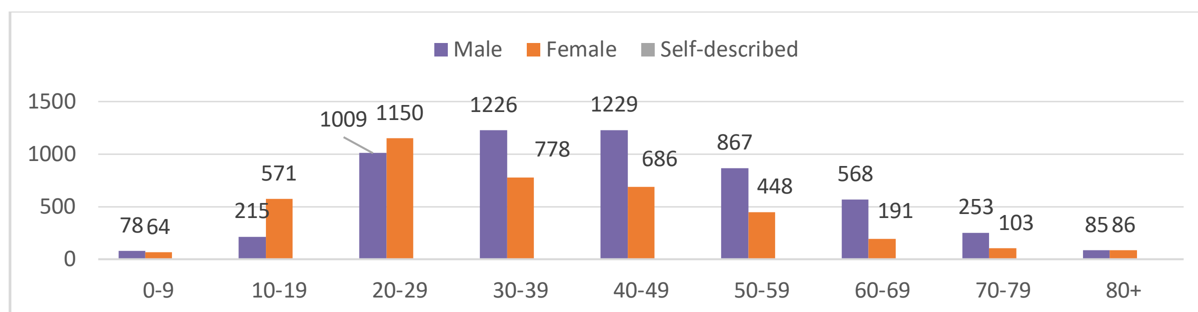
Figure 11. ED presentations due to AOD by age in NWMPHN in 2019-20 and 2020-21



Source: VAHI, 2021c

Hospitalisations primarily due to AOD. From 1 July 2019 to 30 June 2021, people aged 60 years and older accounted for 1,287 or 13.4 per cent of ED presentations primarily due to AOD. Males accounted for more than 70.4 per cent of hospitalisations. *(VAHI, 2021a and 2021b)*

Figure 12. Hospitalisations primarily due to AOD by age and gender in NWMPHN July 2019 - June 2021



Source: VAHI, 2021a

Premature mortality

Premature mortality refers to deaths that occur among people under 75 years of age. *(AIHW, 2015; PHIDU, 2021b)*

From 2015 to 2019, there were 14,947 premature deaths in the NWMPHN region. The average annual premature mortality rate was significantly higher in males (273.1 per 100,000) than females (167.5 per 100,000). Data for non-binary people was not available.

Maribyrnong, Brimbank and Melton are the 3 LGAs with the highest premature mortality rate. The region's rate of death due to circulatory diseases (including ischaemic heart disease) and lung cancer was significantly higher than the Victorian average.

Table 9. Comparison of Premature Death Rates in NWMPHN and Victoria

Cause of death	NWMPHN		Victoria
	Persons	ASR per 100,000	ASR per 100,000
Cancer	2,917	532.7	532.0
Lung cancer	687	125.5	116.4
Circulatory system diseases	1,445	264	232.9
Ischaemic heart disease	727	133	112.9
Respiratory system diseases	554	101	98.1

Source: PHIDU, 2021a

3. Community and stakeholder consultation

3.1 Approach

NWMPHN undertook the process described in Figure 13 in relation to stakeholder and community consultation.

Structured interview questions were developed and adapted for specific geographic and population groups to understand their views of the following:

1. Service needs and characteristics of the population
2. Issues experienced by consumers in accessing care
3. Barriers to engaging

4. The existing service landscape including relationships between providers
5. Workforce considerations

Interviews were undertaken between the 26 July and 3 August 2022. A briefing session was held with staff members before the interviews to help them prepare. This included an overview of the care finder program, the purpose of the consultation and the approach taken (including geographic and population considerations).

In total, 15 stakeholder groups and 8 consumers completed structured interviews with staff members from NWMPHN. Staff members documented responses from the interviews into a prepared template. All interview responses were then collated and analysed thematically. A briefing session with staff members was held post-analysis to provide an overview of the themes, to validate what was presented and to add any critical insights that may have been overlooked.

