Mental Health

Health Needs Assessment

Supplementary file



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Acknowledgements

We acknowledge the people of the Kulin nations 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 carers, and extend our gratitude to the numerous service providers, community groups and associations that have played a vital role in making this work possible. Their support is instrumental in enhancing our understanding of the health needs within the North Western Melbourne Primary Health Network catchment.

We also acknowledge the Victorian Department of Health as the source of Victorian Admitted Episodes Dataset (VAED) and Victorian Emergency Minimum Dataset (VEMD) data used for this report.

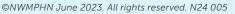
Image credit: Shutterstock images throughout. Image by Leigh Henningham pages 13 and 60.

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About this document

This accompanying document presents a comprehensive set of supplementary, quantitative data analyses utilised in the Mental Health - Health Needs Assessment (December 2023).

Content within this file is intended as a resource for further exploration into the report's findings.

For any enquiries regarding the report or the supplementary file, please contact **HNA.admin@nwmphn.org.au**.

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Metric 1:

Projected population

- Quantified need based on projected population
- Forecast growth



Quantified need based on the projected population

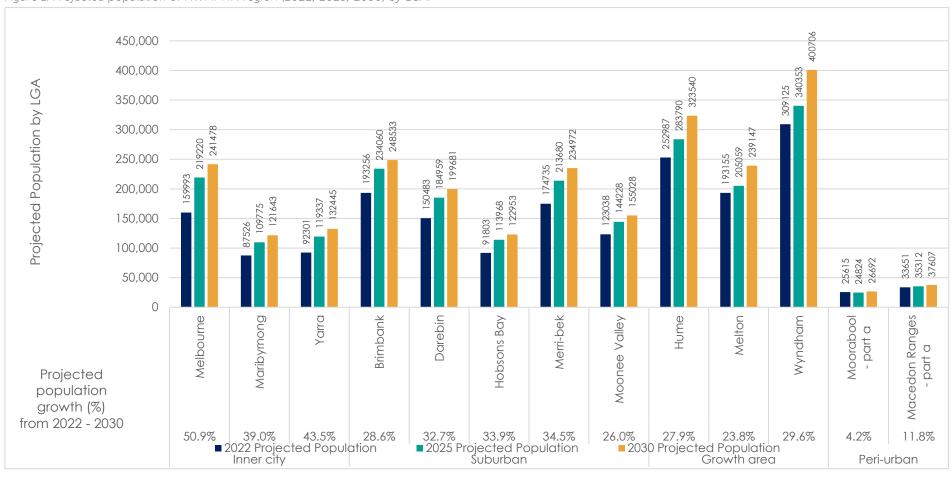
Region	LGA	Estimated Resident Population ERP 2022	Projected Population (2025)	Projected % of NWMPHN region (2025)	Projected Population (2030)	Projected % of NWMPHN region (2030)
	Melbourne	159,993	219,220	9.8%	241,478	9.7%
Inner city	Maribyrnong	87,526	109,775	5.3%	121,643	4.9%
	Yarra	92,301	119,337	4.9%	132,445	5.3%
	Brimbank	193,256	234,060	10.5%	248,533	10.0%
	Darebin	150,483	184,959	8.3%	199,681	8.0%
Suburban	Hobsons Bay	91,803	113,968	5.1%	122,593	4.9%
	Moonee Valley	123,038	144,228	6.5%	155,028	6.2%
	Merri-bek	174,735	213,680	9.6%	234,972	9.4%
	Hume	252,987	283,790	12.7%	323,540	13.0%
Growth area	Melton	193,155	205,059	9.2%	239,147	9.6%
	Wyndham	309,125	340,353	15.3%	400,706	16.1%
Peri-urban	Macedon Ranges - part a	33,651	35,312	1.6%	37,607	1.5%
	Moorabool - part a	25,615	24,824	1.1%	26,692	1.1%

<u>Table notes:</u> Orange shading indicates the top 3 LGAs based on projected population relative to other LGAs in the region. Abbreviations: ERP, estimated residential population; LGA, local government area

Source: (Australian Bureau of Statistics (ABS), 2022; PHIDU, 2022)

Forecast growth

Figure 1. Projected population of NWMPHN region (2022; 2025; 2030) by LGA.



Source: (PHIDU, 2022b)

Figure 2. Projected percentage (%) growth by LGA and Victoria, 2022-2030.

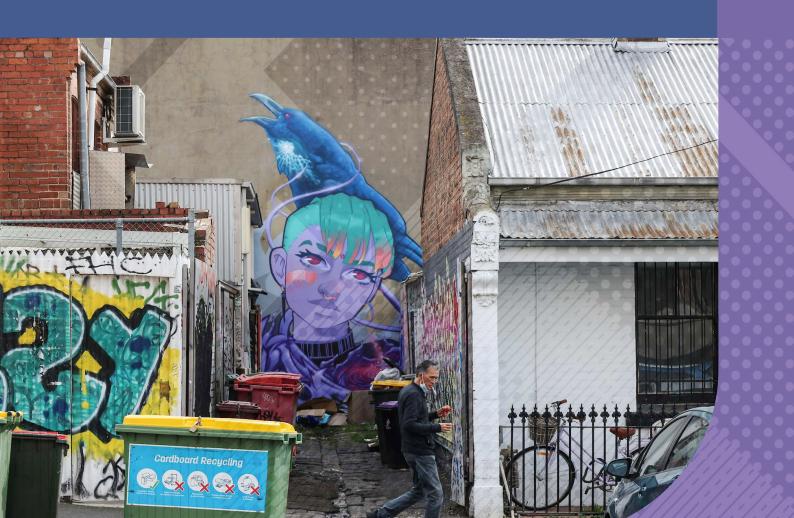


Source: (PHIDU, 2021)

Metric 2:

Socio-demographic factors

- Quantified need based on socio-demographic factors
- Greatest need by LGA across socio-demographic indicators
- Demographic factors
- Social disadvantage



Quantified need based on the sociodemographic factors

Table 2. Quantified need based on socioeconomic factors.

Region	LGA	% of SA1s with an IRSD index in deciles 1-4	Index of population with IRSD in deciles 1-4 by LGA	% of Projected population (2025)	Adjusted population need
	Melbourne	30.3%	0.07	9.8%	9.5%
Inner city	Maribyrnong	36.3%	0.08	5.3%	5.6%
	Yarra	12.8%	0.03	4.9%	4.7%
	Brimbank	83.1%	0.18	10.5%	11.2%
	Darebin	33.2%	0.07	8.3%	8.2%
Suburban	Hobsons Bay	33.3%	0.07	5.1%	5.3%
	Moonee Valley	12.3%	0.03	6.5%	6.1%
	Merri-bek	26.3%	0.06	9.6%	9.2%
	Hume	70.5%	0.15	12.7%	13.0%
Growth	Melton	47.4%	0.10	9.2%	9.3%
31 33	Wyndham	38.1%	0.08	15.3%	14.6%
Peri-urban	Macedon Ranges - part a	2.8%	0.01	1.6%	1.5%
	Moorabool - part a	36.4%	0.08	1.1%	1.8%

Source: Australian Bureau of Statistics (ABS), 2021

Greatest need by LGA across sociodemographic indicators

The NWMPHN region is diverse. There is localised disadvantage across the catchment.

Table 3. Demographic indicators; top 5 LGAs.

Born in a predominantly NES country (%)	Requires assistance with core activities (%)	Young people (0-24 years) (%)	Older people (65+ years) (%)	Aboriginal and/or Torres Strait Islander (%)	LGBTIQ+ (%)
Melbourne (48)	Brimbank (8)	Wyndham (37)	Moonee Valley (17)	Moorabool - part a (1.4)	Darebin (11)
Brimbank (46)	Hume (7)	Melton (37)	Macedon Ranges - part a (17)	Melton (1.2)	Yarra (10)
Wyndham (42)	Moorabool - part a (7)	Hume (36)	Brimbank (16)	Darebin (1)	Merri-bek (10)
Hume (36)	Darebin (7)	Macedon Ranges - part a (32)	Moorabool - part a (16)	Macedon Ranges - part a (0.9)	Melbourne (9)
Maribyrnong (32)	Merri-Bek (7)	Moorabool - part a (32)	Hobsons Bay (16)	Wyndham (0.9)	Moonee Valley (8)
Victoria (24)	Victoria (6)	Victoria (30)	Victoria (17)	Victoria (1.0)	Victoria (6)

Table note: Indicators are presented as a proportion of the population; colours represent specific LGAs.

Source:(Australian Bureau of Statistics (ABS), 2022; PHIDU, 2022)

Table 4. Social disadvantage indicators; top 5 LGAs greatest risk.

Low English proficiency (%)	Low individual income (<\$41,600) (%)	Low or very low household income (<\$65K) (%)	Housing stress (%)	Food insecurity (%)
Brimbank (14)	Brimbank (54)	Brimbank (32)	Melbourne (26)	Brimbank (10)
Hume (8)	Hume (51)	Hume (28)	Moorabool –part a (22)	Maribyrnong (8)
Maribyrnong (8)	Melton (46)	Moorabool –part a (28)	Hume (18)	Melton (7)
Wyndham (6)	Moorabool – part a (45)	Darebin (27)	Melton (16)	Moonee Valley (7)
Melton (5)	Wyndham (44)	Hobsons Bay (26)	Wyndham (16)	Hobson Bay (6)
Victoria (4)	Victoria (46)	Victoria (27)	-	Victoria (6)

<u>Table note:</u> Indicators are presented as a proportion of the population; colours represent specific LGA; "-": data is not available for Victoria. Proportion of low individual income: numerator is'<\$41600 + Nil income' and denominator is 'Total population – Not applicable'.

Source: (Australian Bureau of Statistics (ABS), 2022; PHIDU, 2022)

Demographic factors

Table 5. Projected percentage residential population growth estimates by LGA and age cohort, 2020-2030.

		Growth – 2020 to 2030 (%)					
Region	LGA name	0 – 14 years	15 – 24 years	25 – 44 years	45 – 64 years	65+ years	All age categories
	Melbourne	43.9	0.2	33.9	44.3	65.4	28.7
Inner city	Maribyrnong	25.4	13.0	24.6	27.0	41.5	25.4
	Yarra	32.2	14.6	24.3	25.6	42.5	26.4
	Brimbank	15.1	6.2	13.7	8.7	31.6	14.4
	Darebin	17.7	14.3	19.5	18.2	20.4	18.4
Suburban	Hobsons Bay	17.6	21.0	15.8	12.7	30.5	18.0
	Moonee Valley	15.5	15.5	18.0	15.4	20.5	17.0
	Merri-bek	27.0	16.9	23.0	25.1	21.0	23.1
Cuavida	Hume	35.2	29.4	33.6	27.4	52.4	34.0
Growth area	Melton	32.3	47.3	32.7	46.4	69.9	40.9
area	Wyndham	44.7	53.7	35.1	49.8	64.5	44.9
Peri- urban	Macedon Ranges – part a	11.6	20.5	11.0	8.8	30.0	14.9
	Moorabool – part a	11.3	17.9	14.7	8.4	42.1	17.2
NWMPHN		29.4	20.9	26.2	27.1	39.8	27.8
Victoria		18.3	16.2	19.5	12.9	31.4	19.1

The top 3 LGAs with the highest percentage growth in each age category are highlighted in yellow.

Source: (PHIDU, 2022a)

Table 6. Projected residential population growth estimates by LGA & age cohort, 2020-2030

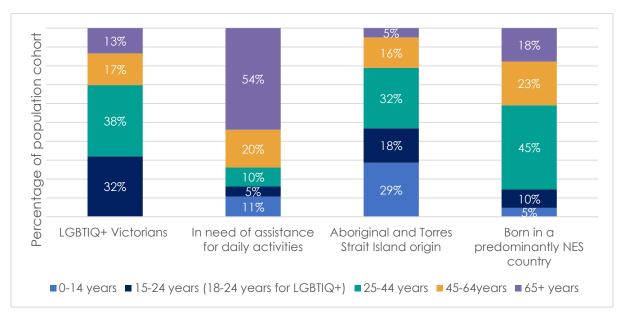
		Growth – 2020 to 2030 (persons)					
Region	LGA name	0 – 14 years	15 – 24 years	25 – 44 years	45 – 64 years	65+ years	Total
	Melbourne	5,472	105	29,877	10,356	7,995	53,805
Inner city	Maribyrnong	3,903	1,535	9,976	5,406	3,828	24,648
	Yarra	3,879	1,620	12,196	5,232	4,705	27,632
	Brimbank	6,115	1,819	9,132	4,373	9,776	31,215
	Darebin	4,733	3,023	11,989	6,708	4,536	30,989
Suburban	Hobsons Bay	3,559	2,361	5,083	3,272	4,509	18,784
	Moonee Valley	3,455	2,477	7,529	4,907	4,182	22,550
	Merri-bek	8,546	3,845	17,325	9,491	4,937	44,144
6 11	Hume	19,176	9,876	25,242	14,457	13,311	82,062
Growth area	Melton	13,414	10,662	17,440	16,994	10,940	69,450
area	Wyndham	31,843	17,708	34,436	25,973	14,216	124,176
Peri-urban	Macedon Ranges - part	815	753	779	806	1,725	4,878
ren-urban	Moorabool - part	529	468	828	504	1,596	3,925
NWMPHN		105,972	56,692	182,514	109,191	86,153	540,522
Victoria		228,732	141,791	391,577	203,449	328,286	1,293,835

The top 3 LGAs with the highest growth by number of persons in each age category are highlighted in yellow.

Source: (PHIDU, 2022a)

Age profile of priority populations

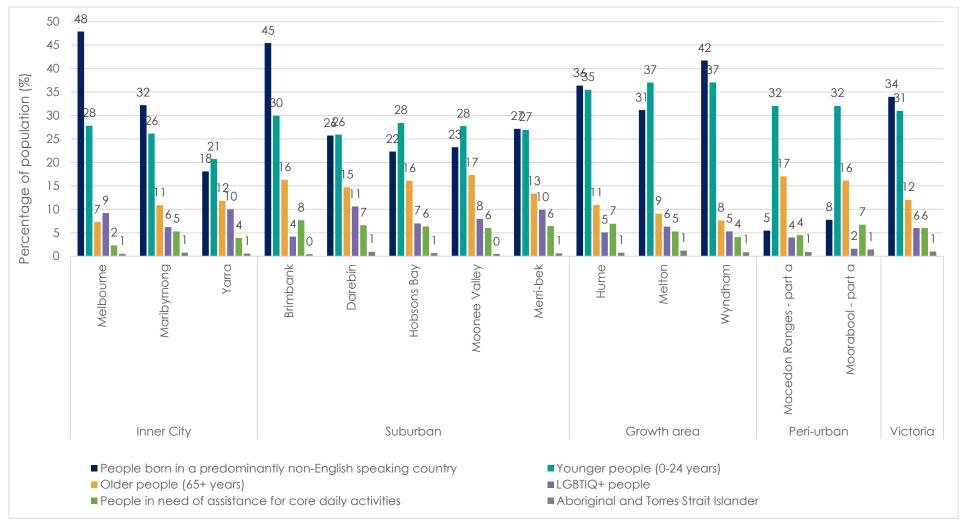
Figure 3. Age composition of priority populations.



Source: (Australian Bureau of Statistics (ABS), 2021; Victorian Department of Health, 2020a) 1

¹ LGBTIQ+ data is for <u>Victoria and for people aged 18 years and older</u>, calculated using data from <u>The health and wellbeing of the lesbian</u>, <u>gay</u>, <u>bisexual</u>, <u>transgender</u>, <u>intersex</u> and <u>queer population in Victoria</u>: <u>Findings from the Victorian Population Health Survey 2017</u>. The "core activity need for assistance" variable from the ABS records the number of people with a profound or severe core activity limitation. People with a profound or severe core activity limitation are those needing assistance in their day to day lives in one or more of the 3 core activity areas of self-care</u>, mobility and communication because of a long-term health condition (lasting 6 months or more), a disability (lasting 6 months or more) or old age.

Figure 4. Priority populations as a percentage of the LGA population.



Source: (Australian Bureau of Statistics (ABS), 2021; Victorian Department of Health, 2020a)

In the NWMPHN catchment, there is a rich diversity of languages spoken, with approximately 41 per cent of residents speaking a language other than English in their households.

Figure 5. Breakdown of languages spoken in the NWMPHN region.

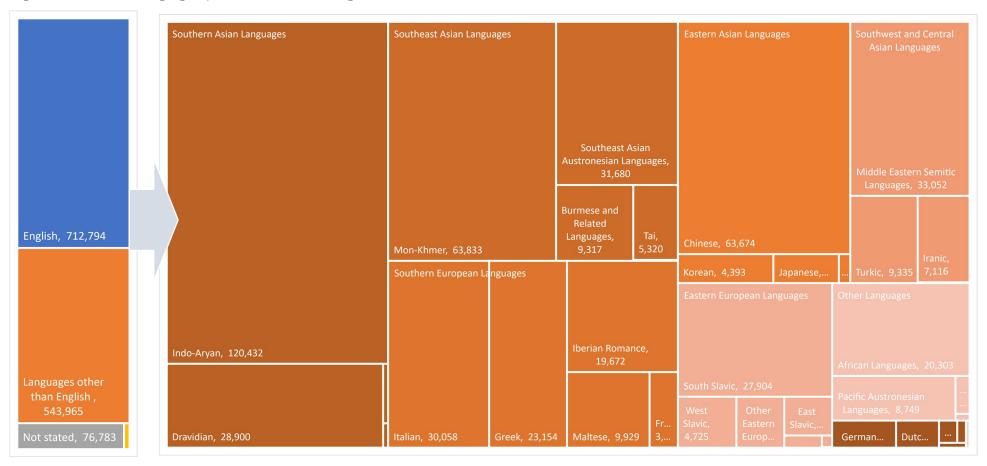


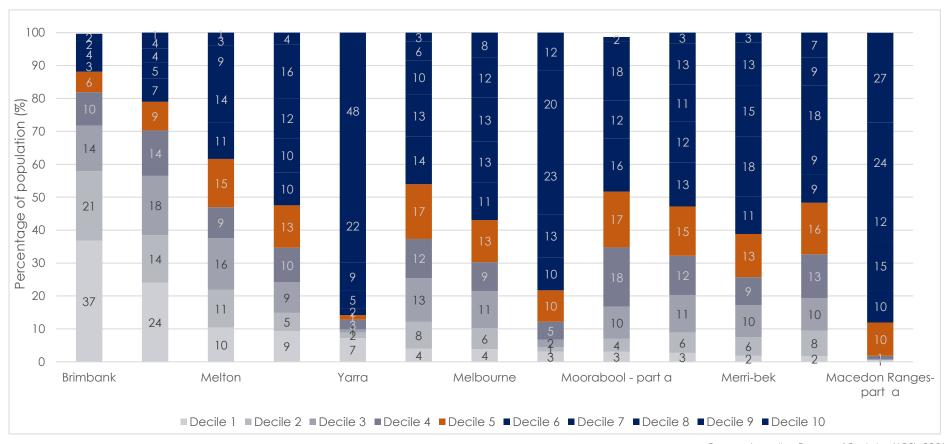
Figure note: Data is taken from the WM HSP region, Therefore it includes only parts of Melbourne and Hume, and excludes Darebin and Macedon Ranges.

Source: (Australian Bureau of Statistics (ABS), 2021)

Social disadvantage

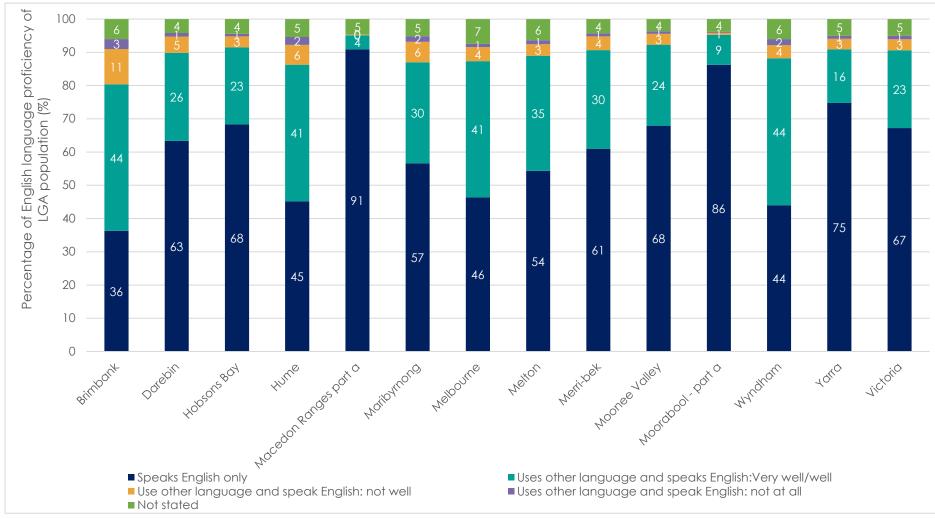
All LGAs in the NWMPHN region have some areas with more disadvantage than the Australian average, with Brimbank standing out as having the highest level of social disadvantage.

