

Emergency department presentations for mental health-related conditions: variations by age group and socioeconomic disadvantage

UPDATE 2022

Findings

Background

The release by the Australian Institute of Health and Welfare of data for presentations to emergency departments across Australia in 2020/21 has enabled an update of selected data presented in the Fact Sheet [Emergency department presentations for mental health-related conditions: variations by age group and socioeconomic disadvantage](#). As in that report, as data for South Australia were available for the latest financial year (in this case 2021/22), they have been included as they may provide an insight into recent national trends.

Overall

Nationally, Victoria had the lowest rates of presentation to an emergency department for mental health-related conditions in 2020/21 in each of the age groups studied – 12 to 17 years, 18 to 24 years, 25 to 64 years and 65 years and over. The Northern Territory had the highest rates in all but the 12 to 17-year age group, where their rates were second to those in South Australia.

Over the six years 2016/17 to 2020/21, there were marked increases in most jurisdictions in all but the 25 to 64-year age group. However, between 2019/20 and 2020/21, marked increases were only evident in the 12 to 17-year age group.

Update to 2021/22

Using data to June 2022 for South Australia, it is clear that:

- over the past five years, rates were generally highest in 2020/2021 and lowest in 2021/22, other than for the 65 years and over age group;
- for those aged 65 years and over, rates barely fell below the pre-pandemic level in 2021/22 and ended the year with an upward trend; and,
- also of note, is that rates for the 12 to 17-year age group rose strongly over the first months of 2021 and fell during 2021/22, in particular in the last six months of 2021.

These data suggest that the impact in South Australia on presentations occurring as a result of the pandemic has eased, to below the pre-pandemic level, although not so for the oldest age group studied¹. Monitoring these data will show whether this is the case in South Australia and if the pattern is replicated in other jurisdictions.

¹Note that this is not a comment on the pressure that emergency departments are under due to mental health-related or other conditions.

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Emergency department presentations for mental health-related conditions: variations by age group

UPDATE 2022

Background

The release by the Australian Institute of Health and Welfare of data for presentations to emergency departments across Australia in 2020/21 has enabled this update of data presented in the Fact Sheet [Emergency department presentations for mental health-related conditions: variations by age group and socioeconomic disadvantage](#). As previously, data for the latest financial year (in this case 2021/22) have been included for South Australia to provide an insight into the recent national trend.

Change in presentations over time, Australia

Nationally, Victoria had the lowest rates of presentation to an emergency department for mental health-related conditions in 2020/21 in each of the age groups studied – 12 to 17 years, 18 to 24 years, 25 to 64 years and 65 years and over. The Northern Territory had the highest rates in all but the 12 to 17-year age group, where the rates were second to South Australia. Overall, South Australia and Western Australia had the second and third highest rates.

Table 1a shows, for the two younger age groups studied, presentation rates for 2014/15, 2019/20 and 2020/21, the increase in rates between these years and a comparison for 2020/21 of the rate in each jurisdiction with the national rate (as a rate ratio).

Table 1a: Presentation to an emergency department for mental health-related conditions, by state and territory, ages 12 to 17 and 18 to 24, selected years, 2014/15 to 2020/21

Increases in rates of 20% or more (poorer outcomes) are bolded; positive variations in rate ratios (lower rates) are bolded, and negative (higher rates) are bolded and italicised

Jurisdiction	Rate per 10,000 population			Change to 2020/21		Rate ratio 2020/21 ¹
	2014/15	2019/20	2020/21	From 2014/15	From 2019/20	
	12 to 17 years					
New South Wales	127.1	139.3	177.6	1.40	1.27	0.99
Victoria	89.6	115.8	144.4	1.61	1.25	0.80
Queensland	140.0	141.2	158.3	1.13	1.12	0.88
Western Australia	135.8	190.4	224.2	1.65	1.18	1.25
South Australia	174.2	246.0	316.8	1.82	1.29	1.76
Tasmania	102.2	135.9	163.1	1.60	1.20	0.91
Australian Capital Territory	98.2	175.1	193.1	1.97	1.10	1.07
Northern Territory	189.8	217.0	241.4	1.27	1.11	1.34
Australia	124.6	147.7	180.0	1.44	1.22	1.00
	18 to 24 years					
New South Wales	182.9	197.8	204.8	1.12	1.04	0.94
Victoria	140.3	167.1	176.0	1.25	1.05	0.80
Queensland	212.1	229.4	241.4	1.14	1.05	1.10
Western Australia	184.1	266.3	268.5	1.46	1.01	1.23
South Australia	213.1	258.9	266.7	1.25	1.03	1.22
Tasmania	220.1	247.0	247.5	1.12	1.00	1.13
Australian Capital Territory	163.2	234.1	258.1	1.58	1.10	1.18
Northern Territory	296.2	437.6	486.5	1.64	1.11	2.22
Australia	181.7	210.4	219.0	1.21	1.04	1.00

¹Rate ratio is the ratio of the rate in the jurisdiction to the Australian rate for the age group

Over the six years to 2020/21, there was an increase in all jurisdictions in the rate of presentations by children and young people aged from 12 to 17 years to an emergency department for mental health-related conditions (Table 1a). The change over the last two years of this period, although over 20 percent in several jurisdictions was, however, lower in all cases than the six-year change.