Figure 13. Consultation approach

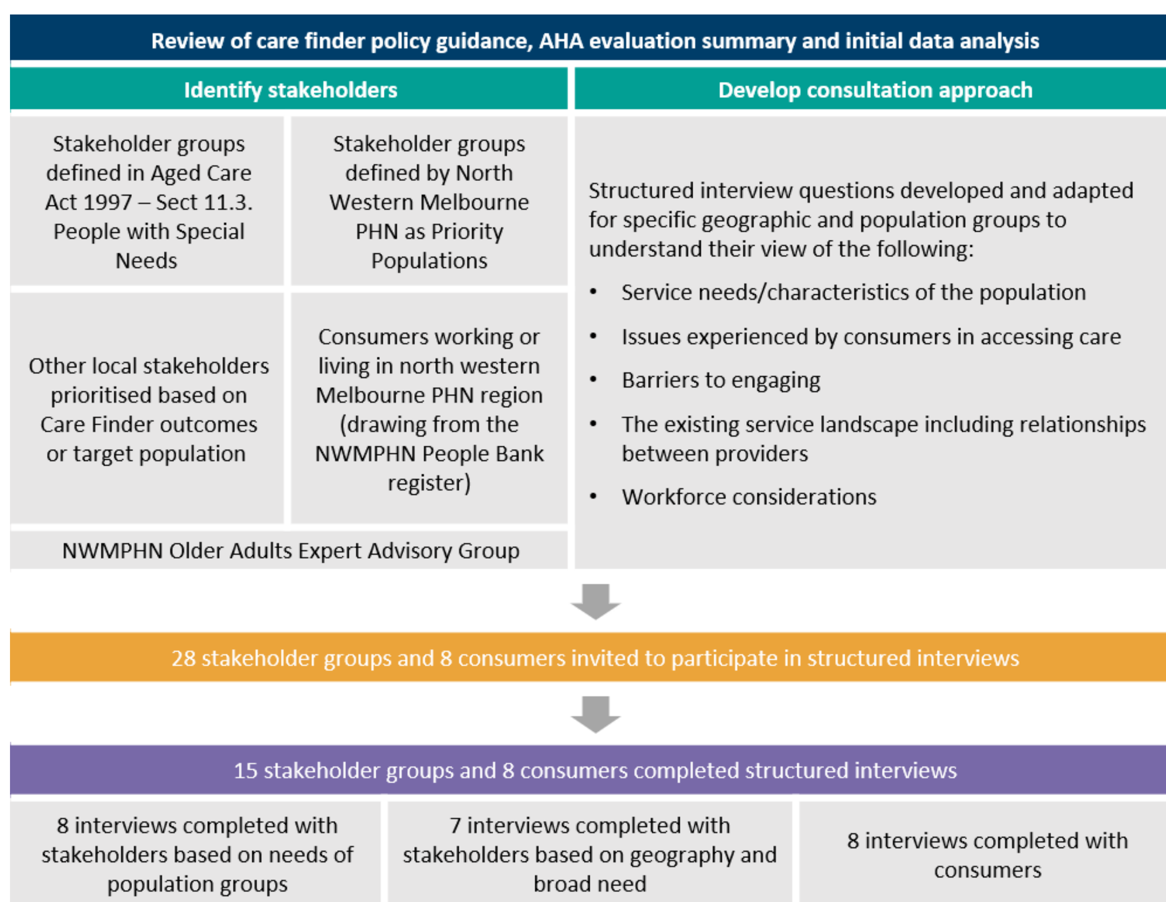


Table 10. List of stakeholders interviewed

Stakeholder	Purpose of engagement
Brimbank City Council	Provide insight/perspectives on providing services to older adults in a geographic area/region of need.
Wyndham City Council	
Hume City Council	
Melton City Council	
Western Aged Care Assessment Service & Northern Health Aged Care Assessment Services	

Merri Health	
IPC Health	
Ethnic Communities Council of Victoria	Provide insights/perspectives of needs of older adults from priority population
Val's LGBTI Ageing & Aged Care	
Aboriginal Community Elders Services	
Victorian Aboriginal Health Service	
Care Leavers Australian Network	
RSL Victoria	
Vietnam Veterans Association	
NWMPHN Older Adults Expert Advisory Group	
Consumers / Community members	Provide personal insights / perspective on their needs as an older adult

3.2 Key insights

Key insights from the consultations are outlined below.