Figure 6. Population by Index of Relative Social Disadvantage (IRSD) deciles by LGA



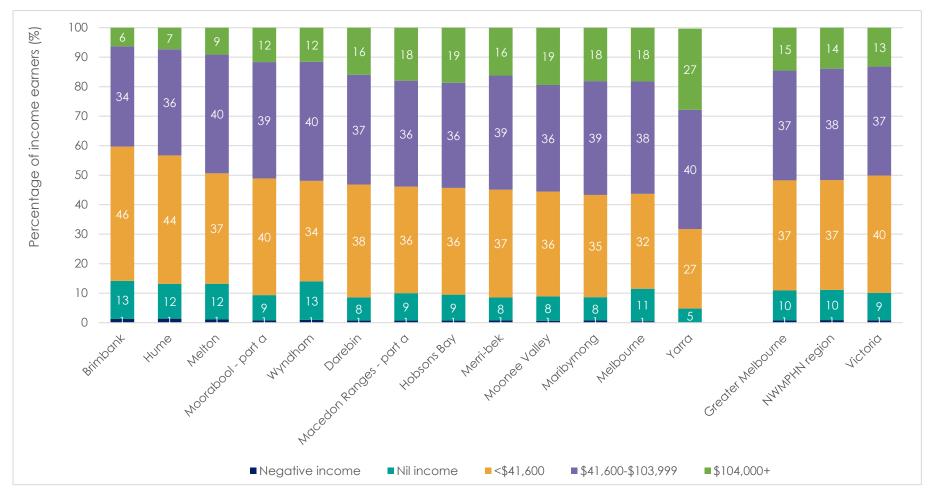
Source: Australian Bureau of Statistics (ABS), 2021

Figure 7. Proficiency in spoken English as a percentage of the LGA population.



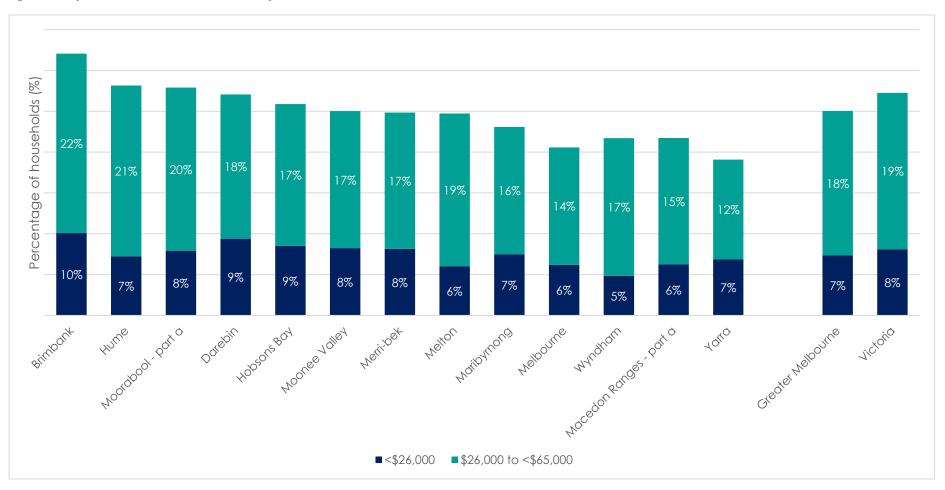
Source: (Australian Bureau of Statistics (ABS), 2021)

Figure 8. Annual individual income by LGA



Source: Australian Bureau of Statistics (ABS), 2021

Figure 9. Very low and low household income by LGA



Source: Australian Bureau of Statistics (ABS), 2022

Eleven of the 13 LGAs in the NWMPHN region had a higher unemployment rate than the Victorian average.

Table 7: Unemployment rate March 2022

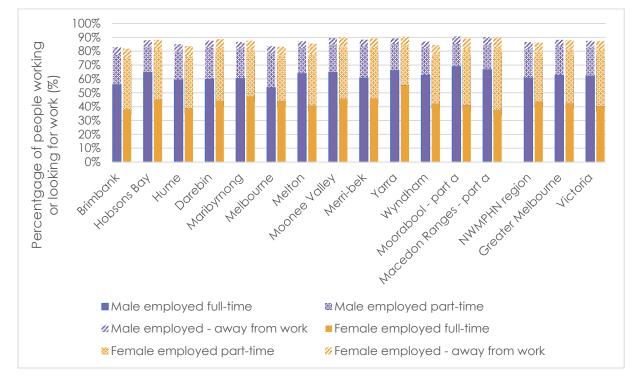
Region	LGA	Unemployment Rate (March 2022)
	Melbourne	5.5%
Inner city	Maribyrnong	5.1%
	Yarra	4.9%
	Brimbank	7.2%
	Darebin	5.2%
Suburban	Hobsons Bay	3.9%
	Merri-Bek	5.5%
	Moonee Valley	4.4%
	Hume	8.4%
Growth area	Melton	6.0%
	Wyndham	4.8%
Davi	Macedon Ranges	2.1%
Peri-urban	Moorabool	3.9%
Victoria		4.5%

<u>Table note</u>: The top 3 LGAs with the highest percentage growth in each age category are highlighted in pink.

Source: National skills commission, June 2022

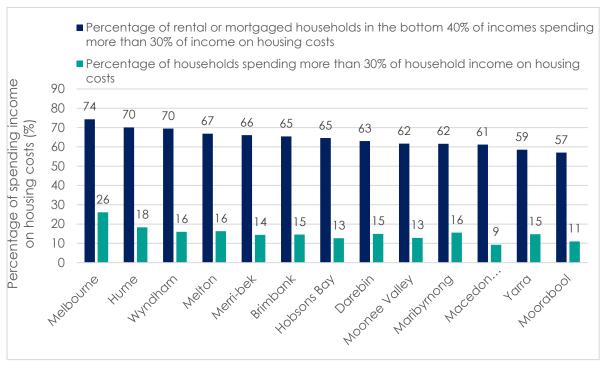
Females were more likely to engage in part-time employment. A greater proportion of females in Yarra, Hobsons Bay and Maribyrnong were employed full-time compared with Victoria.

Figure 10. Employment by sex and LGA.



Source: (Australian Bureau of Statistics (ABS), 2021)

Figure 11. Housing stress by LGA.



Source: Australian Urban Observatory, 2021

Figure 12. Percentage of adults who ran out of money in the previous 12 months and were unable to buy food.

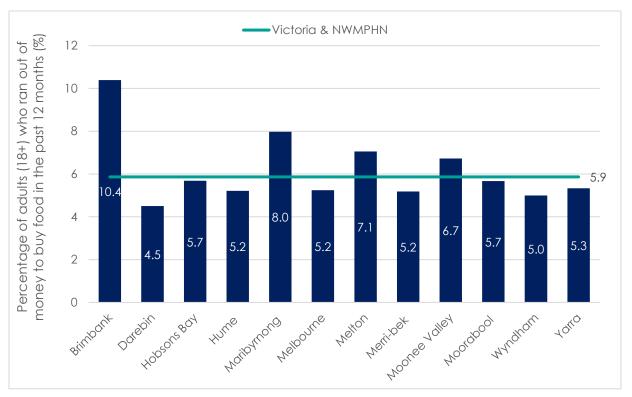


Figure notes: Teal line indicates average for Victoria and NWMPHN region (5.9% for both).

Source: (Victorian Department of Health, 2020b)

Metric 3:

Risk factors

- Quantified need based on risk factors
- Risk factors that affect mental health and wellbeing



Quantified need based on risk factors

Table 8. Quantified need based on risk factors.

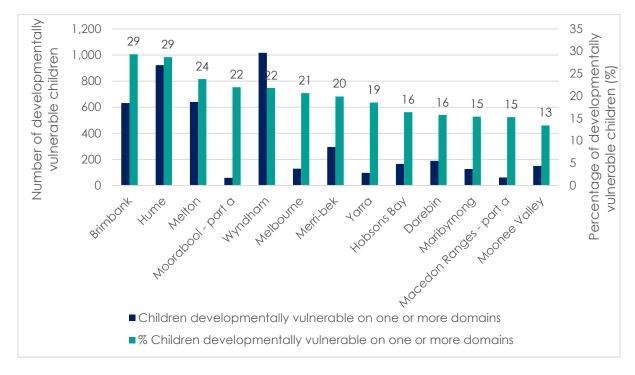
Region	LGA	Vulnerable 1+ domains AEDC (%)	Rate of FV by 100,000	2+ standard drinks ² (%)	Obese adults (%)*	Population who are widowed (%)	Adjusted average index	Average index as % of all LGAs	% of Projected population (2025)	Adjusted population need
Inner city	Melbourne	1.04	1.01	0.83	0.47	0.31	0.76	6.7%	9.8%	9.5%
	Maribyrnong	0.77	0.95	0.74	0.53	0.62	0.75	6.6%	5.3%	5.4%
	Yarra	0.93	0.88	1.24	0.50	0.52	0.82	7.2%	4.9%	5.1%
	Brimbank	1.47	1.04	0.51	1.15	0.90	1.04	9.2%	10.5%	10.4%
	Darebin	0.79	0.81	0.88	0.67	0.87	0.82	7.2%	8.3%	8.2%
Suburban	Hobsons Bay	0.82	0.80	0.96	0.93	0.87	0.86	7.6%	5.1%	5.3%
	Moonee Valley	0.67	0.75	0.98	0.77	0.89	0.80	7.1%	6.5%	6.6%
	Merri-bek	1.00	0.87	0.80	0.79	0.84	0.88	7.7%	9.6%	9.4%
Growth area	Hume	1.44	1.08	0.60	1.50	0.62	1.03	9.0%	12.7%	12.3%
	Melton	1.20	1.10	0.67	1.08	0.49	0.90	8.0%	9.2%	9.1%
	Wyndham	1.09	1.00	0.54	1.12	0.46	0.83	7.3%	15.3%	14.5%
Dori urban	Macedon Ranges - part a	0.77	0.63	1.37	1.10	0.65	0.83	7.3%	1.6%	2.2%
Peri-urban	Moorabool - part a	1.10	0.93	1.13	1.50	0.83	1.03	9.1%	1.1%	1.9%

<u>Table notes:</u> Pink shaded cells represent the top 3 LGAs with the highest indices for individual risk factors. Purple shaded cells represent the top 3 LGAs with highest proportion of need relative to other LGAs in the region. *Data only available at the LGA level, therefore, all of Macedon Ranges and Moorabool included.

² This measure reflects an NHMRC guideline that specified 14 units per week as low-risk consumption. In 2020 NHMRC reduced this rate to 10 units per week.

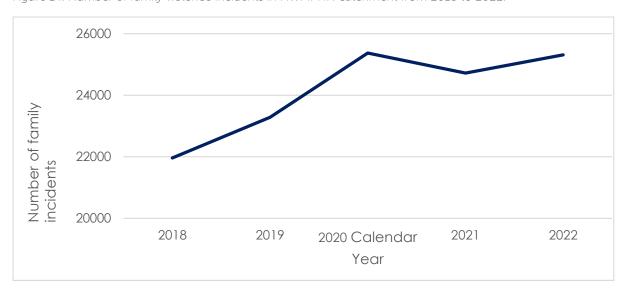
Risk factors that affect mental health and wellbeing

Figure 13. Number and proportion of developmentally vulnerable children on one or more early childhood development domains by LGAs, 2021.



Source: (Australian Bureau of Statistics (ABS), 2022; PHIDU, 2022)

Figure 14. Number of family violence incidents in NWMPHN catchment from 2018 to 2022.



Source: Law Enforcement Assistance Program Database, Crime Statistics Agency, Year ending 31 December 2022 (Crime Statistics Agency Victoria, 2023).

1,800 1,532 1,509 1,454 1,413 1,398 Rate per 100,000 population 1,600 1 320 1,301 1,400 1,174 1,132 1,110 1,039 1,214 1,200 1,000 880 800 600 400 200 0 Welponius Malibymond Mordbool HILLE Welton YOHO

Figure 15. Rate per 100,000 family violence incidents in 2022 by LGA.

Note: The teal horizontal line indicates the Victorian rate (1394 per 100,000 population)

Source: Law Enforcement Assistance Program Database, Crime Statistics Agency, Year ending 31 December 2022 (Crime Statistics Agency Victoria, 2023).

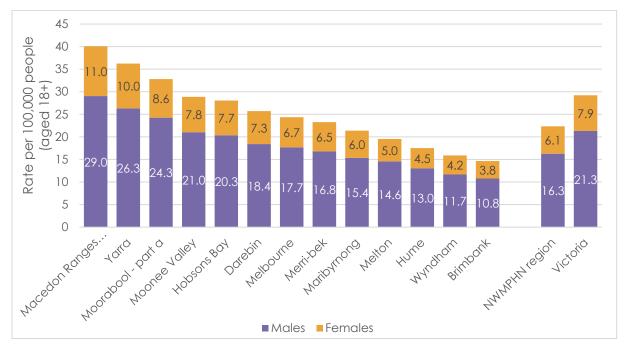
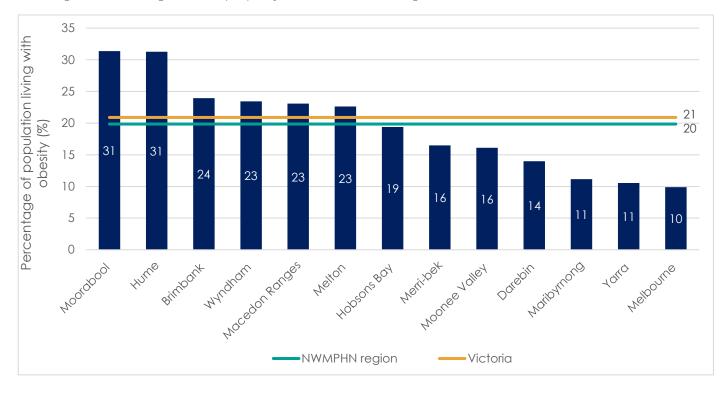


Figure 16. Estimated rate per 100 people aged 18 years and over who consumed more than 2 standard drinks a day^3 .

Source: Compiled by PHIDU based on direct estimates from the 2017-18 National Health Survey, ABS Survey TableBuilder (Public Health Information Development Unit, 2023).

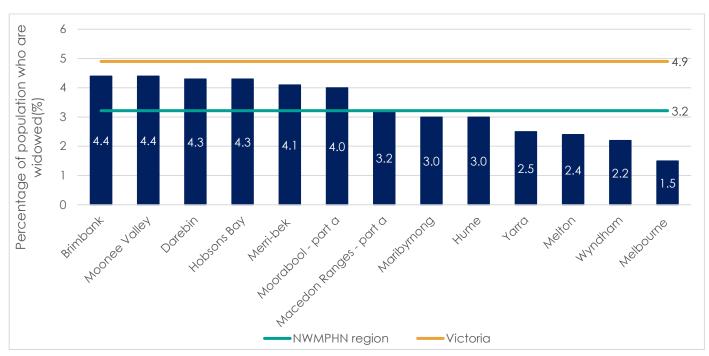
 $^{^3}$ This measure reflects an NHMRC guideline that specified 14 units per week as low-risk consumption. In 2020 NHMRC reduced this rate to 10 units per week.

Figure 17. Percentage of obese people by LGA in the NWMPHN region



Source: (Victorian Department of Health, 2020b)

Figure 18. Percentage of widowed people by LGA in the NWMPHN region



Source: Census, ABS, 2021

Metric 4:

Access and geographical environment

- Quantified need based on access and geographical environment
- Geographical environment
- Framing access to primary health care
- Summary of key findings access to primary health care indicators
- Availability coverage
- Accessibility coverage
- Acceptability coverage
- Contact coverage
- Effective coverage



Quantified need based on access and geographical environment.

Table 9. Quantified need based on access and geographic environment factors.

Area	LGA	Base need % of projected population (2025)	Liveability index*	Index of GP workforce (FTE) per 100,000 people**	Index of Psychologist workforce (FTE) per 100,000 people**	Index of avoidable ED presentation due to mental and behavioural disorders per 100,000^	Adjusted average index	Average index as % of all LGAs	Adjusted population need
Inner city	Melbourne	9.8%	0.93	1.32	0.22	1.57	1.01	7.3%	9.3%
	Maribyrnong	5.3%	0.96	0.83	0.83	1.19	0.96	6.9%	5.6%
	Yarra	4.9%	0.93	0.78	0.24	1.57	0.88	6.3%	5.2%
Suburban	Brimbank	10.5%	1.01	0.83	1.76	1.01	1.15	8.3%	10.1%
	Darebin	8.3%	0.97	1.12	0.72	0.93	0.94	6.7%	8.0%
	Hobsons Bay	5.1%	0.99	1.24	1.12	1.02	1.09	7.8%	5.6%
	Moonee Valley	6.5%	0.97	0.88	0.57	1.17	0.90	6.5%	6.5%
	Merri-bek	9.6%	0.97	0.98	0.84	1.32	1.03	7.4%	9.2%
Growth areas	Hume	12.7%	1.02	1.04	2.45	0.64	1.29	9.3%	12.0%
	Melton	9.2%	1.04	1.46	2.77	0.74	1.50	10.8%	9.5%
	Wyndham	15.3%	1.02	1.00	2.79	0.64	1.36	9.8%	14.2%
Peri-urban	Macedon Ranges - part a	1.6%	1.05	0.89	1.38	0.30	0.90	6.5%	2.6%
	Moorabool - part a	1.1%	1.03	0.86	1.34	0.33	0.89	6.4%	2.2%

<u>Table notes</u>: Index scores are an indicator of advantage (scores lower than 1) and disadvantage (scores greater than 1); *Index of Greater Melbourne average (calculated by Greater Melbourne liveability index divided by LGA liveability index); **Index of Victorian rate (Victorian rate divided by LGA rate); *Index of Victorian rate (LGA rate divided by Victorian rate). Pink shaded cells represent the top 3 LGAs with highest indices for individual access indicators. Purple shaded cells represent the top 3 LGAs with highest proportion of need relative to other LGAs in the region.

Geographical environment

Table 10. Summary of Liveability Index by LGA, 2021.

Region	LGA	Liveability Index	Liveability indicators with disadvantage*	Score for disadvantaged indicators	
	Melbourne	106.3	Alcohol environment	0.2	
Inner city	Maribyrnong	102.5	Alcohol environment	0.5	
	Yarra	105.9	Alcohol environment	0.2	
	Brimbank	98.1	Health infrastructure Public transport access Food environment	1.7 40 1.3	
Suburban	Darebin	101.9	Alcohol environment	0.6	
	Hobsons Bay	100.2	Alcohol environment	0.7	
	Moonee Valley	101.6	Alcohol environment	0.6	
	Merri-bek	101.5	Alcohol environment	0.5	
	Hume	96.5	Health infrastructure Access to bulk-billing GP clinics Public transport access Food environment	1.3 1.4 34 1.6	
Growth area	Melton	95.1	Health infrastructure Access to bulk-billing GP clinics Public transport access Food environment	0.9 2.3 22 1.7	
	Wyndham	96.5	Health infrastructure Access to bulk-billing GP clinics Public transport access Food environment	1.1 1.4 25 1.5	
Peri-urban	Macedon Ranges – part a	94.6	Health infrastructure Access to bulk-billing GP clinics Public transport access** Food environment**	1.0 2.9 3 1.7	
ren-urban	Moorabool– part a	96.4	Health infrastructure Access to bulk-billing GP clinics Public transport access** Food environment**	1.1 1.4 11 3.6	

Table notes: *Disadvantage when compared with the Greater Melbourne average (Liveability index = 98.9, Health infrastructure = 2.2, access to bulk-billing GP clinics = 1.3, public transport = 46, food environment = 1.3, alcohol environment = 0.9). **Public transport and food environment data comes from the entire LGA of Macedon Ranges and Moorabool, which include areas not in the NWMPHN catchment. Alcohol environment measures the distance (km) to the closest off-licence⁴ retailer. Access to GP clinics: Average distance (km) to the nearest GP clinic offering a Medicare bulk-billing payment system where a patient has no out-of-pocket expenses. Food environment: Average distance (km) to closest healthy food outlet including supermarket or greengrocer. Public transport: Percentage of dwellings within 400m of public transport with a regular 30-minute weekday service.

⁴ Outlets that sell alcohol which can be purchased and taken away to consume elsewhere are known as off-licence retailers.

The alleged offender incident rate in Melbourne was nearly 3 times higher than the Victorian rate in 2022.

Figure 19. Alleged offender incident rates per 100,000 people by LGAs from 2019 to 2022 in the NWMPHN region.

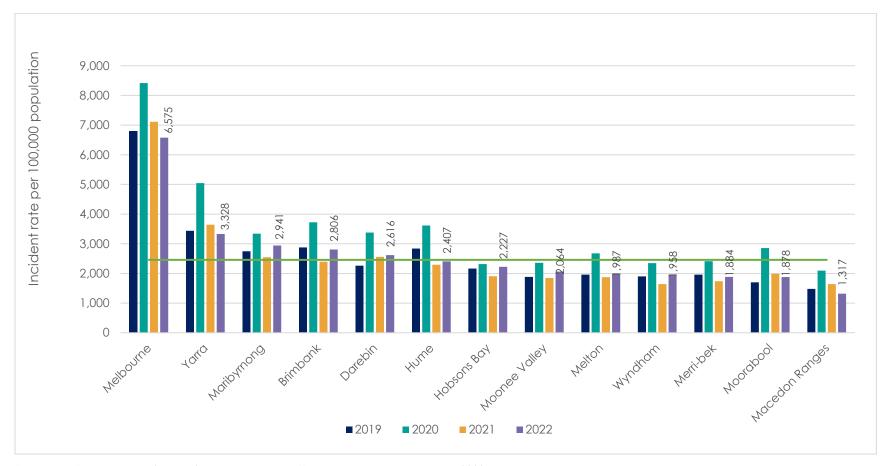
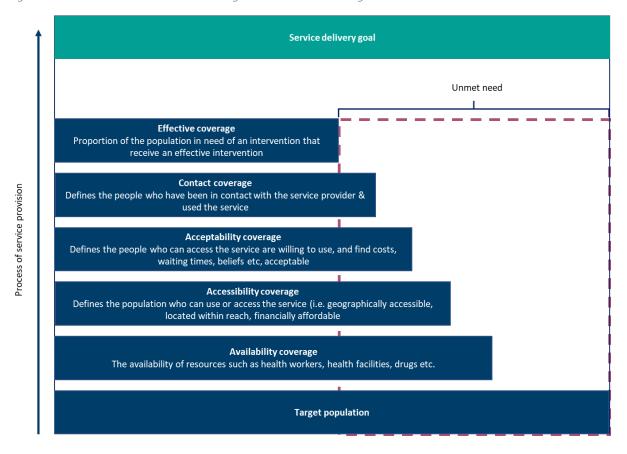


Figure note: Benchmark line (in green) shows the alleged offender incident rate in Victoria in 2022.

Source: The crime data was derived from administrative information recorded by Victoria Police and extracted from the LEAP database by Crime Statistics Agency, Year ending 30 December 2022 (Crime Statistics Agency Victoria, 2022).

Framing access to primary health care

Figure 20. Tanahashi's model of evaluating health service coverage.



Summary of key findings - access to primary care

Table 11. Summary findings across key indicators of mental health care access, 2021-22.

		Inn	er c	ity	Sub	ourb	an			Gro	wth		Peri urba	
Section	Indicators	Melbourne	Maribyrnong	Yarra	Brimbank	Darebin	Hobsons Bay	Moonee Vallley	Merri-bek	Hume	Melton	Wyndham	Macedon Ranges	Moorabool -
	General practitioners workforce shortages*													
Availability	Nurses and midwives workforce shortages*													
coverage	Psychologist workforce shortages*													
	Health Infrastructure Index^													
_	Distance to closest bulk-billing GP clinic with no out-of-pocket costs^													
	Out-of-pocket cost per service - GP in 2021-22**													
	Out-of-pocket cost per service – psychiatrists and psychologists in 2021-22**													
	Out-of-pocket cost per service - nursing and Aboriginal health workers in 2021-22**													
	Utilisation rate of Medicare-subsidised service – GP in 2021-22**													
	Utilisation rate of Medicare-subsidised service – psychiatry and psychology in 2021-22**													
Contact	Utilisation rate of Medicare-subsidised service - nursing and Aboriginal health workers in 2021-22**													
coverage	DirectLine telephone services per 10,000 population*													
	Rate of Head to Health referrals with IAR assessment per 10,000 population***													
	Rate of CareInMind referrals per 10,000 population***													
Effective coverage	Rates of avoidable ED presentation in 2022-23^^													

 $\underline{ \mbox{Table notes}} : \mbox{ LGAs with disadvantages are highlighted in pink}.$

Sources: (Department of Health and Aged Care (DHAC), 2022); (Australian Government Department of Health and Aged Care (DHAC), 2021); (North Western Melbourne Primary Health Network (NWMPHN) & Pen CS, 2023); (Australian Institute of Health and Welfare (AlHW), 2022); (Australian Bureau of Statistics, 2022)

^{*}LGAs with disadvantage are defined when their rates are lower (or costs/distance are higher) than Victorian level.

^{**}LGAs with disadvantage are defined when their rates are lower (or costs/distance are higher) than National level.

^{***}LGAs with disadvantage are defined when their rates are lower (or costs/distance are higher) than NWMPHN level.

[^]LGAs with disadvantage are defined when their rates are lower (or costs/distance are higher) than Melbourne level.

^{^^} LGAs with disadvantage are defined when their rates are higher than Victorian level.

Types of mental health service providers

Table 12: Mental health services and descriptions

Services	Level of care	Description
Self- management	Level 1	A preventive and self-help approach to mental health that uses online or phone-based digital therapies and resources, supported by the Head to Health website.
Low intensity services	Level 2	A type of mental health care that offers quick and easy access to online, phone, or community-based interventions, without requiring a formal referral, and usually involves a small number of short sessions.
Moderate intensity services	Level 3	Moderate intensity services typically offer structured, relatively frequent, and intensive interventions. These often consist of a predetermined number of psychological sessions delivered at regular intervals.
High intensity services	Level 4	High intensity services include periods of intensive intervention that may involve multidisciplinary support. Usually supporting people experiencing severe mental illness, significant functional impairment and/or risk factors.
Acute and specialist community mental health services	Level 5	Specialist mental health care offers intensive, team-based care for complex needs. State or territory services provide multidisciplinary assessments and interventions, involving psychiatrists, case managers, social workers, occupational therapists, psychologists, and addiction specialists. This level often features increased collaboration with GPs for comprehensive care.

Source: IAR Decision Support Tool

Availability coverage

Availability coverage for access to primary health care refers to the extent to which health care services are physically present and accessible in each area. This includes the availability of health care facilities, equipment, medications, and professionals such as doctors, nurses, and support staff.

Table 13. Top 5 LGAs by healthcare professionals

GP FTE per 100,000 population in 2022	Psychologists FTE per 100,000 population in 2021	Nurses and midwives FTE per 100,000 population in 2021				
Melton (82)	Wyndham (22)	Moorabool - part a (100)				
Melbourne (90)	Melton (22)	Moonee Valley (116)				
Hobsons Bay (96)	Hume (25)	Macedon Ranges - part a (120)				
Darebin (106)	Brimbank (35)	Darebin (120)				
Hume (115)	Macedon Ranges - part a (45)	Wyndham (121)				
Victoria (120)	Victoria (61)	Victoria (220)				

<u>Table notes</u>: 2022 ERP was used to calculate GP GTE rates. 2021 URP was used to calculate psychologists, nurses and midwives rates.

Source: HeaDSUPP, 2022

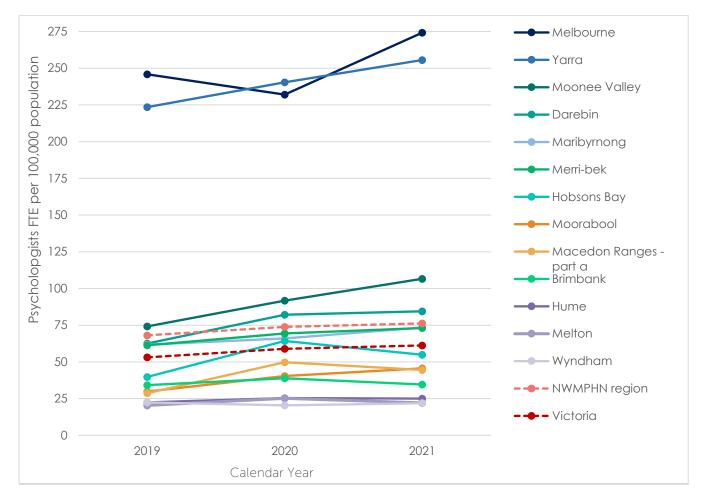
Yarra 200 - Brimbank 190 Maribyrnong 180 Moorabool 170 FTE per 100,000 population - Moonee Valley 160 Macedon 150 Ranges - part a Merri-bek 140 **W**yndham 130 - Hume 120 Darebin <u>Б</u> 110 - Hobsons Bay 100 - Melbourne 90 - Melton 80 -- NWMPHN region 70 -- -- Victoria 60 2019 2020 2021 2022 Calendar Year

Figure 21. GP workforce rates (FTE per 100,000 residents) changes from 2019 to 2022 by LGA.

<u>Figure notes</u>: Rates calculated using ABS estimated resident population for 2022.

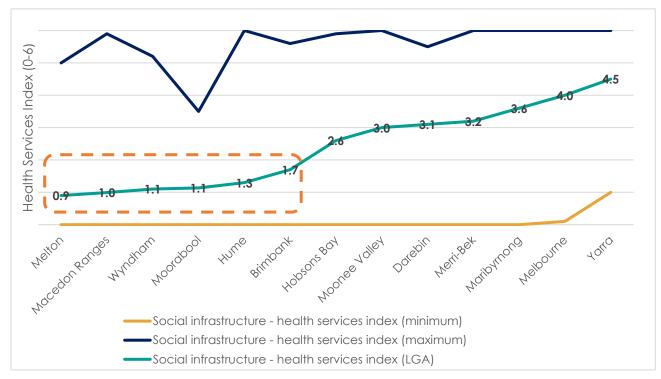
Source: HeaDSUPP, 2022; ABS 2022

Figure 22. Psychologist workforce rates (FTE per 100,000 residents) changes from 2019 to 2021 by LGA.



Source: HeaDSUPP, 2021

Figure 23: Health infrastructure index



Data Source: Australian urban observation 2021 (Davern et al., 2023).

Accessibility coverage

Accessibility coverage related to health care is about determining whether all members of the population can use or access services regardless of their location, financial status, or physical limitations, including geographic accessibility, financial affordability, and physical accessibility of services.

People who live in growth areas (Melton, Hume and Wyndham) and peri-urban areas (Macedon Ranges) have to travel long distances to access bulk-billing GP clinics.

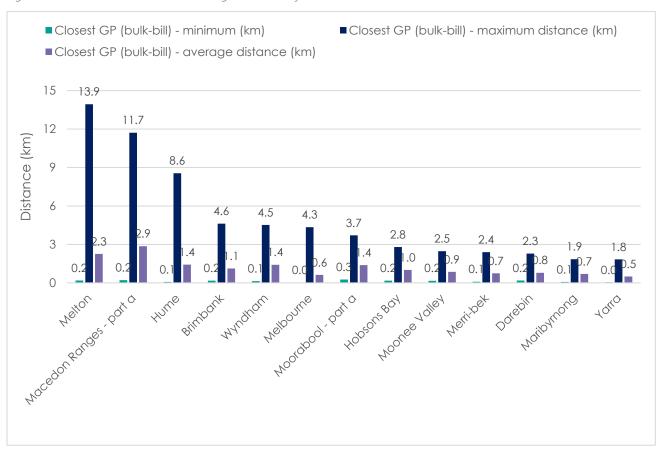


Figure 24. Distance to closest bulk-billing GP clinics by LGA in 2021

<u>Figure notes</u>: Provides the minimum, maximum and average distance for SA1s in each LGA to the nearest general practice clinic offering a Medicare bulk-billing payment system where a patient has no out-of- pocket expenses. Based on SA1 (200-400 residents).

Data Source: Australian Urban Observatory, 2021 (Davern et al., 2023).

Table 14. Out-of-pocket cost and utilisation rates of Medicare-subsidised service by SA3 in NWMPHN, FY 2021-22

		GP	attendance	S	Mental hea	lth services	attendances	Nursing and Aboriginal Health Workers				
SA3 name	Estimated resident population	Percentage of people who had the service (%)	Services per 100 people	Out-of- pocket cost per Service (\$)*	Percentage of people who had the service (%)	Services per 100 people	Out-of- pocket cost per Service (\$)*	Percentage of people who had the service (%)	Services per 100 people	Out-of- pocket cost per Service (\$)*		
Brimbank	188,119	93%	866	\$1	4.0%	21	\$38	7.2%	12	\$1		
Brunswick - Coburg	91,088	86%	718	\$7	11.0%	77	\$64	5.4%	10	\$6		
Darebin - North	96,454	87%	764	\$4	6.9%	45	\$56	5.3%	9	\$3		
Darebin - South	53,881	89%	680	\$11	11.6%	82	\$67	4.0%	6	\$5		
Essendon	69,440	90%	718	\$6	7.4%	45	\$64	4.2%	7	\$5		
Hobsons Bay	87,464	92%	750	\$4	6.6%	40	\$62	5.2%	9	\$4		
Keilor	62,120	95%	895	\$4	6.0%	33	\$57	6.1%	10	\$4		
Macedon Ranges	33,198	98%	811	\$6	7.0%	38	\$57	7.3%	14	\$3		
Maribyrnong	86,398	87%	708	\$5	7.8%	50	\$59	3.7%	7	\$6		
Melbourne City	153,655	65%	533	\$8	5.6%	37	\$65	3.5%	7	\$3		
Melton - Bacchus Marsh	200,971	91%	801	\$2	4.5%	23	\$36	8.0%	13	\$1		
Moreland - North	81,492	87%	816	\$3	6.2%	37	\$52	6.8%	13	\$3		
Sunbury	45,444	95%	897	\$2	6.9%	39	\$47	7.2%	13	\$2		
Tullamarine - Broadmeadows	206,700	93%	865	\$1	4.2%	21	\$30	8.7%	14	\$1		
Wyndham	301,004	90%	795	\$1	3.3%	17	\$42	6.4%	9	\$1		
Yarra	92,504	83%	608	\$11	10.0%	68	\$70	3.0%	5	\$7		
National	25,688,079	90%	735	\$5	5.1%	28	\$53	8.1%	16	\$2		

Table notes: *SA3s with disadvantages (higher cost/lower rates) relative to the national average level are highlighted in pink. Note: 1) All results are based on the patient's Medicare enrolment postcode, not where they received the health care service. Patients may use services outside of their Medicare enrolment postcode. 2)This release includes non-hospital Medicare-subsidised services only. 3) Out-of-pocket cost per service: calculated as the total out-of-pocket cost (Total provider fees' - 'Total Medicare benefits paid') divided by the total number of attendees who reside in the area who claimed the specified service type ('No. of services').

Data Source: Australian Institute of Health and Welfare (AIHW) analysis of Department of Health and Aged Care, Medicare Benefits Schedule (MBS) claims data, 2021–22 (Australian Institute of Health and Welfare (AIHW), 2022)

Acceptability coverage

Acceptability coverage refers to the extent to which people are willing to access the health care services and find the costs, wait times, and attitudes toward treatment acceptable.

Findings related to acceptability will be covered in Community and Health Provider Consultation, due to the absence of relevant available quantitative data.

Contact coverage

Contact coverage is an important measure of health care access because it reflects the ability of individuals to obtain the care they need when they need it, including services such as routine check-ups, preventative care, and treatment for minor illnesses and injuries.

NWMPHN General practice data

Figure 25. Number of patients with active mental health condition by mental health treatment plan (MHTP) and LGA in FY2022-23

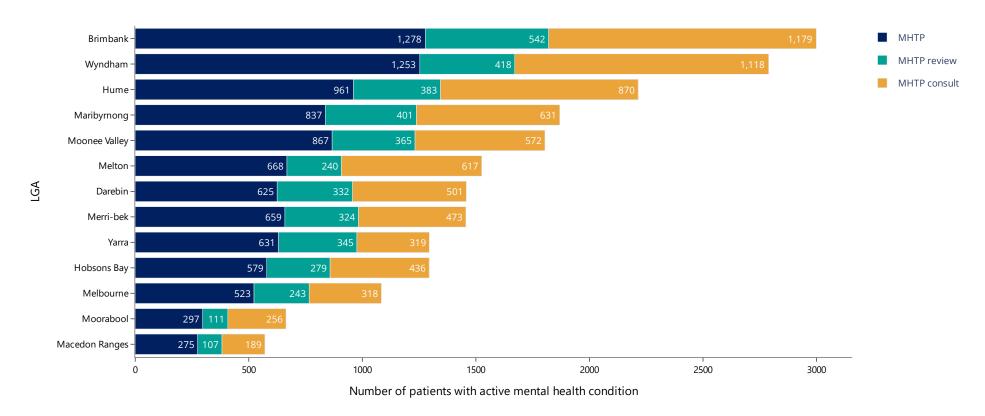


Figure notes: GPMHTP=GP Mental Health Treatment Plan (MBS items 2700, 2701, 2715 or 2717 - Preparation of a GP Mental Health Treatment Plan). MHTP review = MBS item 2712 (MBS item 2712 - Review of a GP Mental Health Treatment Plan). MHTP consult = MBS item 2713 (MBS item 2713 - GP Mental Health Treatment Consultation).

Source: PATCAT, 2023

Figure 26. Rate of patients with active mental health condition by mental health treatment plan (MHTP) and LGA in FY2022-23.

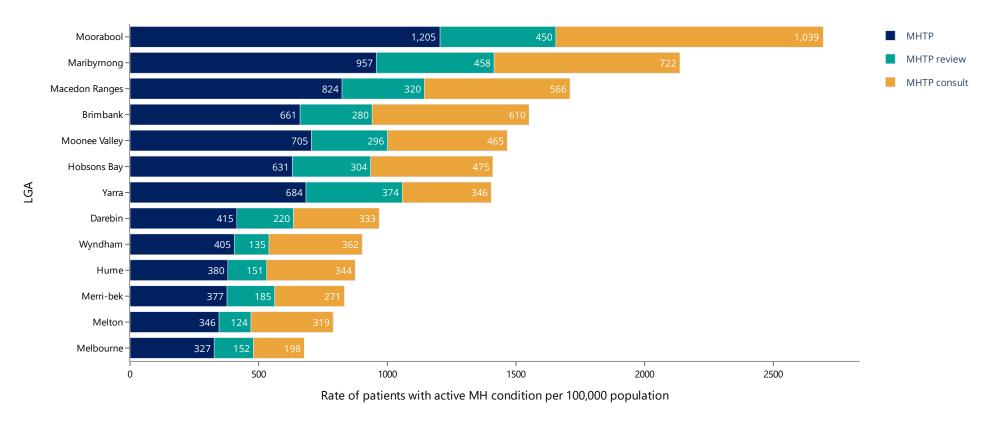
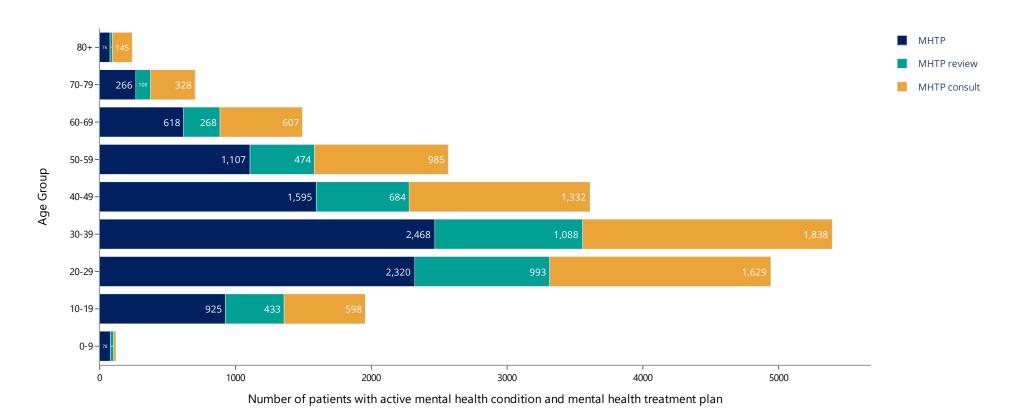


Figure notes: MHTP=GP Mental Health Treatment Plan (MBS items 2700, 2701, 2715 or 2717 - Preparation of a GP Mental Health Treatment Plan). MHTP review = MBS item 2712 (MBS item 2712 - Review of a GP Mental Health Treatment Plan). MHTP consult = MBS item 2713 (MBS item 2713 - GP Mental Health Treatment Consultation).

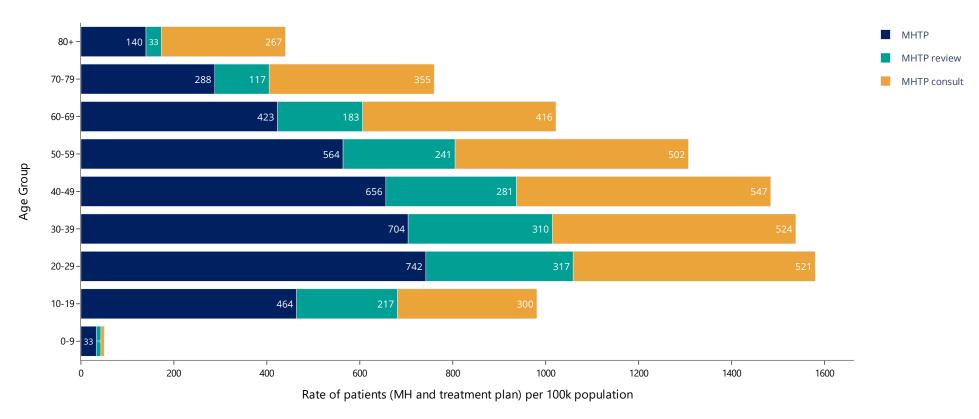
Figure 27. Number of patients with active mental health condition by mental health treatment plan (MHTP) and age in FY2022-23.



<u>Figure notes:</u> MHTP = GP Mental Health Treatment Plan (MBS items 2700, 2701, 2715 or 2717 - Preparation of a GP Mental Health Treatment Plan). MHTP review = MBS item 2712 (MBS item 2712 - Review of a GP Mental Health Treatment Plan). MHTP consult = MBS item 2713 (MBS item 2713 - GP Mental Health Treatment Consultation).

Source: PATCAT, 2023

Figure 28. Rate per 100,000 population of patients with mental health diagnosis by mental health treatment plan (MHTP) and age in FY2022-23.



<u>Figure notes</u>: MHTP = GP Mental Health Treatment Plan (MBS items 2700, 2701, 2715 or 2717 - Preparation of a GP Mental Health Treatment Plan). MHTP review = MBS item 2712 (MBS item 2712 - Review of a GP Mental Health Treatment Plan). MHTP consult = MBS item 2713 (MBS item 2713 - GP Mental Health Treatment Consultation).

Antidepressants are the most prescribed medication for patients with a mental health diagnosis, with or without a mental health treatment plan.

Figure 29. Number of patients with mental health diagnosis and on a mental health treatment plan by type of prescription, 2022-23.