Table 11. Consultation insights

Theme	Insight
Barriers to accessing care	1. It is such a complex system, much of which is only accessible online – doesn't fit with the needs of these particular cohorts. 2. Older people are likely to be concerned about losing their autonomy. They may be reluctant to give up their independence or worried about a 'slippery slope' of having their personal agency reduced, resulting in them ending up in residential aged care. 3. Financial factors relating to aged and health care impact older people in multiple ways including unexpected costs associated with care, transportation costs incurred when accessing care, and limited understanding of how to manage best an envelope of aged care funding to ensure their key needs are met and benefits are maximised. 4. The pandemic has resulted in older people being hesitant to leave their home despite restrictions easing, resulting in reduced access to centre-based services and social interaction. 5. Fear of discrimination. Client diversity and workforce diversity can create practical challenges despite equality under law. For example, clients and caregivers may come from cultural backgrounds with a history of conflict, or differing perspectives on issues of importance (for instance, sexual orientation). 6. 'Queer' may be a triggering term for some older LGBTIQ+ people. 7. Trust is key, and organisations which are known, trusted and already used by the target cohorts are more likely to be accepted to the community. Historical negative experiences among some cohorts (such care leavers, LGBTIQ+ people) may result in a trust deficit in relation to government and religious organisations.

Theme	Insight
	8. Reluctance to use mainstream service providers which may not have the cultural knowledge or language capability (CALD, Aboriginal and Torres Strait Islander) or understanding of the target population (LGBTIQ+, veterans). 9. Culture, language barriers, negative historical experiences and low levels of health literacy can result in older people engaging with services only after a crisis occurs. 10. Creative approaches required to engage "hardly reached" communities and establish trust is key. This may include working with faith leaders, for example.
Engagement Approach	11. Technology may be unavailable or not well understood. Face-to-face communication is preferred among many older people. 12. Digital literacy is limited and there is a strong preference for face-to-face engagement. 13. The region includes a relatively high proportion of older people with low or no English language proficiency which creates challenges in relation to engagement, awareness and understanding of the assessment process and services available, and the cultural appropriateness of services.
Transportation	14. Transportation is a key issue – in terms of older people having to travel to access the services they need, or providers travelling to deliver services at a client's home. Older people without access to a car or who live in peri-urban areas or other areas which are not well serviced by public transport are more reliant on costly taxis. So too, some providers may find it more difficult to regularly visit a geographically isolated client due to the travel time and costs involved.
Client context	15. Cultural norms may result in expectations that care will be provided by family members, and that older people will live as part of multi-generational families. However, this may be at odds with the expectations of their children and grandchildren who have grown up in Australia. There may be a cultural expectation that older people care for their grandchildren and this may impact their ability to access aged care supports which may be required. 16. Older LGBTIQ+ people may be less likely to have inter-generational family members to serve as a conduit to services and are less likely to be 'out' compared to younger LGBTIQ+ people. If so, they may be concerned about being outed by an LGBTIQ+-specific service; conversely, they may be worried about experiencing discrimination at a mainstream service if they choose to disclose their sexual orientation. 17. Existing family and community supports are very important for these cohorts and also need to be supported and included, as appropriate.
Health issues	18. Mental health concerns may be dismissed as simply a consequence of getting older, rather than being important and treatable. 19. Older Aboriginal and Torres Strait Islander people are more likely to be dealing with multiple chronic health conditions alongside other needs such as transportation or food security.

Theme	Insight
	20. Older people may have complex chronic conditions coupled with social and mental health needs, requiring a diverse range of integrated services.
Workforce and Sector issues	21. Services need to prioritise the recruitment, training, support and retention of a diverse workforce with the cultural knowledge, language skills and lived experience that ensures the services offered are safe, accessible and inclusive. 22. Providers find it difficult to recruit and retain staff given the relatively low wages in the sector and the impact of the pandemic. 23. The availability and accessibility of services varies across the region, particularly in peri-urban and rural areas and where transportation is limited. Significant variation often exists within LGAs, with better services and transportation often available in areas where house prices and rental costs are higher, resulting in people who live in lower cost housing (and with lower incomes) being disadvantaged. 24. Competition does not incentivise collaboration between providers. However, some councils have networks in place that support information sharing and collaboration.
Other	25. Consultation primarily explored the issues for each sub-population. However, there will be older people who belong to multiple sub-populations who may be more vulnerable or disadvantaged and in critical need of support. 26. Some local governments identified elder abuse may be an issue where there are expectations that older people will care for their grandchildren. 27. In some locations, 100+ services are available, which can make the task of identifying suitable providers quite challenging. Conversely, limited choice in other areas may result in difficulty accessing the required care – particularly where a low level of care is required (for instance, 2 hours per week) – which may result in a client having to accept a higher and more expensive level of care, which impacts their ability to afford the other services they may require.