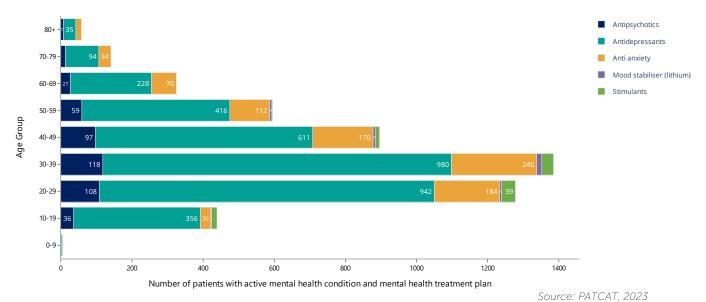
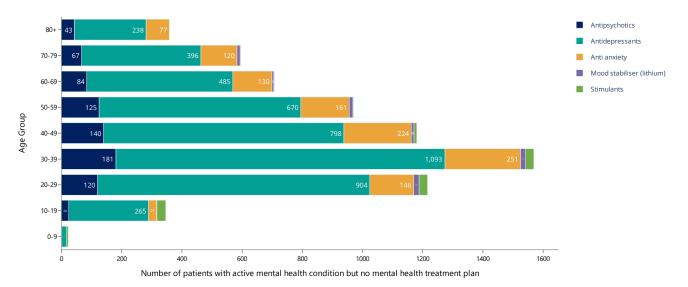


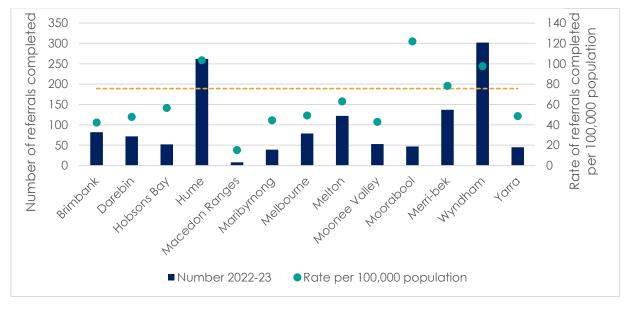
Figure 30. Number of patients with mental health diagnosis and on a mental health treatment plan by type of prescription, 2022-23.



Source: PATCAT, 2023

NWMPHN commissioned mental health services Head to Health

Figure 31. Head to Health referrals completed by LGA in 2022-23.



<u>Figure notes:</u> Referrals completed indicates a referral and IAR-DST assessment was completed. Rate was calculated using 2022 ERP population. Data only available at the LGA level, therefore, all of Macedon Ranges and Moorabool included. Orange line indicates the NWMPHN rate (76 per 100,000 population).

Source: Head to Health, 2023; ABS, 2022

Figure 32. Head to Health referrals and assessments completed with distribution of derived level of care by LGA in 2022-23.

LGA	Number of IAR-DSTs completed	% Derived level<3	% Derived level 3	% Derived level >3
Brimbank	82	1%	78%	21%
Darebin	72	1%	83%	15%
Hobsons Bay	52	4%	81%	15%
Hume	262	3%	81%	16%
Macedon Ranges	8	13%	88%	0%
Maribyrnong	39	3%	90%	8%
Melbourne	79	3%	85%	13%
Melton	122	2%	80%	17%
Merri-bek	137	1%	92%	7%
Moonee Valley	53	0%	77%	23%
Moorabool	47	2%	83%	15%
Wyndham	302	3%	84%	13%
Yarra	45	7%	84%	9%

Table notes: Based on the IAR-DST assessment, the derived level of care uses the clinician's assessed level of care if it is provided, or the IAR-DST recommended level of care if it is not. Level of care <3 involves self-management or low intensity support services. Level of care =3 involves moderate intensity support services and is generally the recommended level of care. Level of care >3 entails high intensity support services or acute and specialist community mental health services. Cells highlighted in pink indicate the 3 LGAs with the highest percentages.

Source: Head to Health, 2023

Table 15. Head to Health referrals and assessments completed with distribution of derived level of care by gender in 2022-23.

LGA	Number of IAR-DSTs completed	% Derived level<3	% Derived level 3	% Derived level >3
Female	819	2%	83%	15%
Male	466	3%	84%	13%
Transgender	5	0%	80%	20%
Genderqueer	6	0%	83%	17%
Not stated	3	33%	67%	0%

<u>Table notes:</u> Based on the IAR-DST assessment, the derived level of care uses the clinician's assessed level of care if it is provided, or the IAR-DST recommended level of care if it is not. Level of care <3 involves self-management or low intensity support services. Level of care =3 involves moderate intensity support services and is generally the recommended level of care. Level of care >3 entails high intensity support services or Acute and Specialist Community Mental Health Services. Cells highlighted in pink indicate the 3 gender groups with the highest percentages.

Source: Head to Health, 2023

Table 16. Head to Health referrals and assessments completed with distribution of derived level of care by age in 2022-23.

Age Group (years)	Number of IAR- DSTs completed	% Derived level<3	% Derived level 3	% Derived level >3
0-9	49	6%	88%	6%
10-19	158	2%	82%	16%
20-29	257	3%	84%	13%
30-39	279	1%	85%	13%
40-49	220	2%	80%	19%
50-59	177	4%	81%	15%
60-69	110	4%	84%	13%
70-79	41	0%	88%	12%
80+	8	13%	88%	0%

Table notes: Based on the IAR-DST assessment, the derived level of care uses the clinician's assessed level of care if it is provided, or the IAR-DST recommended level of care if it is not. Level of care <3 involves self-management or low intensity support services. Level of care =3 involves moderate intensity support services and is generally the recommended level of care. Level of care >3 entails high intensity support services or Acute and Specialist Community Mental Health Services. Cells highlighted in pink indicate the 3 age groups with the highest percentages.

Source: Head to Health, 2023

Culturally and linguistically diverse communities

Figure 33. Head to Health referrals and assessments completed with distribution of derived level of care in people from culturally and linguistically diverse backgrounds in 2022-23.

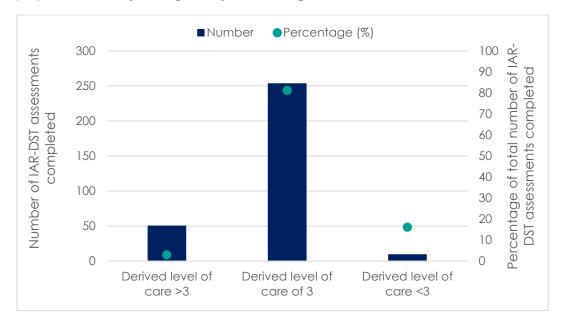


Figure notes: Based on the IAR-DST assessment, the derived level of care uses the clinician's assessed level of care if it is provided, or the IAR-DST recommended level of care if it is not. Level of care <3 involves self-management or low intensity support services. Level of care =3 involves moderate intensity support services and is generally the recommended level of care. Level of care >3 entails high intensity support services or acute and specialist community mental health services. Proxy for culturally and linguistically diverse people was defined in Head to Health as: born in a non-English speaking country and main language spoken at home other than English.

Source: Head to Health, 2023

Aboriginal and/or Torres Strait Islander

Figure 34. Head to Health referrals and assessments completed with distribution of derived level of care in Aboriginal and/or Torres Strait Islander people in 2022-23.

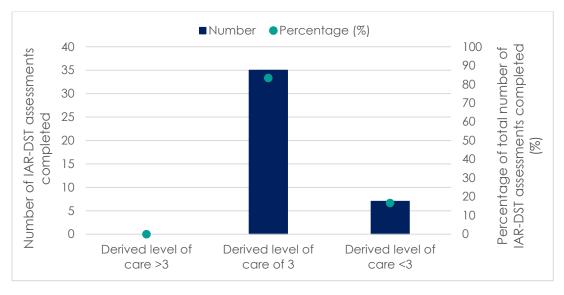
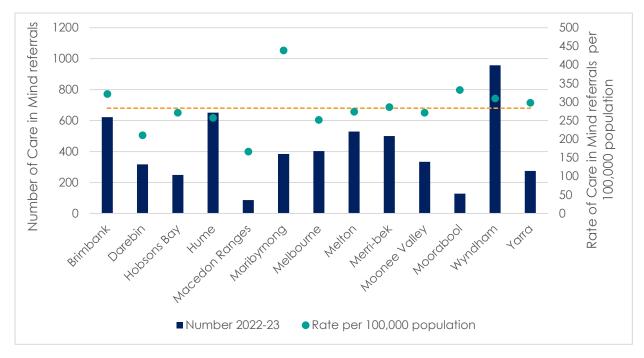


Figure notes: There were 0 assessments with a derived level of care greater than 3.

Source: Head to Health, 2023

CAREINMIND

Figure 35. Referrals to CAREinMIND by LGA in 2022-23.



<u>Figure notes:</u> Rate was calculated using 2022 ERP population. Data only available at the LGA level, therefore, all of Macedon Ranges and Moorabool included. Orange line indicates the NWMPHN region rate (76 per 100,000 population).

Source: CAREinMind from Refer Direct, 2023; ABS, 2022



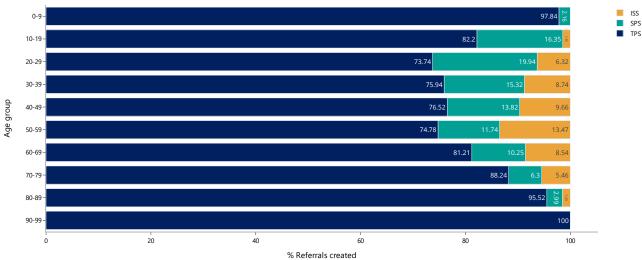


Figure notes: ISS- Intensive Support Services; SPS Suicide Prevention Support; TPS Targeted Psychological Support

Source: CAREinMIND from Refer Direct, 2022-23

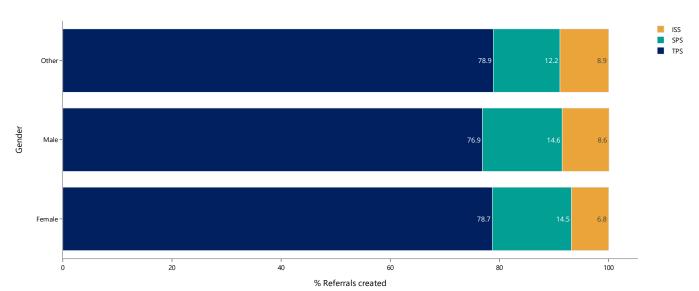


Figure 37. Percentage of CAREinMIND referrals by type of service and gender in 2022-23.

Figure notes: ISS- Intensive Support Services; SPS Suicide Prevention Support; TPS Targeted Psychological Support

Source: CAREinMIND from Refer Direct, 2022-23

Effective coverage

Effective coverage is the proportion of the population in need of an intervention that receives an effective intervention. One key aspect of effective coverage is to reduce avoidable ED presentations, which can be seen as indicators of gaps in primary care (Rosano et al., 2013).

Avoidable ED presentations are based on the AIHW variables: Presentations to public hospital emergency departments where the patient:

- had a principal diagnosis of any mental health condition and
- was allocated a triage category of 4 (semi-urgent: within 60 minutes) or 5 (non-urgent: within 120 minutes) and
- did not arrive by ambulance, or police or correctional vehicle and
- departure status was to "Home" or "Referred to GP" or "Residential care facility" and
- was not admitted to the hospital, not referred to another hospital, or did not die.

Table 17. Numbers and rates of avoidable ED presentations with a principal diagnosis of any mental health condition by LGA, 2019-20 to 2021-22.

		2019-20			2020-21		2021-22			2022	2-23						
LGA	N of total ED presentations	I avoldanie El I	% of ED presentations		N of avoidable ED presentations (% change from 2019- 20)	% of ED presentations	N of total ED presentations	N of avoidable ED presentations (% change from 2019- 20)	% of ED presenta tions	N of total ED presentati ons	N of avoidable ED presentation s (% change from 2019- 20)	% of ED present ations	Rate per 100,000 populatio n				
Brimbank	1,237	118	8%	1,219	108 (-8%)	7%	1,049	116 (-8%)	9%	1,141	137 (18%)	10%	71				
Darebin	1,440	130	9%	1,407	127 (-8%)	9%	1,161	97 (-8%)	8%	1,371	98 (1%)	7%	65				
Hobsons Bay	713	115	16%	720	106(-8%)	15%	677	121 (14%)	18%	685	66 (-45%)	10%	72				
Hume	1,959	164	8%	1,942	181 (-8%)	9%	1,776	186 (3%)	10%	1,645	113 (-39%)	7%	45				
Macedon Ranges - part a	122	11	9%	137	15 (-8%)	11%	104	7 (53%)	7%	111	7 (0%)	6%	21				
Maribyrnong	804	101	13%	788	80 (-8%)	10%	705	77 (-4%)	11%	778	73 (-5%)	9%	83				
Melbourne	1,933	232	12%	2,212	208 (-8%)	9%	2,113	280 (35%)	13%	1,800	176 (-37%)	10%	110				
Melton	1,484	97	8%	1,570	102(-8%)	8%	1,496	84 (-18%)	7%	1,399	100 (19%)	9%	52				
Merri-bek	1,845	180	10%	1,834	188 (-8%)	10%	1,584	189 (1%)	12%	1,540	162 (-14%)	11%	93				
Moonee Valley	1,121	99	9%	1,242	116 (-8%)	9%	1,003	120 (3%)	12%	929	101 (-16%)	11%	82				
Moorabool - part a	154	9	6%	147	12 (-8%)	8%	95	5 (-58%)	5%	141	6 (20%)	4%	23				
Wyndham	1,448	160	11%	1,512	138 (-8%)	9%	1,655	144 (4%)	9%	1,655	139 (-3%)	8%	45				
Yarra	1,191	130	11%	1,072	120 (-8%)	11%	1,131	115 (-4%)	10%	1,134	102 (-11%)	9%	111				
NWMPHN	15451	1,546	10%	15,802	1,501	9%	14,549	1,541	11%	14,329	1,280	9%	68				
Victoria	15451	6,146		15,802	5831		14,549	5434		14,329	4645						

Source: Victorian Emergency Minimum Dataset, DH, 2023; ABS, 2022

Figure 38. Avoidable ED presentations with a principal diagnosis of any mental health condition by LGA in 2022-23.

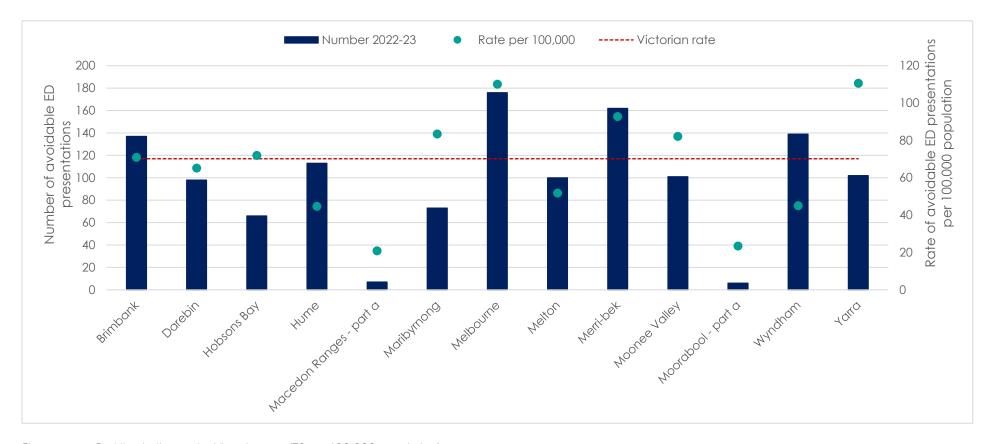
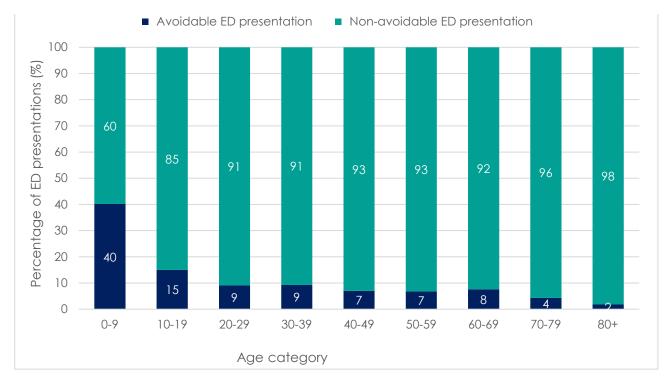


Figure notes: Red line indicates the Victorian rate (70 per 100,000 population).

Source: Victorian Emergency Minimum Dataset, DH, 2023; ABS, 2022

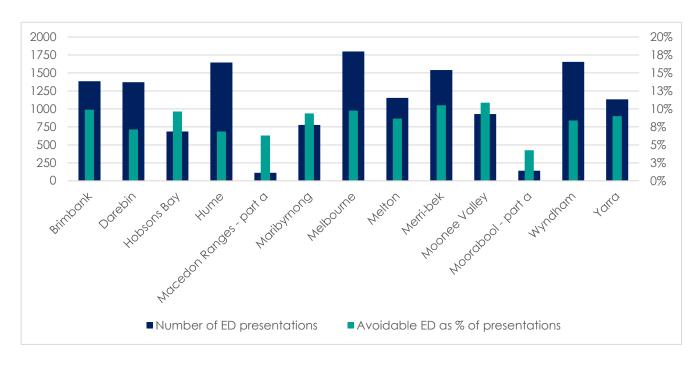
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Figure 39. Avoidable versus non-avoidable ED presentations due to any mental health condition by age in 2022-23.



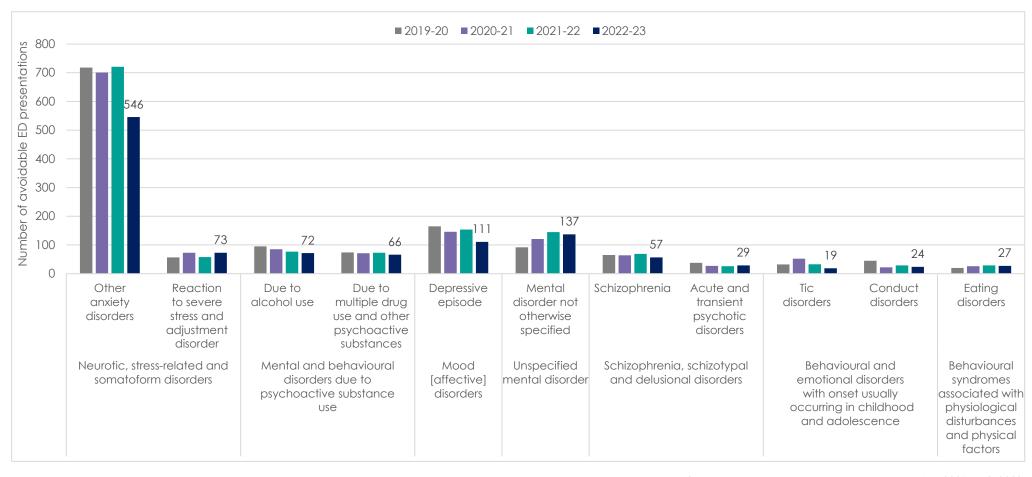
Source: Victorian Emergency Minimum Dataset, DH, 2023

Figure 40. Avoidable ED as a proportion of total ED presentations due to any mental health condition in 2022-23.



Source: Victorian Emergency Minimum Dataset, DH, 2023

Figure 41. Number of avoidable ED presentations by top 10 conditions (in the principal diagnosis) from 2019-20 to 2022-23.

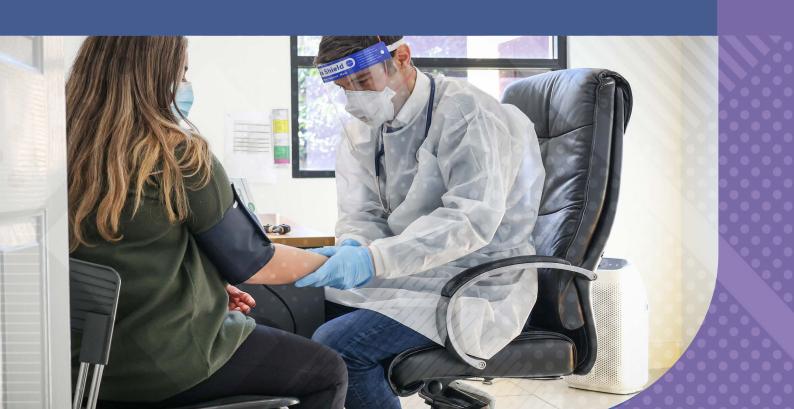


Source: Victorian Emergency Minimum Dataset, DH, 2023; ABS, 2022

Metric 5:

Mental health conditions and consequences

- Quantified need based on mental health condition and consequences
- Chronic conditions
- Mental ill health profile
- Hospitalisation and Emergency Department presentations
- Suicidal ideation, self harm, and suicide
- Mortality due to suicide



Quantified need based on health conditions and consequences

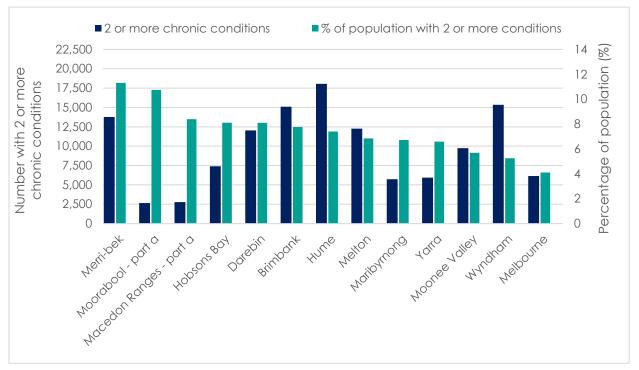
Table 18. Quantified need based on health conditions and consequences.

Area	LGA	% of projected population (2025)	% of population with chronic health condition (2 or more)	Index of population high or very high psychological distress based on K10*	Hospitalisation rate per 10,000 population due to mental & behavioural disorders	ED presentation rate per 10,000 population due to mental & behavioural disorders	ED presentation rate per 10,000 population due to suicidal ideation or self- inflicted injury	Hospitalisation rate per 10,000 population due to suicidal ideation or self- inflicted injury	Average annual ASR per 10,000 population (0-74 years) of death by suicide & self- inflicted injury	Average index	Average index as % of all LGAs	Adjusted population need
	Melbourne	9.8%	0.5	0.9	1.2	1.4	1.0	3.0	1.0	1.3	9.5%	9.7%
Inner city	Maribyrnong	5.3%	0.8	1.0	1.3	1.1	1.4	0.8	1.0	1.1	7.7%	5.8%
	Yarra	4.9%	0.8	0.8	1.4	1.6	1.0	2.4	1.1	1.3	9.6%	5.8%
	Brimbank	10.5%	0.9	1.1	1.3	0.9	1.1	1.3	1.0	1.1	7.9%	10.0%
	Darebin	8.3%	0.9	1.3	1.1	1.2	1.2	1.5	1.1	1.2	8.6%	8.4%
Suburban	Hobsons Bay	5.1%	0.9	1.1	0.8	1.0	1.3	0.8	1.2	1.0	7.3%	5.5%
	Moonee Valley	6.5%	0.7	0.9	1.1	1.0	0.8	1.5	0.8	1.0	7.1%	6.6%
	Merri-bek	9.6%	1.3	1.2	1.1	1.1	1.0	2.1	1.1	1.3	9.3%	9.5%
	Hume	12.7%	0.9	1.0	1.0	0.8	1.1	1.3	1.0	1.0	7.3%	11.6%
Growth area	Melton	9.2%	0.8	0.9	0.9	0.8	1.2	1.5	1.2	1.0	7.5%	8.9%
0.00	Wyndham	15.3%	0.6	1.0	0.6	0.7	0.8	0.5	1.1	0.7	5.4%	13.3%
Peri-urban	Macedon Ranges - part a	1.6%	1.0	0.7	0.5	0.4	0.4	0.5	1.2	0.7	4.8%	2.2%
ren-urban	Moorabool - part a	1.1%	1.3	1.0	0.9	0.7	0.9	1.4	1.5	1.1	8.0%	2.5%

Table note: All indicators are an index of the Victorian rate or percentage (LGA rate or % divided by Victorian rate or %). Pink shaded cells represent the 3 LGAs with the highest indices for individual access indicators. Index scores are an indicator of advantage (scores lower than 1) and disadvantage (scores greater than 1); purple shaded cells represent the 3 LGAs with highest proportion of need relative to other LGAs in the region.

Chronic conditions

Figure 42. Percentage of population with 2 or more chronic health conditions by LGA, 2021.



Source: Census 2021, ABS

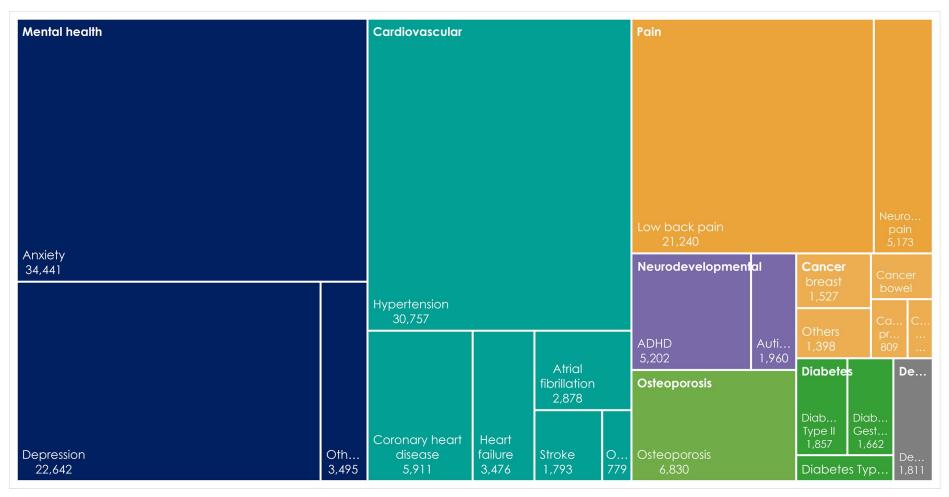
Table 19. Prevalence of chronic condition type by LGA, 2021.

Condition	Anxie Depr	ety and ession	Ast	hma	Diak	etes		art ease	Art	hritis	Cancer		Str	oke
LGA	М	F	М	F	М	F	М	F	М	F	М	F	М	F
Brimbank	4.9%	7.6%	6.9%	7.6%	6.7%	6.2%	4.2%	2.6%	4.7%	9.3%	2.0%	2.2%	1.1%	0.9%
Darebin	8.4%	13.5%	7.8%	9.1%	4.6%	3.9%	3.9%	2.5%	4.9%	9.5%	2.1%	2.5%	0.9%	0.8%
Hobsons Bay	6.6%	10.1%	7.6%	8.8%	5.1%	4.4%	4.3%	2.9%	5.3%	9.7%	2.4%	2.7%	1.0%	0.9%
Hume	5.3%	8.6%	6.8%	8.3%	5.8%	5.1%	3.8%	2.4%	4.4%	8.8%	1.8%	1.9%	0.8%	0.6%
Macedon Ranges	7.1%	11.0%	8.3%	9.5%	4.6%	3.4%	5.3%	2.8%	6.6%	11.2%	3.5%	3.3%	1.0%	0.8%
Maribyrnong	7.6%	12.2%	8.0%	9.0%	4.2%	3.7%	2.8%	1.8%	3.6%	6.9%	1.7%	2.0%	0.8%	0.6%
Melbourne	6.5%	9.8%	6.2%	6.5%	2.2%	1.5%	2.0%	1.2%	2.3%	3.7%	1.4%	1.5%	0.5%	0.4%
Melton	5.5%	8.9%	7.7%	9.0%	5.4%	4.4%	3.1%	1.9%	3.9%	7.5%	1.5%	1.9%	0.7%	0.6%
Moonee Valley	6.6%	10.1%	7.4%	8.4%	4.7%	3.9%	4.6%	2.9%	5.2%	9.8%	2.9%	2.8%	1.0%	0.8%
Moorabool	7.7%	12.7%	8.6%	11.1%	5.6%	4.3%	5.3%	2.9%	7.1%	12.5%	2.9%	3.3%	1.2%	1.1%
Merri-bek	8.3%	13.6%	8.0%	9.1%	4.6%	4.0%	3.6%	2.6%	4.5%	9.0%	2.0%	2.5%	0.9%	0.7%
Wyndham	4.3%	7.1%	5.9%	7.2%	4.8%	3.9%	2.7%	1.6%	3.1%	6.0%	1.2%	1.5%	0.5%	0.5%
Yarra	9.3%	14.3%	8.9%	9.7%	3.0%	2.3%	2.9%	1.7%	3.7%	6.8%	2.3%	2.3%	0.7%	0.5%
NWMPHN region	6.3%	10.0%	7.2%	8.3%	4.9%	4.1%	3.5%	2.2%	4.2%	8.0%	1.9%	2.1%	0.8%	0.7%
Victoria	6.8%	10.7%	7.6%	9.1%	5.2%	4.2%	4.6%	2.9%	5.7%	10.2%	2.7%	2.8%	1.0%	0.8%

<u>Table notes</u>: LGAs with average higher than Victoria highlighted in yellow.

Source: Census 2021, ABS

Figure 43. Top new diagnoses recorded by GPs between 1 January 2022 and 31 December 2022.



Notes: 35 diagnoses were included in the analysis and were counted if a patient had a valid diagnosis recorded during a GP clinic visit between 1 January 2022 and 31 December 2022 and data was received by NWMPHN (i.e., through the PATCAT system). The diagnosis counts were calculated as the number of distinct patients by the selected health condition for residents of the NMPHN region (based on patient postcode). NWMPHN does not receive data from all general practices across the region, so these numbers are likely to be underrepresented. Further, the data will not account for patients who have seen multiple GPs in the time period, therefore single patients could have a single diagnosis reported more than once.

Source: PAT CAT, February 2023 (North Western Melbourne Primary Health Network (NWMPHN) & Pen CS, 2023)

Mental ill health profile

NWMPHN general practice data

Figure 44. Number of mental health diagnoses by age and sex in 2022-23.

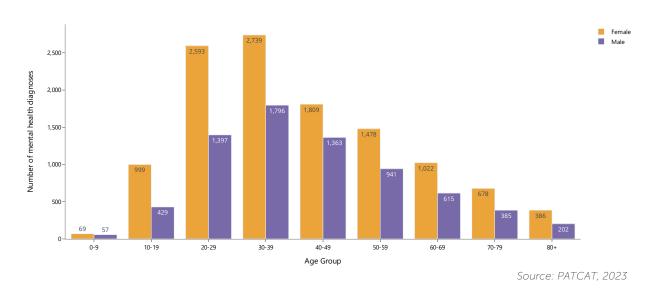
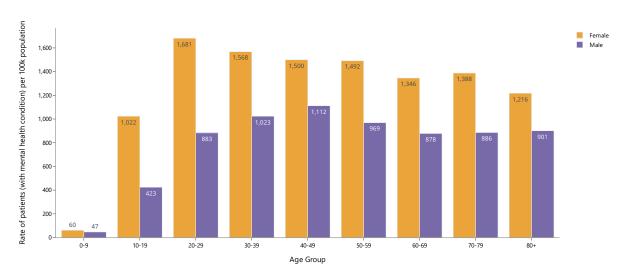


Figure 45. Rate of mental health diagnoses by age and sex per 100,000 population in 2022-23.



Source: PATCAT, 2023

Figure 46. Number of patients with a mental health diagnosis by LGA in 2022-23.

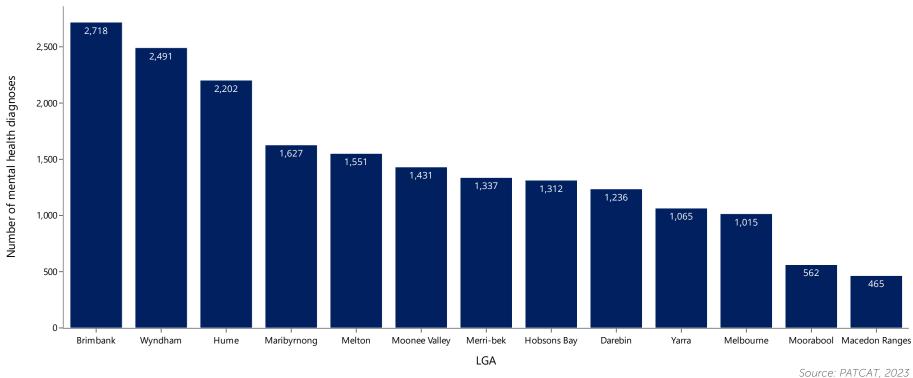
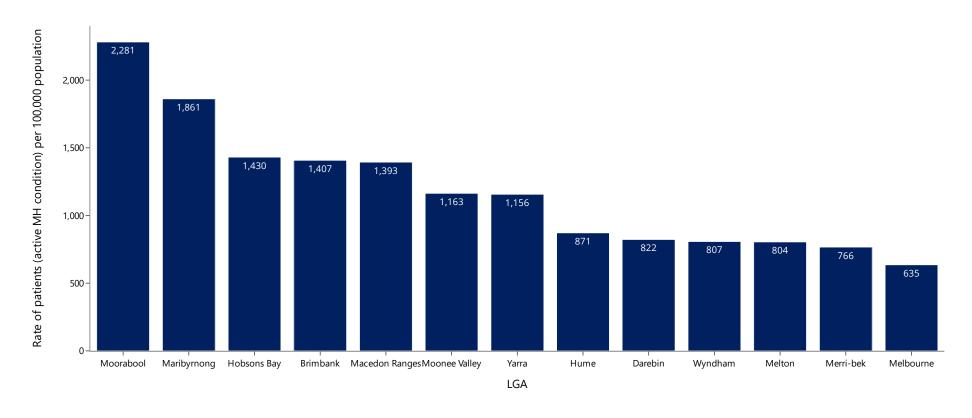


Figure 47. Rate per 100,000 population with a mental health diagnosis by LGA in 2022-23.



Source: PATCAT, 2023

In 2022-23 rates of anxiety and depression diagnoses were greatest in Moorabool – part a, followed by Maribyrnong. Hobsons Bay, Brimbank and Macedon Ranges also ranked highly across anxiety and depression diagnoses.

Figure 48. Rate of active mental health diagnoses per 100,000 population by LGA and condition.

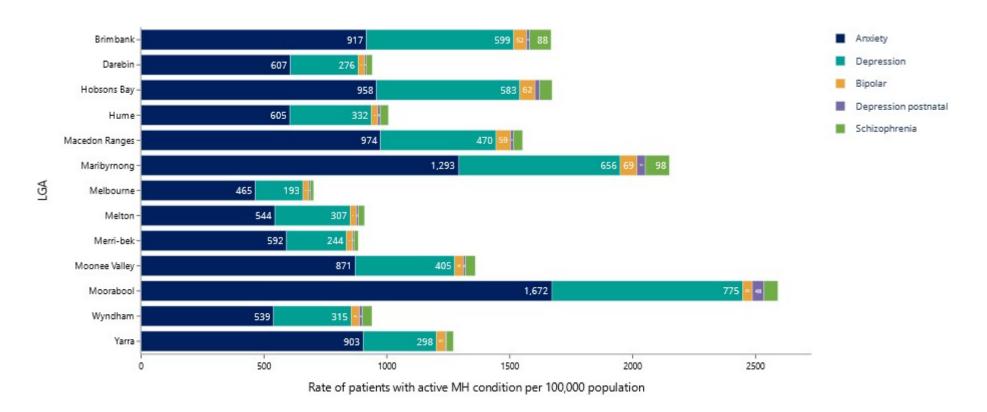
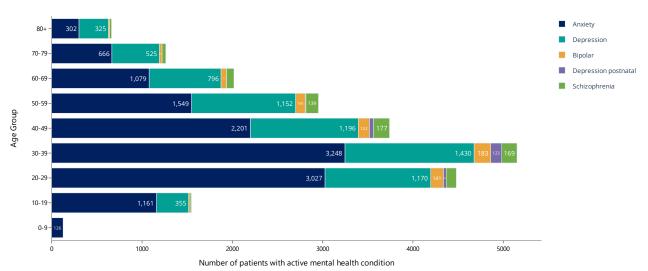


Figure notes: Rates calculated using 2022 ABS ERP

Figure 49. Number of active mental health diagnoses by age and condition.



Source: PATCAT, 2023

Figure 50. Rate of active mental health diagnoses per 100,000 population by age and condition.

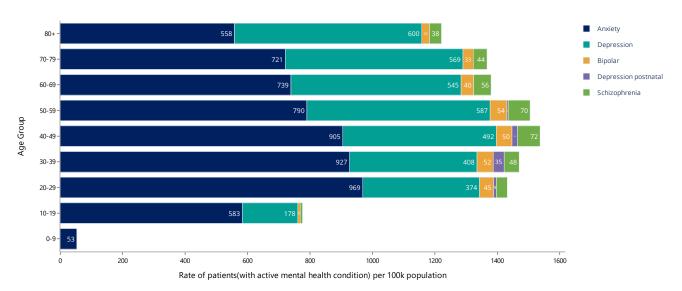
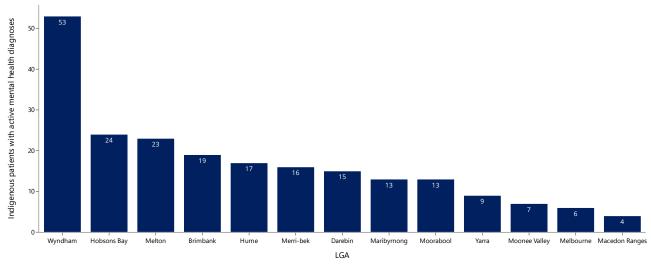


Figure notes: Rates calculated using 2022 ABS ERP

Among Aboriginal and Torres Strait Islander people, Wyndham had the highest number of mental health diagnoses in 2022-23. However, when accounting for population size, Moorabool - *part a* and Hobsons Bay had the highest rates of mental health diagnoses among the cohort.

Figure 51. Number of mental health diagnoses in Aboriginal and Torres Strait Islander people by LGA in 2022-23.



Source: PATCAT, 2023

Figure 52. Rate of mental health diagnoses in Aboriginal and Torres Strait Islander people by LGA in 2022-23.

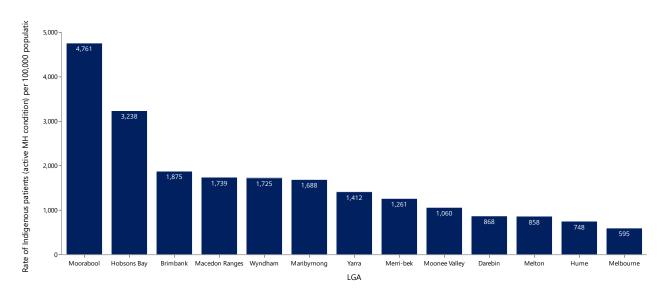
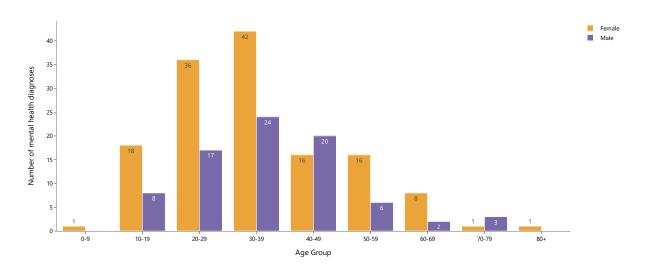


Figure 53. Number of mental health diagnoses by age and sex in Aboriginal and Torres Strait Islander people, 2022-23



Source: PATCAT,2023

NWMPHN commissioned primary mental health services

Figure 54. Rate of episodes of care delivered by commissioned service providers per 10,000 population by LGA in 2022-23.

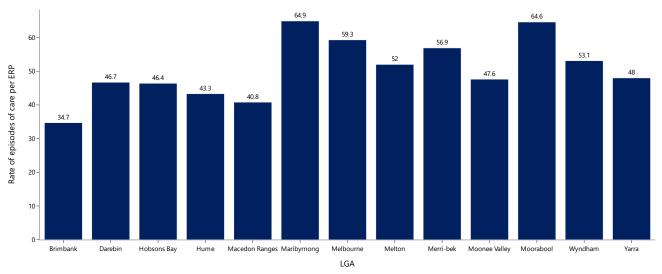
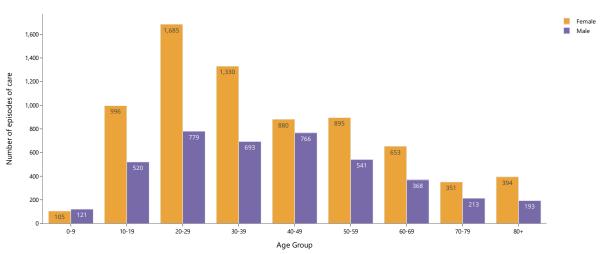


Figure note: Definition of episode of care: An episode is a period of health care with a defined start and end. A new episode record is created when a client is referred to a PMHC-MDS reporting treatment commissioned service provider.

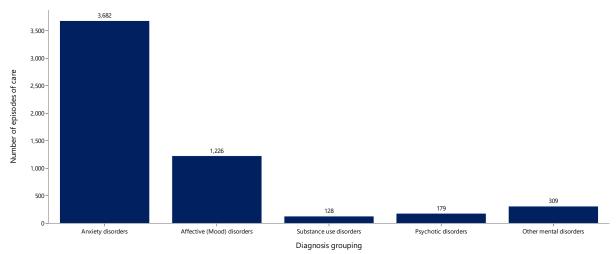
Source: NWMPHN PMHC-MDS, 2023

Figure 55. Number episodes of care delivered by commissioned service providers by age and sex in 2022-23.



Source: NWMPHN PMHC-MDS, 2023

Figure 56. Number of episodes of care delivered by commissioned service providers by principal diagnosis condition type in 2022-23.



<u>Figure note</u>: The episode data allows for a principal diagnosis and an additional diagnosis for each record. These are grouped into categories as in the figure. Within the "anxiety disorders" group, there are 8 possible diagnoses, including acute stress disorder, agoraphobia, generalised anxiety disorder, obsessive-compulsive disorder, panic disorder, post-traumatic stress disorder, social phobia, and other anxiety disorder. Depression falls into the affective (mood) disorder category.

Source: NWMPHN PMHC-MDS, 2023

Hospitalisation and Emergency Department (ED) presentations

In Australia, people experiencing mental distress have access to a variety of mental health care services provided by professionals in different care settings. Public hospital EDs play an important role in treating mental health challenges (AIHW, 2019). They can be the initial point of care for those seeking mental health-related services for the first time, as well as an alternative for people seeking after-hours mental health care (ACEM 2018). Overnight mental health-related hospitalisations occur in public acute, public psychiatric, or private hospitals. These hospitalisations can also take place on a general ward or in psychiatric units (AIHW, 2019).

Hospitalisations and Emergency Department presentations for mental health

This section presents findings pertaining to the prevalence and type of hospitalisations and ED presentations due to mental health conditions (in the principal diagnosis) from 2019 to 2022, analysed using the Victorian Admitted Episodes Dataset (VAED) and Victorian Emergency Minimum Dataset (VEMD), within the NWMPHN region (based on the recorded postcode of the persons residence during their admission episode).

Prevalence and demographic characteristics

Table 20. Hospitalisations due to a principal diagnosis of any mental health condition by LGA from 2019-20 to 2022-23.