4. Local service landscape

Findings from both the data analysis and stakeholder and community consultations point to a service landscape or 'care finder ecosystem' that can be categorised into these sectors:

1. Primary care
2. Aged care
3. Social care
4. Secondary and tertiary care
5. Specific health services and systems, such as National Disability Insurance Scheme or Department of Veterans' Affairs services.

An initial analysis of the care finder service landscape is provided in Table 12. It outlines some of the common service types highlighted by stakeholders and community members and corresponding local service providers. It is worth noting that transport and access to

transport services was reported as a barrier to access for older adults by stakeholders. This gap is also reflected in the initial landscape mapping, where no information could be found on local free or subsidised transport services.

Table 12. Care finder service landscape mapping

Sector	Service type	Service provider	Location
Primary care	General practice	• Approx. 560 general practices, including Victorian Aboriginal Health Service (only Aboriginal medical service in NWMPHN region)	NWMPHN region-wide
	Mental health services	• Online or telephone-based wellbeing support services or locally available community services, including those offered by Victorian Aboriginal Health Service • Targeted psychological support • Intensive support services • Suicide prevention services • Head to Health mental health hubs	NWMPHN region-wide
Aged Care	Aged Care Assessment Services	• Western Metropolitan ACAS North West	Hume, Melbourne, Moonee Valley, Moreland
		• Western Metropolitan ACAS Western	Brimbank, Hobsons Bay, Maribyrnong, Melton, Wyndham
	Regional Assessment Services	• Northern Metropolitan • Western Metropolitan *(Victoria's Department of Health is responsible for providing Regional Assessment Services across Victoria)*	NWMPHN region-wide
		• Australian - Multicultural	NWMPHN region-wide

Sector	Service type	Service provider	Location
	• Access & Support Services	Community Services Inc	
		• Wintringham	Brimbank, Hobsons Bay
		• cohealth	West Metropolitan region
		• Macedonian Community Welfare Association Inc	NWMPHN region-wide
		• Melton City Council	Melton
		• Migrant Resource Centre, North West Region Inc	West Metropolitan region
		• Pronia	West Metropolitan region
		• Action on Disability within Ethnic Communities (ADEC)	North Metropolitan region
		• Merri Health	North Metropolitan region
		• Your Community Health	Darebin
		• VincentCare Victoria	Moreland and Hume
		• Co.As.It. - Italian Assistance Association	Moonee Valley, Moreland, Darebin, Yarra, Hume and Melbourne
		• Hume City Council	Hume
		• Moreland City Council	Moreland
		• Northern Health	North Metropolitan region
		• Spectrum Migrant Resource Centre Ltd	Banyule, Darebin, Hume, Moreland, Nillumbik, Whittlesea, Yarra
		• Cohealth	Melbourne, Yarra, Moonee Valley, Maribyrnong, Hobsons Bay, Brimbank
Social care	Housing - Assistance with Care & Housing	• Maribyrnong City Council	Braybrook, Footscray, Kingsville, Maidstone, Maribyrnong, Seddon, Tottenham, West Footscray and Yarraville
		• Moonee Valley City Council	Aberfeldie, Essendon, Essendon Fields, Strathmore, Ascot Vale, Flemington, Moonee Ponds, Travancore, Airport West, Avondale Heights, Essendon West, Keilor East, Niddrie
		• Launch Housing Pty Ltd	Darebin, Yarra
		• Wintringham	Whittlesea, Darebin, Hume, Hobsons Bay

Sector	Service type	Service provider	Location
		• Housing for the Aged Action Group	Information requested
		• Spectrum Migrant Resource Centre	Hume, Moreland, Darebin, Whittlesea
		• Merri Outreach Support Service Ltd	Hume, Moreland, Darebin, Banyule Whittlesea, Nillumbik
	Social connection	• Neighbourhood Houses	NWMPHN region-wide
		• FriendLine	Telephone service
		• Social groups delivered Victorian Community Health Centres	NWMPHN region wide
	Elders Rights & Advocacy	• Seniors Rights Victoria • Domestic and Family Violence Support Services • Elder Rights Advocacy	State-wide services
	Carer support	• Carer Gateway	State-wide services
	Emergency Relief / Material Aid	• Extreme Hardship Support Program • Network West • Hume City community directory • Wyndham City support services	NWMPHN region wide
	Legal issues	• Consumer Affairs • Women's Legal Service Advice Line • Victoria Legal Aid • Mental Health Legal Centre • Disability Discrimination Legal Service	State-wide services
	Aboriginal & Torres Strait Islander	• Aboriginal Community Elders Services Inc. • Victorian Aboriginal Health Service	NWMPHN region-wide
Secondary and Tertiary care	Various, including: • Emergency services • General Medicine	• Mercy Health • Northern Health • The Royal Melbourne Hospital • Western Health	NWMPHN region

Sector	Service type	Service provider	Location
	• Dementia & Cognitive Impairment services • Falls and balance services • Geriatric Medicine Referrals • Older Adults' Mental Health referrals	• St Vincent's Hospital Melbourne Peter MacCallum Cancer Institute • The Royal Victorian Eye and Ear Hospital • Epworth Hospital	
Specific health services and systems	Condition specific needs	• Vision Australia	State-wide services
		• Dementia Victoria	State-wide services
		• Hearing Australia	National
Other service		• National Disability Insurance Scheme	National
		• Department of Veterans' Affairs services	

5. Identified needs

A summary of key insights from the previous section, including analysis of data and synthesis of stakeholder and community consultations, is outlined here.

Table 13. Summary insights from the care finder Supplementary Health Needs Assessment (SHNA)

Key insights
1. Chronic conditions are a significant health burden for older people, many of whom have multiple chronic conditions. 2. People aged 60 years and older account for 27.5 per cent of all hospitalisations for mental and behavioural disorders, indicating they may not be accessing treatment and support through the primary health system. 3. People from culturally and linguistically diverse backgrounds and people living with a disability are the largest cohorts and are relatively evenly distributed across the NWMPHN region, with the exception of peri-urban areas. 4. Older people with a disability who live alone, are on a low income, and who rent are particularly vulnerable. 5. Organisations with histories of abuse should not be commissioned to provide services. 6. Face-to-face communication and trust-building are very important. 7. The majority of older people (52 per cent) are living in suburban areas which have better service availability and public transport compared to outer urban and peri-urban areas. 8. Brimbank has the highest per capita need (and will do at least until 2030) and is the most disadvantaged LGA in the NWMPHN region. However, Darebin and Moreland also have significant populations of older people. 9. The growth area LGAs of Wyndham and Hume have the second and third highest per capita need and, along with Melton, will grow significantly over the next decade. Growth areas generally have more limited service availability and poorer public transportation options. 10. Fifteen per cent of older people live in the inner city LGAs of Melbourne, Yarra and Maribyrnong, where disadvantaged neighbourhoods, such as housing estates, exist alongside more affluent areas. 11. Four per cent of older people live in peri-urban areas where access to services is more challenging. 12. Trauma-informed care is critical given the historical experiences of many Aboriginal and Torres Strait Islander people, LGBTIQ+ people, care leavers and veterans. 13. Transportation is a significant issue, particularly for people living in areas of low population density and with poor public transport network coverage. 14. The cost of services and transportation are barriers for older people, many of whom live on low, fixed incomes. 15. Workforce mutuality: staff recruitment and retention is difficult, particularly when seeking a diverse workforce that reflects the target population, and that has the necessary cultural and language skills.

This section provides the detail of all needs identified in the NWMPHN region in relation to care finder support, regardless of whether the need has been determined a priority. The needs have been grouped into four areas: (a) health conditions, (b) population groups, (c) geographic locations, and (d) health system and process.

Note: The source of the evidence is noted as (D) for data or (C) for consultation.

5.1 Health conditions

Table 14. Identified needs – health conditions

Identified need	Key issue	Evidence
Chronic disease	1. Chronic disease is the most significant health burden for older people.	1. Higher incidence of chronic conditions among older people. (D) 2. Leading cause of hospitalisation among older people. (D) 3. More likely to have multiple chronic conditions. (D) 4. Higher rates of premature mortality in NWMPHN due to circulatory diseases and lung cancer. (D)
Mental health	1. Generational attitudes towards mental health. 2. May not seek support until crisis point.	1. People aged 60+ years account for 27.5 per cent of hospitalisations for mental and behavioural disorders. (D) 2. Higher likelihood of social isolation and loneliness. 3. Generational attitudes toward mental health may result in older people not seeking support until crisis point(C) 4. More likely to experience difficulty in attending community mental health care appointments due to transportation issues and costs. (C) 5. Low, fixed incomes and rising living costs likely to reduce ability for co-payment of mental health services. (D, C)
Indicators of unmet health and social care needs	1. Less likely to access primary care when needed. 2. May not seek support until crisis point.	1. Higher rate of hospitalisation among older people from CALD backgrounds. (D) 2. Lower proportion of older people have a mental health care plan compared to other age cohorts. (D) 3. Higher likelihood of social isolation and loneliness. (C)