	201	19-20		2020-21			2021-22			2022-23		
LGA	Number	Rate per 100,000 population	Number	% change from 2019/20	Rate per 100,000 population	Number	% change from 2020/21	Rate per 100,000 population	Number	% change from 2021- 22	Rate per 100,000 population	
Brimbank	1,608	788	1,713	7%	840	1,542	-10%	792	1,936	26%	1,002	
Darebin	1,275	813	1,374	8%	876	1,218	-11%	820	1,300	7%	864	
Hobsons Bay	685	721	587	-14%	617	674	15%	738	523	-22%	570	
Hume	1,798	739	1,585	-12%	652	1,639	3%	672	1,811	10%	716	
Macedon Ranges part a	132	403	153	16%	467	179	17% 542		136	-24%	404	
Maribyrnong	925	1,036	816	-12%	914	759	-7% 891		848	12%	969	
Melbourne	1,230	720	1,519	23%	889	1,472	-3%	984	1,413	-4%	883	
Melton	1306	754	1016	-22%	587	1077	6%	602	1290	20%	668	
Merri-bek	1,557	866	1,587	2%	883	1,527	-4%	891	1,403	-8%	803	
Moonee Valley	854	674	1,069	25%	844	880	-18%	722	1,010	15%	821	
Moorabool - part a	136	597	167	23%	734	147	-12%	610	180	22%	703	
Wyndham	1,346	469	1,265	-6%	441	1,417	12%	485	1,322	-7%	428	
Yarra	771	799	789	2%	817	930	18%	1,032	951	2%	1,030	
NWMPHN	13,623	725	13,640	0%	726	13,461	-1%	738	14,123	5%	748	
Victoria total	52,392	775	52,726	1%	780	49,801	-6%	766	49,783	0%	752	

Table notes: LGAs with rates higher than the Victorian average level are highlighted in orange. Largest increases are highlighted in red and largest decreases are highlighted in green.

Source: Victorian Admitted Episodes Dataset, DH, 2022-23; ABS, 2022

Table 21. ED presentations due to a principal diagnosis of any mental health condition by LGA from 2019-20 to 2022-23.

	201	9-20		2020-21			2021-22			2022-23	2022-23	
LGA	Number	Rate per 100,000 population	Number	% change from 2020	Rate per 100,000 population	Number	% change from 2021	Rate per 100,000 population	Number	% change from 2021	Rate per 100,000 population	
Brimbank	1,555	762	1,504	-3%	737	1,308	-13%	672	1,386	6%	717	
Darebin	1,440	918	1,407	-2%	897	1,161	-17%	781	1,371	18%	911	
Hobsons Bay	713	750	720	1%	757	677	-6%	741	685	1%	746	
Hume	1,959	805	1,942	-1%	798	1,776	-9%	728	1,645	-7%	650	
Macedon Ranges - part a	122	373	137	12%	419	104	-24%	315	111	7%	330	
Maribyrnong	804	900	788	-2%	882	705	-11%	827	778	10%	889	
Melbourne	1,933	1,132	2,212	14%	1,295	2,113	-4%	1,412	1,800	-15%	1,125	
Melton	1,166	673	1,285	10%	742	1,237	-4%	691	1,154	-7%	597	
Merri-bek	1,845	1,026	1,834	-1%	1,020	1,584	-14%	924	1,540	-3%	881	
Moonee Valley	1,121	885	1,242	11%	981	1,003	-19%	823	929	-7%	755	
Moorabool - part a	154	676	147	-5%	646	95	-35%	394	141	48%	550	
Wyndham	1,448	505	1,512	4%	527	1,655	9%	567	1,655	0%	535	
Yarra	1,191	1,234	1,072	-10%	1,110	1,131	6%	1,255	1,134	0%	1,229	
NWMPHN	15,451	823	15,802	2%	842	14,549	-8%	797	14,329	-2%	759	
Victoria total	59,691	883	60,434	1%	894	52,885	-12%	813	51,472	-3%	778	

Table notes: LGAs with rates higher than the Victorian average level are highlighted in orange. Largest increases are highlighted in red and largest decreases are highlighted in green.

Figure 57. Rate of hospitalisation due to a principal diagnosis of any mental health condition by LGA from 2019-20 to 2022-23.

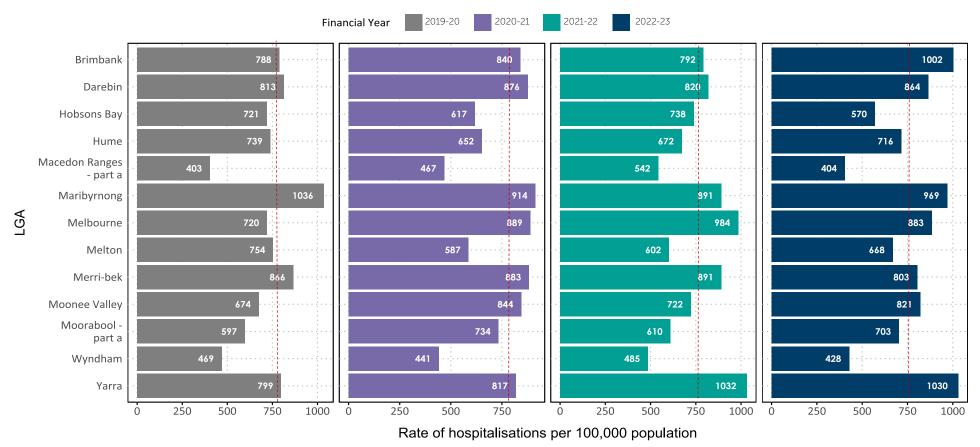
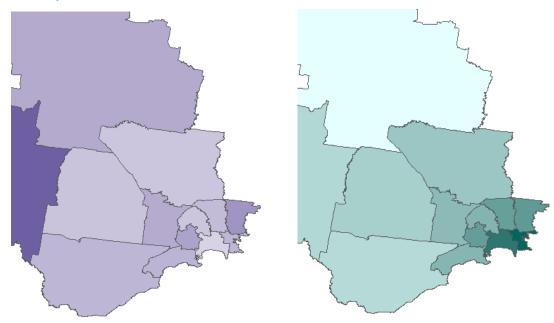


Figure notes: Red dotted line indicates the Victorian rate (775 per 100,000 in 2019, 780 per 100,000 in 2020, 766 per 100,000 in 2021 and 752 per 100,000 in 2022). Rates calculated using the 2022 ERP population.

Source: Victorian Admitted Episodes Dataset, DH, 2022-23; ABS, 2022

Figure 58. LGA map of percentage change from 2021-22 to 2022-23 and rate of ED presentations due to a principal diagnosis of any mental health condition in 2022-23.



<u>Figure notes:</u> Purple shading corresponds to the % change from 2021-22 to 2022-23-22 values in the table below. The green shading corresponds to the Rate values in the table below.

Table 22. ED presentations due to any mental health condition in the principal diagnosis in 2022-23.

LGA	ED presentati	ions due to any mental heal	th condition in 2022-23	
	Number	% change in FY2022-23	Rate	
Brimbank	1,386	6.0%	717	
Darebin	1,371	18.1%	911	
Hobsons Bay	685	1.2%	746	
Hume	1,645	-7.4%	650	
Macedon Ranges - part a	111	6.7%	330	
Maribyrnong	778	10.4%	889	
Melbourne	1,800	-14.8%	1,125	
Melton	1,154	-6.7%	597	
Merri-bek	1,540	-2.8%	881	
Moonee Valley	929	-7.4%	755	
Moorabool - part a	141	48.4%	550	
Wyndham	1,655	0.0%	535	
Yarra	1,134	0.3%	1,229	
Victoria	51,472	-3%	778	

Rates of hospitalisations are highest males and females aged 80 and above. High rates are also recorded for males aged 40-59, followed by females aged 20-29.

Figure 59. Number of hospitalisations due to a principal diagnosis of any mental health condition by age and sex in 2022-23.

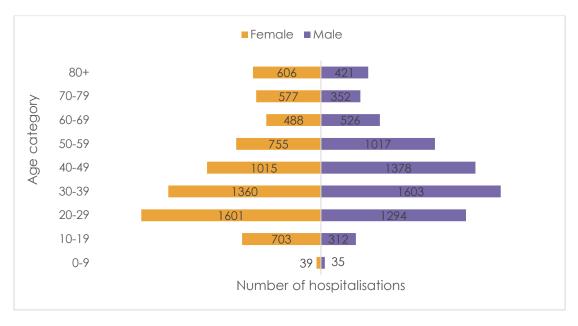
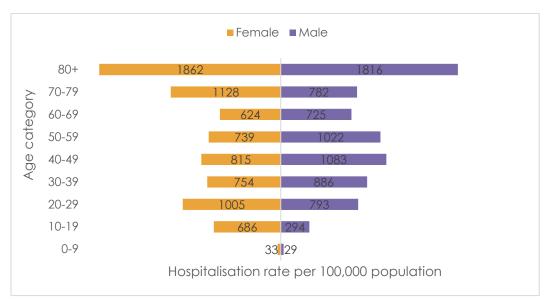


Figure note: 41 additional respondents recorded sex as intersex or other

Source: Victorian Admitted Episodes Dataset, DH, 2022-23

Figure 60. Hospitalisation rate due to a principal diagnosis of any mental health condition by age and sex in 2022-23.



<u>Figure note</u>: For the 41 additional respondents who recorded sex as intersex or other, rates were not calculated by age category.

Source: Victorian Admitted Episodes Dataset, DH, 2022-23; ABS, 2022

Rates of ED presentations are high in those aged 80 and above for males and females despite the number of ED presentations being lower. Highest rates are for males aged 40-49 followed by females aged 10-19.

Figure 61. Number of ED presentations due to any mental health condition by age and sex in 2022-23.

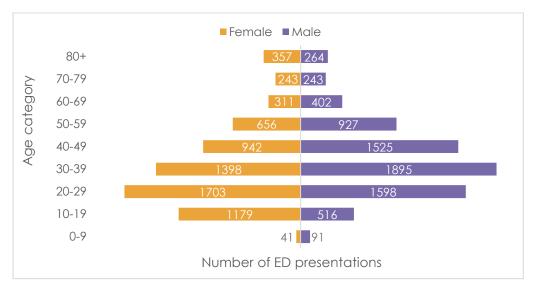


Figure note: 40 additional respondents recorded gender as intersex or other.

Source: Victorian Emergency Minimum Dataset, DH, 2022-23

Figure 62. Rate of ED presentations due to any mental health condition per 100,000 population by age and sex in 2022-23.

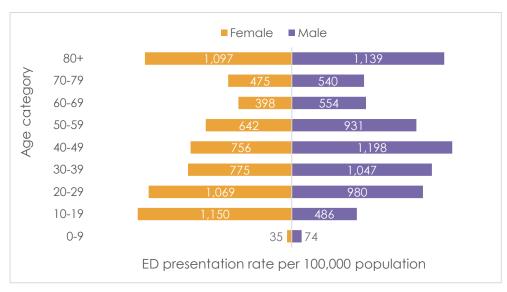
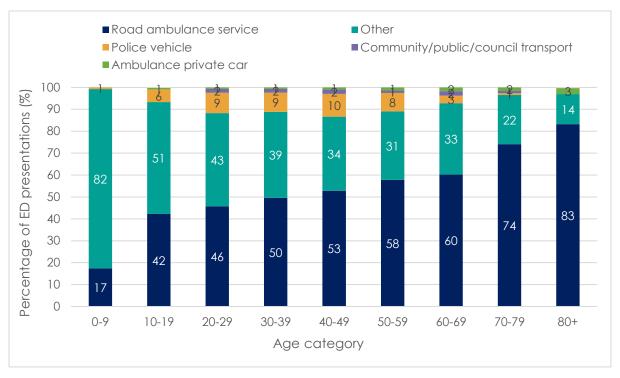


Figure note: For the 40 additional respondents who recorded sex as intersex or other, rates were not calculated by age category.

More older adults than younger cohorts arrived by ambulance to EDs in 2022-23

Figure 63. Percentage of ED presentations due to mental health conditions by age and arrival mode in 2022-23.



Diagnosis type

Figure 64. Number of hospitalisations due to any mental health condition by ICD-10 category from 2019-20 to 2022-23.

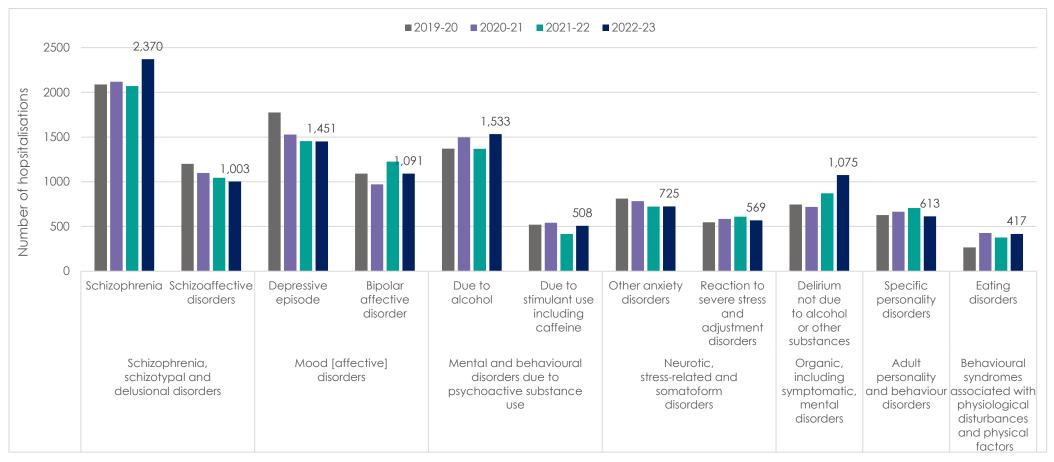
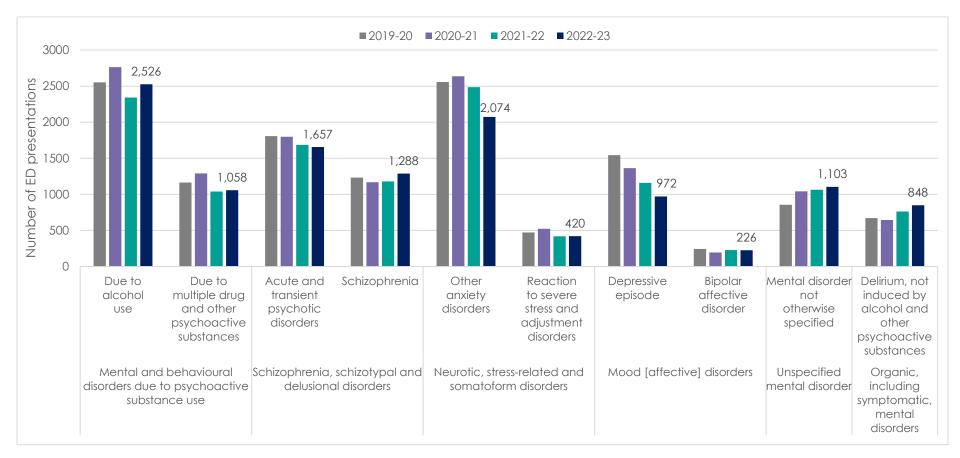


Figure notes: Top 11 ICD-10 categories of mental health conditions (primary diagnosis) with their respective ICD-10 block in 2022-23 and compared with previous years.

Source: Victorian Admitted Episodes Dataset, DH, 2022-23

Figure 65. Number of ED presentations by top 10 mental health conditions in the principal diagnosis from 2019-20 to 2022-23.



Of all mental health conditions, schizophrenia and alcohol use were the leading causes of hospitalisations in 2022-23. Brimbank and Moonee Valley had the highest rate for hospitalisations due to schizophrenia, whereas Yarra and Melbourne had the highest rates for alcohol use.

Table 23. Top 5 ICD-10 categories of mental health conditions (principal diagnosis) ranked by top 5 LGAs by hospitalisation rate in 2022-23.

	Schizophrenia	Mental and behavioural disorders due to use of alcohol	Depressive episode	Bipolar affective disorder	Delirium, not induced by alcohol and other psychoactive substances
Rank 1	Brimbank (257)	Yarra (220)	Brimbank (134)	Hume (101)	Moonee Valley (106)
Rank 2	Moonee Valley (180)	Melbourne (161)	Moorabool - part a (105)	Moonee Valley (88)	Brimbank (97)
Rank 3	Maribyrnong (171)	Merri-bek (118)	Maribyrnong (99)	Darebin (65)	Merri-bek (77)
Rank 4	Darebin (165)	Darebin (110)	Melbourne (86)	Melbourne (63)	Hobsons Bay (74)
Rank 5	Yarra (165)	Moorabool - part a (98)	Hobsons Bay (83)	Macedon Ranges - part a (56)	Darebin (67)

Notes: Table includes the top 5 categories of mental health conditions (principal diagnosis) in 2022-23 ranked by the top 5 LGAs with the highest hospitalisation rates for those conditions. Rates are presented as per 100,000 population using 2022 ERP. Colours represent specific LGAs.

Source: Victorian Admitted Episodes Dataset, DH, 2022-23; ABS, 2022

Table 24. Top 5 ICD-10 categories of mental health conditions (principal diagnosis) ranked by top 5 LGAs by ED presentation rate in 2022-23.

	Mental and behavioural disorders due to alcohol use	Other anxiety disorders	Acute and transient psychotic disorders	Schizophrenia	Mental disorder not otherwise specified
Rank 1	Yarra (256)	Yarra (153)	Maribyrnong (157)	Yarra (169)	Melbourne (104)
Rank 2	Melbourne (252)	Merri-bek (135)	Melbourne (135)	Darebin (113)	Moonee Valley (81)
Rank 3	Merri-bek (201)	Melbourne (134)	Brimbank (120)	Melbourne (98)	Merri-bek (76)
Rank 4	Maribyrnong (179)	Hobsons Bay (127)	Yarra (108)	Maribyrnong (91)	Hobsons Bay (72)
Rank 5	Darebin (166)	Hume (125)	Darebin (105)	Merri-bek (66)	Yarra (69)

Notes: Table includes the top 5 categories of mental health conditions (principal diagnosis) in 2022-23 ranked by the top 5 LGAs with the highest ED presentation rates. Rates are presented as per 100,000 population. Colours represent specific LGAs.

Table 25. Hospitalisations by age and top 3 mental health conditions in the principal diagnosis in 2022-23.

Age Category	Condition 1	Condition 2	Condition 3		
0-9 years	Other behavioural and emotional disorders with onset occurring in childhood (n=16)	Unspecified disorder of psychological development (n=14)	Pervasive developmental disorders (n=7)		
10-19 years	Eating disorders (n=264)	Specific personality disorders (n=122)	Depressive episode (n=120)		
20-29 years	Schizophrenia (n=462)	Depressive episode (n=307)	Specific personality disorders (n=266)		
30-39 years	Schizophrenia (n=548)	Mental and behavioural disorders due to alcohol use (n=351)	Bipolar affective disorder (n=255)		
40-49 years	Schizophrenia (n=586)	Mental and behavioural disorders due to alcohol use (n=427)	Schizoaffective disorders (n=236)		
50-59 years	Schizophrenia (n=376)	Mental and behavioural disorders due to alcohol use (n=295)	Schizoaffective disorders (n=236)		
60-69 years	Schizophrenia (n=240)	Bipolar affective disorder (n=160)	Depressive episode (n=147)		
70-79 years	Delirium not due to alcohol or other psychoactive substances (n=259)	Depressive episode (n=230)	Bipolar affective disorder (n=99)		
80+ years	Delirium not due to alcohol or other psychoactive substances (n=702)	Depressive episode (n=102)	Bipolar affective disorder (n=52)		

Source: Victorian Admitted Episodes Dataset, DH, 2022-23;

Table 26. ED presentations by age and top 3 mental health conditions in the principal diagnosis in 2022-23.

Age	Condition 1	Condition 2	Condition 3
0-9 years	Conduct disorders (n=48)	Other anxiety disorders (n=27)	Tic disorders (n=14)
10-19 years	Mental disorder not otherwise specified (n=343)	Other anxiety disorders (n=327)	Mental and behavioural disorders due to alcohol use (n=184)
20-29 years	Other anxiety disorders (n=563)	Acute and transient psychotic disorders (n=441)	Mental and behavioural disorders due to alcohol use (n=426)
30-39 years	Mental and behavioural disorders due to alcohol use (n=546)	Acute and transient psychotic disorders (n=521)	Other anxiety disorders (n=461)
40-49 years	Mental and behavioural disorders due to alcohol use (n=595)	Schizophrenia (n=358)	Acute and transient psychotic disorders (n=337)
50-59 years	Mental and behavioural disorders due to alcohol use (n=465)	Schizophrenia (n=231)	Acute and transient psychotic disorders (n=202)
60-69 years	Mental and behavioural disorders due to alcohol use (n=207)	Other anxiety disorders (n=114)	Delirium not due to alcohol or other psychoactive substances (n=84)
70-79 years	Delirium not due to alcohol or other psychoactive substances (n=214)	Other anxiety disorders (n=70)	Mental and behavioural disorders due to alcohol use (n=73)
80+ years	Delirium not due to alcohol or other psychoactive substances (n=504)	Other anxiety disorders (n=45)	Mental and behavioural disorders due to alcohol use (n=28)

Referrals upon hospital and ED discharge

Table 27. Number of hospitalisations due to any mental health condition (principal diagnosis) by top 10 referral statuses upon discharge from hospital for 2019-20 to 2022-23

Top 10 referral statuses upon	Number of h	nospitalisations (or v from prev	rious FY)
discharge from hospital	2019-20	2020-21	2021-22	2022-23
Mental health community services*	48.0%	45.5% ▼	44.8% ▼	39.0% ▼
Referral to GP*	29.8%	31.8% ▲	32.2% ▲	35.3% ▲
No referral or support services arranged	11.5%	11.9% 🛦	13.0% ▲	16.1% ▲
Other clinical care and/or support services*	6.3%	6.6% ▲	5.2% ▼	5.8% ▲
Referral to both GP and mental health community services*	1.2%	1.4% ▲	1.9% ▲	1.6% ▼
Referral to private psychiatrist*	0.8%	0.6% ▼	0.6% ▼	0.5% ▼
Referral to both GP and other clinical care and/or support services*	0.5%	0.6% ▲	0.5% ▼	0.4% ▼
Alcohol and drug treatment service*	0.3%	0.2% ▼	0.2% —	0.1% ▼
Referral to Transition Care home- based program*	0.1%	0.0% ▼	0.1% 🛦	0.1% —
Referral to both GP and private psychiatrist*	<0.1% —	<0.1% —	0.1% ▲	0.1% —

<u>Table note</u>: * referrals arranged before discharge. \blacktriangle = increase, \blacktriangledown = decrease, \multimap = no change. This data includes patients who were discharged from hospital and excludes patients who died in hospital, were transferred to another hospital or had a change in care type.

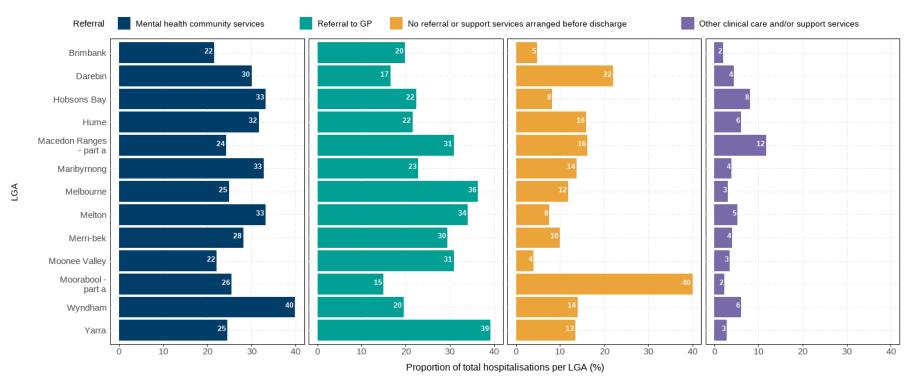
Source: Victorian Admitted Episodes Dataset, DH, 2022-23;

Table 28. Number of ED presentations by top 10 referral statuses upon discharge to usual residence from 2019-20 to 2022-23.

Top 10 referral statuses upon	Number of ED presentations (▲ or ▼ from previous FY)								
discharge to home/usual residence	2019-20	2020-21	2021-22	2022-23					
GP	56.8%	56.3% ▼	57.9% ▲	57.8% ▼					
Review in ED - as required	15.7%	16.2% ▲	15.7% ▼	15.3% ▼					
Mental Health Community Service	10.4%	9.8% ▼	9.1% ▼	10.4%▲					
No referral	9.3%	10.1% ▲	10.0% ▼	9.1% ▼					
Other	2.0%	2.4% ▲	2.1% ▼	2.1% —					
Other Specialist Health Practitioner	1.3%	1.3% —	1.2% ▼	1.7% ▲					
Not known	0.8%	0.9% ▲	0.7% ▼	0.8% ▲					
Outpatients	0.9%	0.6% ▼	0.8% 🛦	0.7% ▼					
Other community service	1.0%	0.7% ▼	0.7% —	0.7% —					
Alcohol and Drug Treatment	0.8%	0.6% ▼	0.6% —	0.7% ▲					

<u>Table note</u>: \blacktriangle = increase, \blacktriangledown = decrease, — = no change. Discharge to usual residence includes home, correctional/custodial facility, mental health residential facility and residential care facility. This does not include patients who were admitted to the ward, transferred to another hospital or departed the ED before treatment was completed.

Figure 66. Proportion of hospitalisations due to any mental health condition by LGA and top 4 referral statuses upon discharge from hospital in 2022-23.



<u>Figure notes</u>: Proportions for each LGA calculated by the number of referrals divided by the total number of hospitalisations (due to any mental health condition) for the LGA. This data includes patients who were discharged from hospital and excludes patients who died in hospital, were transferred to another hospital or had a change in care type.

Source: Victorian Admitted Episodes Dataset, DH, 2022-23

LGA

Figure 67. Proportion of ED presentations due to any mental health condition by LGA and top 4 referral status after discharge from the ED to usual residence in 2022-23.

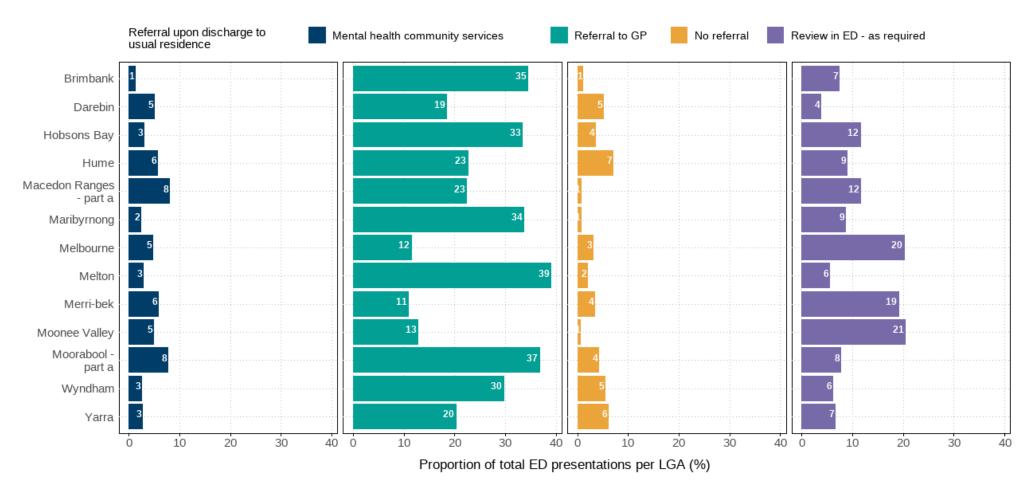
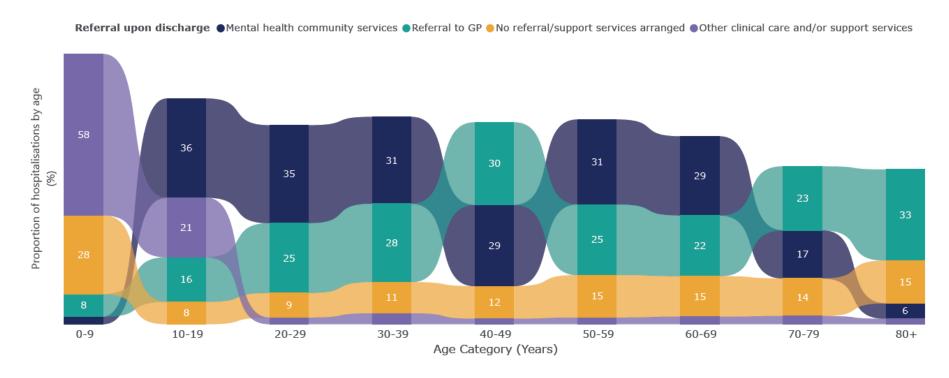


Figure 68. Proportion of hospitalisations due to any mental health condition by age category and top 4 referrals upon discharge from hospital in 2022-23.



<u>Figure notes</u>: Proportions for each age group calculated by the number of referrals divided by the total number of hospitalisations (due to any mental health condition) in the age group. This data includes patients who were discharged from hospital and excludes patients who died in hospital, were transferred to another hospital or had a change in care type.

Source: Victorian Admitted Episodes Dataset, DH, 2022-23;

Figure 69. Proportion of ED presentations by age and top 4 referrals upon discharge to usual residence in 2022-23.

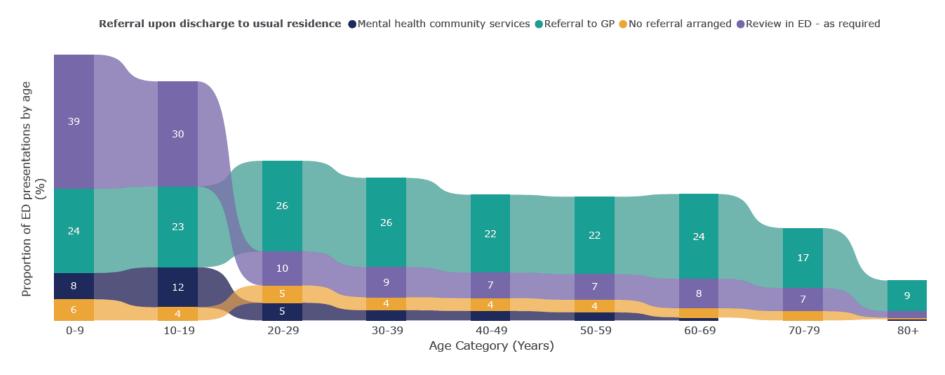
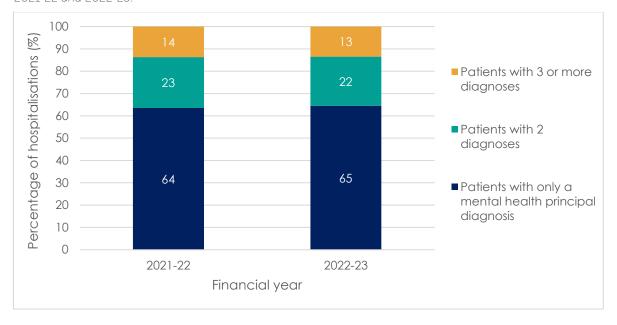


Figure notes: Proportions for each age group calculated by the number of referrals divided by the total number of ED presentations (due to any mental health condition) in the age group.

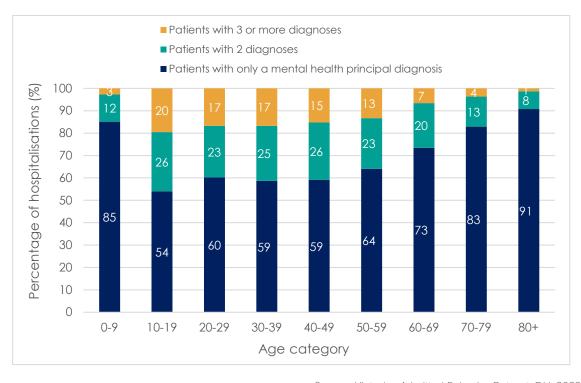
Comorbid mental health conditions

Figure 70. Percentage of hospitalisations due to any mental health condition by number of diagnoses in 2021-22 and 2022-23.



Source: Victorian Admitted Episodes Dataset, DH, 2022-23

Figure 71. Percentage of hospitalisations due to any mental health condition by age and number of diagnoses in 2022-23.



Source: Victorian Admitted Episodes Dataset, DH, 2022-23

People from culturally and linguistically diverse backgrounds

Proxy for culturally and linguistically diverse people was defined in the VAED and VEMD as: born in a non-English speaking country and preferred language spoken at home other than English. The population denominator to calculate rates was defined by the variables from the 2021 ABS Census data (the number of people born overseas who speak English not well or not at all).

Table 29. Hospitalisations due to any mental health condition in culturally and linguistically diverse people in 2021-22 and 2022-23.

	Number of people born	20	21-22	20	22-23
LGA	overseas who speak English not well or not at all	Number	Number Rate per 1,000 population		Rate per 1,000 population
Brimbank	23,279	207	8.9	164	7.0
Darebin	7,718	121	15.7	86	11.1
Hobsons Bay	3,074	41	13.3	31	10.1
Hume	16,195	191	11.8	179	11.1
Macedon Ranges - part a	98	1	-	3	-
Maribyrnong	5,840	55	9.4	53	9.1
Melbourne	6,908	57	8.3	70	10.1
Melton	6,157	59	9.6	98	15.9
Merri-bek	7,124	106	14.9	118	16.6
Moonee Valley	4,159	56	13.5	67	16.1
Moorabool - part a	107	1	-	2	-
Wyndham	11,934	88	7.4	121	10.1
Yarra	3,154	94	29.8	61	19.3
NWMPHN region	95,760	1,077	11.2	1,053	11.0

<u>Table notes</u>: Rates calculated from 2021 ABS Census data using the number of people born overseas who speak English not well or not at all . Rates for Macedon Ranges and Moorabool were not calculated.

Source: Victorian Admitted Episodes Dataset, DH, 2022-23; ABS Census, 2021

Figure 72. Hospitalisations due to a principal diagnosis of any mental health condition in culturally and linguistically diverse people by LGA in 2022-23.

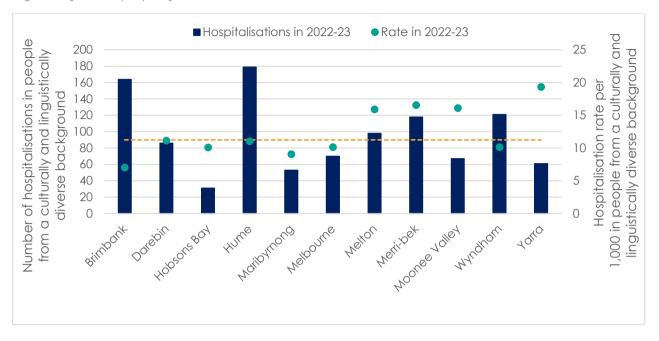


Figure notes: Orange dotted line indicates NWMPHN rate (11 per 10,000 population) Macedon Ranges and Moorabool were not included as numbers were too small (3 hospitalisations in Macedon, 2 hospitalisations in Moorabool).

Source: Victorian Admitted Episodes Dataset, DH, 2022-23; ABS Census, 2021

Figure 73. ED presentations due to a principal diagnosis of any mental health condition in culturally and linguistically diverse people by LGA in 2022-23.

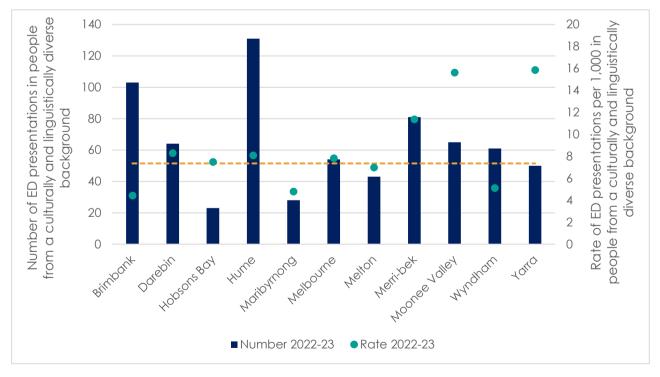
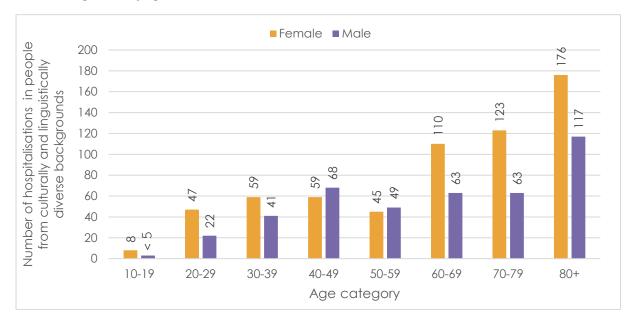


Figure notes: Macedon Ranges and Moorabool were not included as numbers too small (1 ED presentation in Macedon, 0 in Moorabool) to calculate rates. Orange dotted line indicates NWMPHN region rate (7 per 1,000 population).

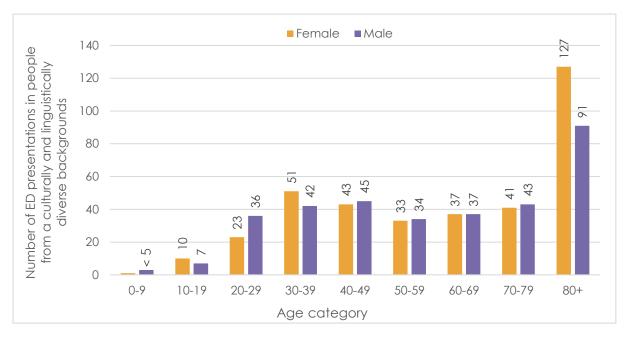
Source: Victorian Emergency Minimum Dataset, DH, 2022-23; ABS Census, 202

Figure 74. Hospitalisations due to any mental health condition in people from culturally and linguistically diverse backgrounds by age and sex in 2022-23.



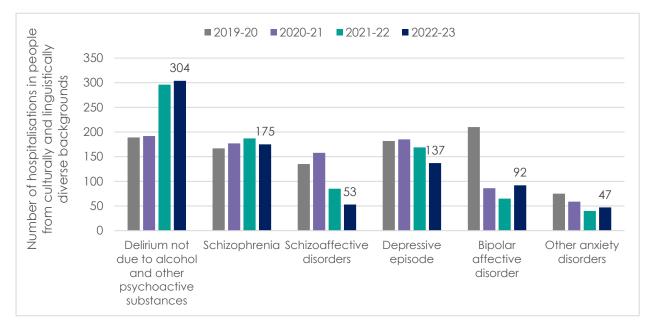
Source: Victorian Admitted Episodes Dataset, DH, 2022-23

Figure 75. ED presentations due to any mental health condition in people from culturally and linguistically diverse backgrounds by age and sex in 2022-23.



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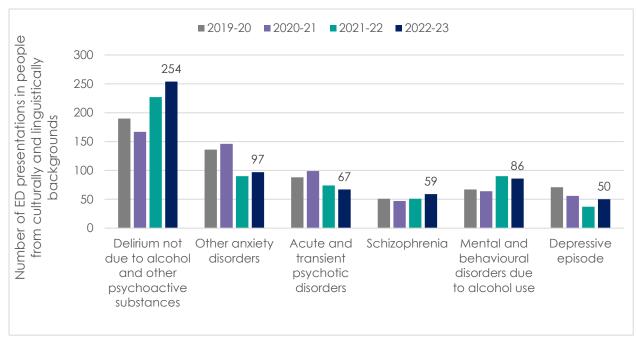
Figure 76. Number of hospitalisations by top 6 conditions in people from culturally and linguistically diverse backgrounds from 2019-20 to 2022-23.



<u>Figure note</u>: Top 6 conditions since FY2019/12. Proxy for culturally and linguistically diverse people was defined in the VEMD as: born in a non-English speaking country and preferred language spoken at home other than English.

Source: Victorian Admitted Episodes Dataset, DH, 2022-23

Figure 77. Number of ED presentations by top 6 condition in people from culturally and linguistically diverse backgrounds from 2019-20 to 2022-23.



<u>Figure note</u>: Top 6 conditions. Proxy for culturally and linguistically diverse people was defined in the VEMD as: born in a non-English speaking country and preferred language spoken at home other than English.

Aboriginal and Torres Strait Islander people

Figure 78. Hospitalisation rate due to a principal diagnosis of any mental health condition in Aboriginal and Torres Strait Islander people by LGA in 2022-23.

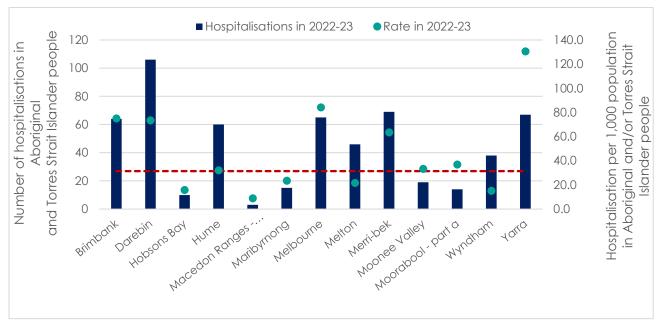


Figure notes: Rates calculated from 2021 ABS Census data of Aboriginal and Torres Strait Islander population.

Source: Victorian Admitted Episodes Dataset, DH, 2022-23

Figure 79. ED presentations due to a principal diagnosis of any mental health condition in Aboriginal and Torres Strait Islander people by LGA in 2022-23.

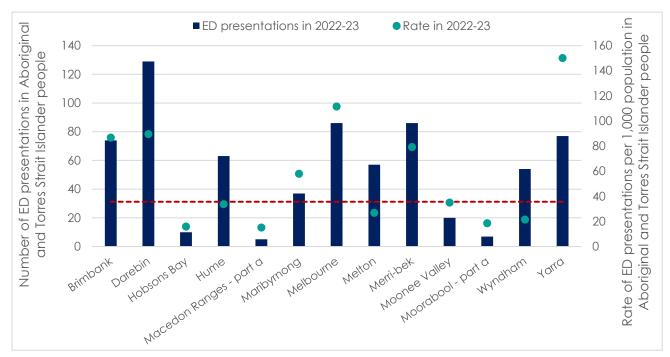


Figure notes: Rates calculated from 2021ABS Census data of Aboriginal and Torres Strait Islander population.

Figure 80. Number of ED presentations due to principal diagnosis of any mental health condition by sex in Aboriginal and Torres Strait Island people for 2022-23.

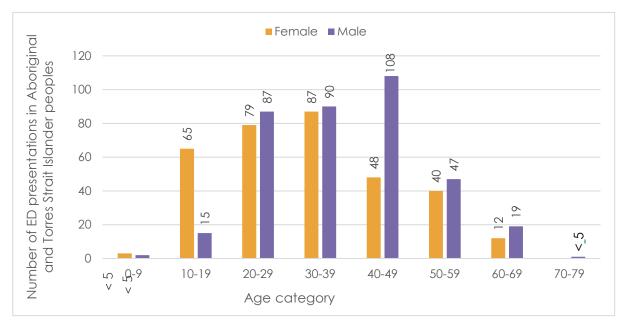


Figure notes: Rates calculated from 2021ABS Census data of Aboriginal and Torres Strait Islander population.

Source: Victorian Admitted Episodes Dataset, DH, 2022-23; ABS Census, 2021

Figure 81. Rate of ED presentations due to a principal diagnosis of any mental health condition in Aboriginal and Torres Strait Islander people by sex in 2022-23.