5.2 Population groups

Table 15. Identified needs - Population groups

Identified need	Key issue	Evidence
All	1. Lower incomes, often fixed 2. Lower levels of educational attainment 3. Low digital literacy 4. 'Slippery slope' concerns regarding independence and personal agency	1. Majority of older people are on a lower income, with many receiving an age pension. They have limited retirement savings which makes them vulnerable to increased cost of living pressures, which reduces their ability to meet basic needs and co-pay for services. (D) 2. More than half of older people (54.8 per cent) had access to an internet connection at home. However, many older people prefer face-to-face engagement, particularly in relation to the delivery of health services, and especially where interpreting is required. (C,D) 3. Almost one quarter (23.3 per cent) achieved Year 8 or lower, and 9.1 per cent completed Year 12. (D) 4. A fear that engaging care services will result in a progressive loss of independence and end with admission to a residential aged care facility.
Aboriginal and/ or Torres Strait Islander	1. Historical experiences of trauma 2. Complex needs 3. Chronic conditions 4. Trust 5. Safety	1. The impact of previous government policies and structural economic and social factors has contributed to many older people of Aboriginal and Torres Strait Island origin experiencing complex health and care needs. 2. Older people of Aboriginal and Torres Strait Island origin are more likely to experience multiple chronic conditions and have a higher rate of hospitalisation than the wider community. (D) 3. Older people of Aboriginal and Torres Strait Island origin who have complex needs may be more likely to isolate rather than reach out for support. (C) 4. Important for people to feel a sense of trust and safety in order to engage. (C)
Care leavers	1. Historical experiences of trauma 2. Complex needs 3. Trust and empathy 4. Safety	1. The experience of institutional care has a major impact on a person's life trajectory, with many care leavers having complex needs in relation to physical and mental health, substance use, the justice system, housing instability and unemployment. (C) 2. Historical experiences of trauma (for instance, abuse while in the care of a religious organisation) reinforce the importance of commissioning care finder organisations which do not have historical associations with abuse (C). 3. Distrustful of government and reluctant to seek help. (C) 4. Unresponsive to assistance that lacks empathy and recognition of past experiences and trauma. (C) 5. Prefer to meet in their home or in a space that is safe for them. (C)

Identified need	Key issue	Evidence
Cultural and linguistic diversity (CALD)	1. Culturally responsive services 2. May reach crisis before accessing services 3. Challenges to engage online, particularly when interpreting is required	1. 42.5 per cent of older adults speak a language other than English at home and 17.2 per cent reported speaking English not well or at all. (D) 2. Strong cultural norms around ageing at home and multi-generational families among migrant families from non-English speaking backgrounds. (C,D) 3. Significantly higher rate of hospitalisation among people aged 70+ years from CALD backgrounds (and significantly lower rates for younger people from CALD backgrounds) which may indicate that care is more likely to be accessed at a time of crisis. (C,D)
Disability and carers	1. High level of need for assistance among older people 2. Not all people with a need for assistance are receiving it (ABS modelling) 3. People with a disability, living alone on a low income are especially vulnerable 4. Older people providing unpaid care to others	1. 24.9 per cent required assistance with core activities, increasing from 10.9 per cent for the 65-69 years cohort to 64.1 per cent for those 95-99. (D) 2. ABS modelling (2016) suggests there may have been 27,332 people who required assistance with one or more activities and who were not receiving it. (D) 3. 11.9 per cent provided unpaid care, including 5.3 per cent of people aged 85 years or older. (D) 4. 6,976 older people have a disability, live alone and are on a low income. (D)
LGBTIQ+	1. Historical experiences of trauma 2. Fear of discrimination when accessing services 3. May not have families to support them 4. Less likely to be 'out' and, if so, may be concerned about being 'outed' by an LGBTIQ+ service provider	1. Significant variation within the 65+ year age group and their experiences – some are still very much invisible and silent as LGBTIQ+, whereas others have been more public for most of their lives. (C) 2. Negative experiences with health services during AIDS crisis in the 80s and 90s continues to create fear of accessing services. (C) 3. Unwillingness to engage with services due to perceived or actual discrimination they have experienced over the course of their lifetime. (C) 4. Unwillingness among some people to identify as LGBTIQ+ means they are unlikely to access a specialist service. (C)
Veterans	1. Historical experiences of trauma and conflict	1. Veterans have historical experiences of trauma from their active service which have ongoing mental, physical and social impacts. (C)

Identified need	Key issue	Evidence
	2. Veteran health issues and experiences impact on the health of their spouses 3. Trust 4. Bureaucracy	2. The experience of being shunned (for instance in the case of Vietnam veterans) has resulted in distrust towards government. (C) 3. The spouses of veterans may have similar health issues (such as PTSD) as a consequence of their experience of caring for their partner. (C) 4. The veteran community is tight-knit and, when accessing services, veterans prefer to deal with people who understand their lived experience. (C) 5. Many veterans have an expectation that the Department of Veterans Affairs should provide all the services they require; however, this is often not possible. (C) 6. Bureaucratic red tape can make accessing services difficult. (C)

5.3 Geographic locations

Table 16. Identified needs - Geographic locations

Identified need	Key issue	Evidence
Suburban areas	1. Highest proportion of older adult population 2. Large number of local services can make it difficult for older people to determine which are most appropriate to meet their needs 3. High level of diversity requires services which are trusted and understand the specific needs of target cohorts	1. 52 per cent of older adults live in suburban areas -- Brimbank, Darebin, Hobsons Bay, Moonee Valley and Moreland. State-wide, 41 per cent of older adults live in suburbs. (D)
Brimbank	1. Highest per capita need 2. High level of cultural diversity 3. High level of IRSD disadvantage creates additional barriers to accessing the required services. These include language proficiency, co-payment, transportation.	1. Highest numbers of older adults in the NWMPHN region (30,961) and forecast to continue at least until 2030. (D) 2. Based upon the Index of Relative Social Disadvantage (IRSD), Brimbank is the most disadvantaged LGA in the NWMPHN region, and the fourth most disadvantaged LGA in Victoria. (D) 3. Highest number of older people on lower incomes, and one of the highest proportions of people in receipt of the age pension in the NWMPHN region. (D) 4. Brimbank is one of the most diverse municipalities in Victoria and has high proportion of people with low or no spoken English proficiency (D).

Identified need	Key issue	Evidence
Darebin & Moreland	High level of need in disadvantaged neighbourhoods within the municipalities	1. Higher rates of hospitalisation due to chronic conditions. (D) 2. Higher proportion of older people on lower incomes and in receipt of the age pension. (D) 3. More than 2,000 people with a disability living alone and on low incomes. (D) 4. Greater proportion on age pension. (D) 5. ABS modelling indicates 1 in 20 have unmet needs for assistance. (D) 6. Darebin has a significant LGBTIQ+ population. (D) 7. High number of hospitalisations among Aboriginal and Torres Strait Islander people. (D) 8. High level of need in less affluent neighbourhoods where there is a higher proportion of older people on lower incomes and the age pension, higher rates of hospitalisation due to chronic conditions, and higher populations of older people with a disability living alone. (D)
Growth areas	1. Second highest proportion of older adults 2. Limited availability of services 3. High and increasing levels of diversity 4. Transportation	1. 29 per cent of older adults are in growth areas (compared with 36 per cent of the general population) on the edge of the town with established plans for future development): Hume, Melton, Wyndham (D) 2. Forecast to increase to 34 per cent of all older adults in the NWMPHN region by 2030. (D)
Hume	1. Second highest per capita need 2. Highest projected increase in population to 2030 3. Limited public transport and variable access to services, particularly for people living outside of the main population areas 4. Higher prevalence of chronic conditions	1. Hume and Wyndham estimated to see the largest increases in the number of people aged 65 years and over by 2030. (D) 2. High level of cultural diversity. (D) 3. High level of social isolation in some areas of the municipality. (C)
Wyndham	1. Third highest per capita need 2. Second highest projected increase in population to 2030 3. Limited public transport and variable access to services within the municipality	1. High level of hospitalisation among older CALD communities (accounting for 19 per cent of all hospitalisations across the NWMPHN region). (D) 2. Largest Aboriginal and Torres Strait Islander population in the NWMPHN region. (D)