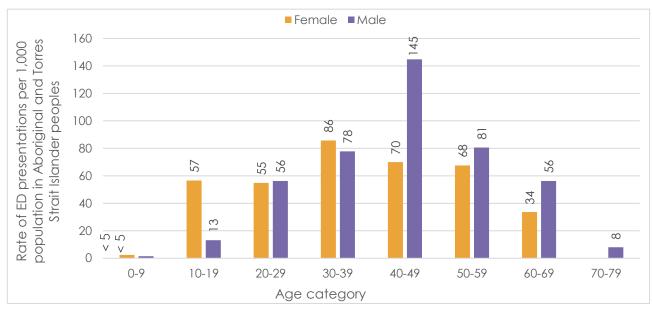
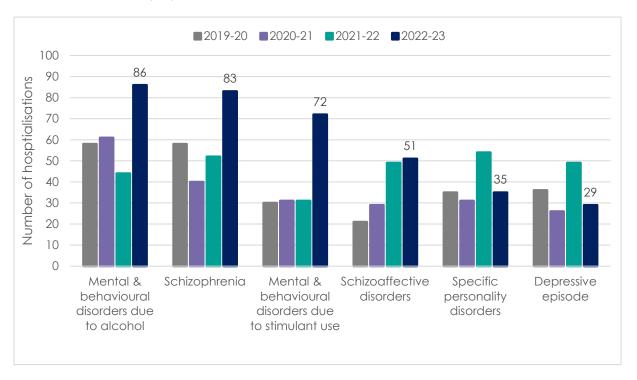


Figure notes: Rates calculated from 2021ABS Census data of Aboriginal and Torres Strait Islander population.

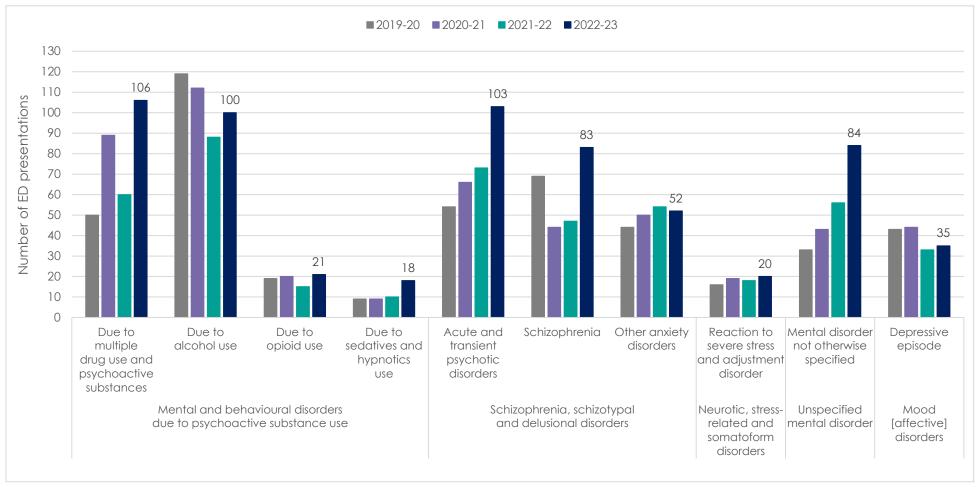
Source: Victorian Emergency Minimum Dataset, DH, 2022-23; ABS Census, 2021

Figure 82. Number of hospitalisations by top 6 mental health conditions in the principal diagnosis in Aboriginal and Torres Strait Islander people from 2019-20 to 2022-23.



Source: Victorian Admitted Episodes Dataset, DH, 2022-23

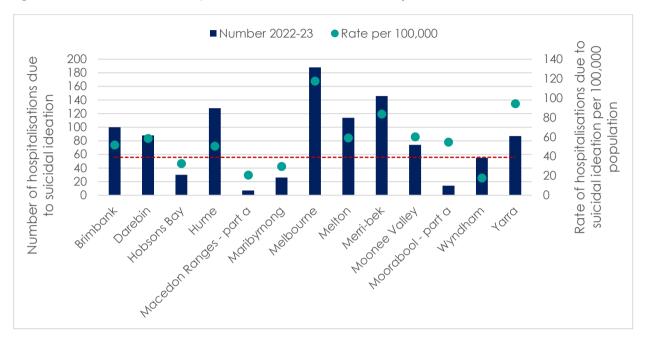
Figure 83. Top 10 conditions attributed to ED presentations due to mental health in Aboriginal and Torres Strait Islander people.



Suicidal ideation, self-harm and suicide

Suicidal ideation – prevalence and demographic characteristics

Figure 84. Number and rate of hospitalisations due to suicidal ideation by LGA in 2022-23.



<u>Figure notes</u>: Red line indicates the Victorian rate (39 per 100,000 population). Rate was calculated using 2022 ERP population.

Source: Victorian Admitted Episodes Dataset, DH, 2022-23; ABS Census, 2021

Figure 85. Number and rate of ED presentation due to suicidal ideation by LGA in 2022-23.

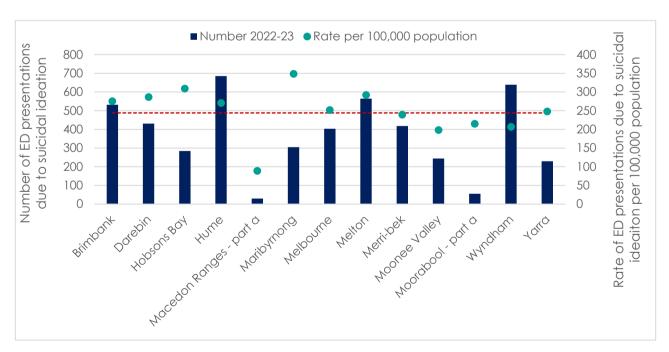


Figure notes: Red line indicates the Victorian rate (244 per 100,000 population). Rate was calculated using 2022 ERP population.

Source: Victorian Emergency Minimum Dataset, DH, 2022-23; ABS Census, 2021

Figure 86. Hospitalisation rates due to suicidal ideation by sex and age in 2022-23.

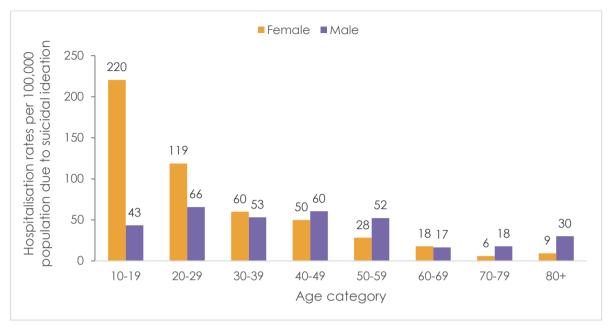


Figure notes: Rate was calculated using 2022 ERP population.

Source: Victorian Admitted Episodes Dataset, DH, 2022-23; ABS, 2022

■Female ■Male 1200 oopulation due to suicidal ideation ED presentation rate per 100,000 1058 1000 800 600 523

30-39

Age category

293

40-49

222

50-59

312

20-29

Figure 87. ED presentations due to a principal diagnosis of suicidal ideation by sex and age in 2022-23.

Figure notes: Rate was calculated using 2022 ERP population.

10-19

272

400

200

0

1 7

0-9

Source: Victorian Emergency Minimum Dataset, DH, 2022-23; ABS Census, 2021

67 79

60-69

43 53

70-79

31 35

80+

Females aged 10-19

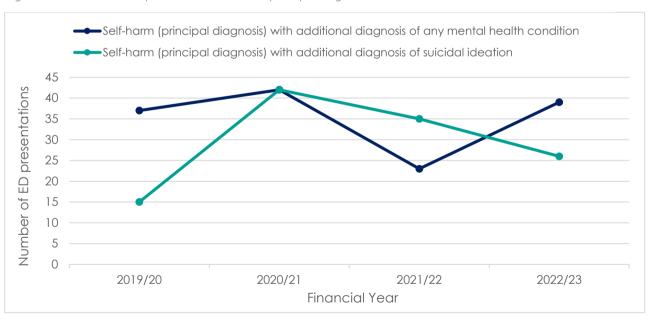
Table 30. Top 5 LGAs ranked by hospitalisation and ED presentation rate due to suicidal ideation for females aged 10-19 in 2022-23.

Hospitalisations	ED presentations
Moorabool - part a (614)	Hobsons Bay (1761)
Brimbank (500)	Moorabool - part a (1413)
Hobsons Bay (340)	Merri-bek (1288)
Hume (272)	Brimbank (1269)
Melton (231)	Moonee Valley (1191)
Victoria (139)	Victoria (831)

Source: Victorian Emergency Minimum Dataset and Victorian Admitted Episodes Dataset, DH, 2022-23; ABS, 2022

ED presentations, all people, due to self-harm

Figure 88. Number of ED presentations due to a principal diagnosis of self-harm from 2019-20 to 2022-23.



<u>Figure notes</u>: Self-harm was derived from the human intent variable, which is only recorded in the principal diagnosis. Self-harm in the principal diagnosis with additional diagnosis of any mental health condition and self-harm in the principal diagnosis with an additional diagnosis of suicidal ideation are shown separately.

Mortality due to suicide and self-inflicted injury

Figure 89. Mortality rate due to suicide and self-inflicted injury by LGA, calendar years 2016 to 2020.

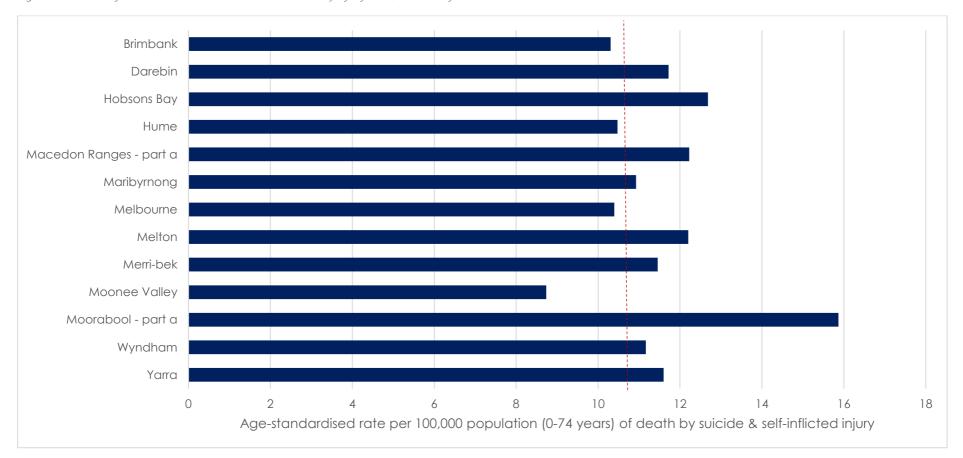


Figure notes: Red dotted line indicates Victorian rate (10.6 per 100,000 population).

Source: Data compiled by PHIDU, an analysis of deaths data based on the 2016 to 2020 Cause of Death Unit Record Files, 2018, (PHIDU), 2023

Full indicator list



Full Indicator List

Table 31. Full list of indicators by LGA

	Indicator	Period	Melbourne	Maribyrnong	Yarra	Brimbank	Darebin	Hobsons Bay	Merri-bek	Moonee Valley	Hume	Melton	Wyndham	Macedon Ranges – part a	Moorabool – part a	Benchmark
Metric 1: Population size	% of projected population growth in 2025 ^{1,^^}	2020- 30	9.8	5.3	4.9	10.5	8.3	5.1	6.5	9.6	12.7	9.2	15.3	1.6	1.1	۸۸
	% of SA1 population with IRSD in deciles 1- 4 ¹ .~	2021	30.3	36.3	12.8	83.1	33.2	33.3	26.3	12.3	70.5	47.4	38.1	2.8	36.4	42.1
	% of population born in a predominantly non-English speaking country*	2021	47.9	32.2	18.1	45.5	25.7	22.3	27.2	23.2	36.4	31.1	41.7	5.5	7.8	34.0
	% of population who identify as LGBTIQ+*	2020	9.2	6.2	10.0	4.2	10.6	7.3	9.9	8.0	5.1	6.3	5.3	4.0	1.6	6.0
Metric 2:	% of the population with low English proficiency*	2021	5.2	7.8	4.1	13.6	6.0	4.1	5.1	4.0	8.3	4.7	5.8	0.3	0.9	4.4
Sociodemogra phic factors	% of the population with low individual income (<\$41,600)*	2021	39.5	39.8	29.9	53.9	43.4	42.2	41.8	41.4	51.5	45.5	43.7	42.6	45.5	45.8
	% of the population with low or very low household income (<\$65K)*	2021	20.6	23.1	19.1	32.1	27.1	25.9	24.9	25.0	28.2	24.7	21.7	21.7	27.9	27.3
	% of the population in housing stress	2021	26.1	15.6	14.7	14.6	14.9	12.7	14.4	12.8	18.3	16.3	16.0	9.3	11.0	14.3
	% of the population with food insecurity with hunger	2020	5.2	8.0	5.3	10.4	4.5	5.7	5.2	6.7	5.2	7.1	5.0	NA	5.7	5.9

	Indicator	Period	Melbourne	Maribyrnong	Yarra	Brimbank	Darebin	Hobsons Bay	Merri-bek	Moonee Valley	Hume	Melton	Wyndham	Macedon Ranges – part a	Moorabool – part a	Benchmark
	% of children vulnerable on 1 or more AEDC domains ^{1,}	2021	20.6	15.4	18.5	29.3	15.8	16.4	19.9	13.4	28.7	23.8	21.8	15.3	22.0	19.9
	% of babies born low birth weight*	2017-19	6.9	6.0	6.4	7.2	7.0	6.6	5.8	6.2	6.6	7.6	8.3	5.4	8.3	6.7
	Rate of family violence per 100,000 population ^{1,*}	2022	1,413	1,320	1,174	1,454	1,132	1,110	1,214	1,039	1,509	1,532	1,398	880	1,301	1,394
	2+ standard drinks per day (%) ^{1,*}	2017-18	12.0	10.7	17.9	7.3	12.6	13.9	14.2	11.5	8.7	9.6	7.9	19.8	16.3	14.4
Metric 3: Risk factors	% of people widowed ^{1.}	2021	1.5	3.0	2.5	4.4	4.3	4.3	4.1	4.4	3.0	3.2	2.2	3.2	4.0	4.9
	% of people aged 18 and above years who were obese ^{1, ¥}	2020	9.9	11.2	10.6	23.9	14.0	19.4	16.5	16.1	31.3	22.6	23.4	23.1	31.4	20.9
	% of people aged 18 and above years who were overweight, *	2020	34.4	35.2	35.4	35.4	35.2	36.9	35.1	37.2	34.8	34.9	35.0	36.7	35.9	36.3
	Rate of people aged 2-17 years who were obese*	2022	25.6	29.7	25.2	28.6	29.3	29.6	33.0	34.0	29.6	41.8	26.9	34.3	28.1	30.1
	% of pregnant women who smoked during pregnancy*	2017-19	3.4	4.0	4.1	7.4	4.0	5.1	5.2	5.0	10.1	9.7	5.6	7.3	12.1	8.0

	Indicator	Period	Melbourne	Maribyrnong	Yarra	Brimbank	Darebin	Hobsons Bay	Merri-bek	Moonee Valley	Hume	Melton	Wyndham	Macedon Ranges – part a	Moorabool – part a	Benchmark
	Livability index ^{1, ¥}	2021	106.3	102.5	105.9	98.1	101.9	100.2	101.5	101.6	96.5	95.1	96.5	94.6	96.4	98.9
	Health infrastructure ^{,¥}	2021	4.0	3.6	4.5	1.7	3.1	2.6	3.2	3.0	1.3	0.9	1.1	1.0	1.1	2.2
	Alleged offender incidents rates per 100,000*	2022	6,575	2,941	3,328	2,806	2,616	2,227	1,884	2,064	2,407	1,987	1,958	1,317	1,878	2,458
	GP workforce (FTE) per 100,000 ^{1,*}	2023	90	143	153	144	106	96	135	121	115	82	119	134	139	119
	Nurses and Midwives workforce (FTE) per 100,000*	2023	973	213	495	194	120	125	138	116	133	137	121	120	99	221
Metric 4: Access and	Allied health professionals (Psychologists) (FTE) per 100,000 ^{1.*}	2023	274	74	256	35	85	55	73	107	25	22	22	45	46	61
geographical environment	Average distance (km) to Bulk-billed GP clinic [¥]	2021	0.6	0.7	0.5	1.1	0.8	1.0	0.7	0.9	1.5	2.2	1.4	2.9	1.4	1.3
	DirectLine telephone services per 100,000*	2021	870	552	601	257	596	320	430	395	316	341	215	192	162	428
	Counselling Online treatment sessions per 100,000*	2021	53.5	17.6	30.0	15.9	25.6	11.0	30.9	21.4	13.1	10.6	13.7	21.4	15.9	18.2
	Head to Health IAR referrals per 100,000^	2022- 23	49.4	44.6	48.8	42.4	47.8	56.6	78.4	43.1	103.6	63.2	97.7	15.3	122.1	75.7
	CareInMind referrals per 100,000^	2022- 23	252	439	298	322	211	271	286	271	257	274	310	167	332	283
	Avoidable ED presentation rates due to MH per 100,000 ^{1,*}	2022- 23	110	83	111	71	65	72	82	93	45	52	45	21	23	70

	Indicator	Period	Melbourne	Maribyrnong	Yarra	Brimbank	Darebin	Hobsons Bay	Merri-bek	Moonee Valley	Hume	Melton	Wyndham	Macedon Ranges – part a	Moorabool – part a	Benchmark
	% of residents with chronic health condition (1 or more)*	2021	14.3	18.5	20.6	16.6	20.1	18.9	27.8	13.4	16.1	16.2	13.8	20.1	20.8	18.8
	% of residents with chronic health condition (2 or more)	2021	4.1	6.7	6.6	7.8	8.1	8.1	5.7	11.3	7.4	6.8	5.3	8.4	10.7	8.6
	% of residents with high or very high psychological distress based on K10 ^{1,*}	2022	22.1	23.3	19.7	25.3	30.9	25.5	28.8	21.2	23.4	21.4	24.6	15.8	23.1	24.5
Metric 5: Health	ED presentation rate per 10,000 due to chronic conditions [^]	2020- 21	32	54	52	56	75	77	71	59	85	86	70	40	52	66
conditions and consequences	Hospitalisation rate per 10,000 due to chronic conditions [^]	2020- 21	38	66	58	73	103	83	92	82	119	124	76	62	118	87
	ED presentation rates per due to MH per 100,000 ^{1,*}	2022- 23	1125	889	1229	717	911	746	755	881	650	597	535	330	550	778
	Hospitalisation rates per due to MH per 100,000 ^{1,*}	2022- 23	883	969	1030	1002	864	570	821	803	716	668	428	404	703	752
	Hospitalisation rate due to suicidal ideation per 100,000 ^{1,*}	2022- 23	118	30	94	52	58	33	60	84	51	59	18	21	55	39
	ED presentation rate due to suicidal ideation per 100,000 ^{1,*}	2022- 23	252	348	248	275	286	309	198	239	271	292	207	89	215	244

Indicator	Period	Melbourne	Maribyrnong	Yarra	Brimbank	Darebin	Hobsons Bay	Merri-bek	Moonee Valley	Hume	Melton	Wyndham	Macedon Ranges – part a	Moorabool – part a	Benchmark
ED presentation rates per due to AOD per 100,000*	2022- 23	441	296	486	212	272	205	298	199	175	198	147	74	183	241
Hospitalisation rates per due to AOD per 100,000*	2022- 23	271	144	343	138	159	86	177	138	106	108	51	59	187	145
Average annual ASR per 100,000 population (0-74 years) of death by suicide & self-inflicted injury ^{1,*}	2016- 20	10.4	10.9	11.6	10.3	11.7	12.7	8.7	11.5	10.5	12.2	11.2	12.2	15.9	11

¹ Criteria 1-3 met

^^numbers are the % of NWMPHN Catchment (2025), therefore, no benchmark. Red indicates the top 5 LGAs with largest % population of the catchment, amber indicates the LGAs that sit within the middle and green indicates the bottom 2 LGAs with the smallest % of population.

Colour scheme: Green = better than benchmark, Amber = "similar" to benchmark, Red = below 95% of target

[€] Benchmark is the IRSD index base of 1000 for Australia (5th decile)

[#] Benchmark is Australia

^{*} Benchmark is Victoria

[¥] Benchmark is Greater Melbourne

[^] Benchmark is NWMPHN

Table 32. List of indicators by SA3

	Indicator	Period	Melbourne City	Maribyrnong	Yarra	Brimbank	Brunswick- Coburg	Darebin North	Darebin South	Essendon	Hobsons Bay	Merri-bek North	Tullamarine - Broadmeadows	Keilor	Hume - Sunbury	Melton Bacchus Marsh	Wyndham	Macedon Ranges	Benchmark
	Average out-of-pocket per service spending in \$ on Medicare Services (GP attendances) 1, #	2021- 22	8	5	11	1	7	4	11	6	4	3	1	4	2	2	1	6	5
	Average out-of-pocket per service spending in \$ on Medicare Services (Mental Health services attendances) 1, #	2021- 22	65	59	70	38	64	56	67	64	62	52	30	57	47	36	42	57	53
Metric 4: Access and geographical	Average out-of-pocket per service spending in \$ on Medicare Services (Nursing and Aboriginal Health Workers) 1, #	2021- 22	3	6	7	1	6	3	5	5	4	3	1	4	2	1	1	3	2
environment	Utilisation rates (%) of Medicare-subsidised service - GP ^{1, #}	2021- 22	65	87	83	93	86	87	89	90	92	87	93	95	95	91	90	98	90
	Utilisation rates (%) of Medicare-subsidised service - Specialists (MH) 1,#	2021- 22	5.6	7.8	10.0	4.0	11.0	6.9	11.6	7.4	6.6	6.2	4.2	6.0	6.9	4.5	3.3	7.0	5.1
	utilisation rates (%) of Medicare-subsidised service - Nursing & Aboriginal Health Workers ^{1,#}	2021- 22	3.5	3.7	3.0	7.2	5.4	5.3	4.0	4.2	5.2	6.8	8.7	6.1	7.2	8.0	6.4	7.3	8.1

¹ Criteria 1 met

Colour scheme: Green = better than benchmark, Amber = "similar" to benchmark, Red = below 95% of target The data for these indicators were only available at \$A3 granularity.

[#] Benchmark is Australia