Identified need	Key issue	Evidence
	4. Highly diverse with emerging communities (e.g., Indian)	
Melton	Limited public transport and variable access to services across the municipality.	1. High and increasing level of cultural diversity. (D) 2.
Inner city areas	1. Older people represent a smaller proportion of the population 2. Significant localized variation in socio-economic status with both affluent and low-income neighborhoods 3. Significant LGBTIQ+ population	1. 15 per cent of older adults are in the inner city (or main cities): Maribyrnong, Melbourne and Yarra (compared with 20 per cent of the total population). (D) 2. Older adults represent a smaller proportion of the inner-city population compared to elsewhere across the NWMPHN region. (D) 3. Significant variation in socio-economic status, with highly affluent areas (e.g., East Melbourne) and areas of disadvantage (egg. public housing estates in Flemington, Fitzroy, Carlton, Collingwood, Richmond). (D) 4. Significant LGBTIQ+ population in Melbourne and Yarra LGAs. (C)
Peri-urban areas	1. Limited availability of services 2. Increased dependence on private car or taxis/ride sharing (expensive) 3. Longer distances to travel to receive centre-based services, and for service providers to deliver home-based care 4. Higher incidence of chronic conditions	1. 4 per cent of older adults are in peri-urban areas (outside of the city; a mixture of town and countryside characteristics): Macedon Ranges and Moorabool (compared with 3 per cent of the total population). (D) 2. Higher incidence of chronic conditions. (D)

5.4 Health system and process

Table 17. Identified needs - Health system and process

Identified need	Key issue	Evidence
Access to primary care	Transportation issues can result in older people delaying or not receiving the primary care they need	1. Transportation is a key issue for care leavers and for people of Aboriginal and Torres Strait Island origin. (C) 2. People are less likely to have access to their own car the older they get. (D) 3. Outer urban and peri-urban areas often have poor public transport networks and the greater geographic distances to access services are more expensive if a taxi or ride-share is used. (D, C)

Identified need	Key issue	Evidence
		4. Within an LGA, there can be significant geographic variation in access to public transport, with cheaper residential properties often less well serviced. (D)
Access to aged care services	1. Geographic variability in availability of aged care services 2. People with unmet needs for assistance 3. Waiting lists	1. ABS modelling suggests more than 8,000 people living in the region have unmet needs for assistance for one or more activities. (D) 2. The Royal Commission into Aged Care Quality and Safety has resulted in new policy settings which are impacting upon the service provision ecosystem (for instance, councils exiting service delivery; private providers finding it difficult to recruit staff). (C) 3. Significant waiting lists to access services after assessment. (C)
Access to appropriate level of aged care services	Some people admitted to RACFs when they could remain at home if suitable services were available.	Availability of and waiting times for appropriate at-home services may result in some people being unable to care for themselves and necessitate their admission to RACFs. (C)
Cost of services	Limited ability to pay for health and aged care services.	Reduced capacity for older people on low, fixed incomes to co-pay for aged care services in a context of increasing costs of living may result in people delaying or deferring treatment or services.
Safe and appropriate (trauma informed) care	1. Negative lived experience with religious institutions 2. Loss of independence, personal agency/self-determination 3. Fear of discrimination	1. Some service providers with religious foundations may be associated with physical and sexual abuse, or facilitating the Stolen Generation, among some target cohorts, based upon their lived experience. (C) 2. Concerns regarding the loss of independence and personal agency, and of being placed in residential aged care against one's will. (C) 3. Concerns regarding the risk of discrimination where the personal values or beliefs of aged care workers may conflict with the person who is in need of care (e.g., LGBTIQ+). (C)
System navigation	Navigating an extremely complex and changing aged care system.	1. The aged care system is highly complex. (C) 2. Much information about aged care services is only available online in English. (C)
Workforce	Recruitment and retention of diverse staff which reflects target populations (workforce mutuality) and has the necessary cultural and language skills.	Difficulty to recruit and retain staff due, in part, to low wages in the aged care sector. (C)

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