Increases in the 18 to 24-year age group from 2014/15 to 2020/21 were generally lower than for the younger age group, although some increases, such as in the Northern Territory, the Australian Capital Territory and Western Australia, were still substantial. There was little change from 2019/20 to 2020/21, only reaching 10 per cent in the Australian Capital Territory (up by 10 per cent) and the Northern Territory (up by 11 per cent).

Differences from the national rate in 2020/21 in the 12 to 17-year age group were greatest between Victoria (20 per cent below the national rate) and South Australia (76 per cent above the national rate). In the 18 to 24-year age group Victoria again had a rate 20 per cent below the national rate, in stark contrast to the Northern Territory with a rate over twice (2.22 times) the national rate and nearly three (2.76) times that in Victoria.

For adults aged 25 to 64 years, rates over the six years to 2020/21 were notably lower in only New South Wales (down 12 per cent), with the largest increase in Western Australia (up by 37 per cent) (Table 1b). Rates varied little from 2019/20 to 2020/21, ranging from a decline of 11 per cent in New South Wales to an increase of 7 per cent in the Northern Territory. However, the rates in the Northern Territory, South Australia and Western Australia were above the national rate, up by almost three (2.87) times, and 23 and 19 per cent, respectively.

Table 1b: Presentation to an emergency department for mental health-related conditions, by state and territory, ages 25 to 64 and 65 years and over, selected years, 2014/15 to 2020/21

Increases in rates of 20% or more (poorer outcomes) are bolded; positive variations in rate ratios (lower than national rates) are bolded, and negative variations (higher rates) are bolded and italicised

Jurisdiction	Rate per 10,000 population			Change to 2020/21		Rate ratio 2020/21 ¹
	2014/15	2019/20	2020/21	From 2014/15	From 2019/20	
	25 to 64 years					
New South Wales	145.1	143.0	127.7	0.88	0.89	0.94
Victoria	97.3	114.8	113.0	1.16	0.98	0.83
Queensland	136.4	150.2	144.5	1.06	0.96	1.06
Western Australia	117.7	165.2	161.6	1.37	0.98	1.19
South Australia	146.5	173.2	167.9	1.15	0.97	1.23
Tasmania	131.3	130.6	126.1	0.96	0.97	0.93
Australian Capital Territory	118.1	133.1	136.3	1.15	1.02	1.00
Northern Territory	332.9	367.1	391.0	1.17	1.07	2.87
Australia	129.7	143.3	136.3	1.05	0.95	1.00
	65 years and over					
New South Wales	84.1	87.0	86.3	1.03	0.99	0.99
Victoria	59.2	72.0	73.6	1.24	1.02	0.84
Queensland	75.9	90.2	87.8	1.16	0.97	1.00
Western Australia	79.0	101.7	105.4	1.33	1.04	1.21
South Australia	82.9	106.8	107.7	1.30	1.01	1.23
Tasmania	63.1	77.8	80.8	1.28	1.04	0.92
Australian Capital Territory	79.7	103.5	89.4	1.12	0.86	1.02
Northern Territory	169.2	173.3	196.1	1.16	1.13	2.24
Australia	75.4	87.3	87.5	1.16	1.00	1.00

¹Rate ratio is the ratio of the rate in the jurisdiction to the Australian rate for the age group

Over the six years to 2020/21, rates in the 65 years and over age group rose in all jurisdictions, with the largest increases in Western Australia (33 per cent), South Australia (30 per cent), Tasmania (28 per cent) and, notably, Victoria (24 per cent). Again, there was little variation in rates between 2019/20 and 2020/21, apart from a decline of 14 per cent in the Australian Capital Territory to an increase of 13 per cent in the Northern Territory. As for all but the 12 to 17-year age group, the highest rate was in the Northern Territory (2.24 times the national rate), with the lowest in Victoria (16 per cent below). South Australia and Western Australia also had rates above the national average, up by 23 per cent and 21 per cent, respectively.

The charts [here](#) show the data from Tables 1 and 2.

Update to 2021/22 using data for South Australia

PHIDU was given access to data to June 2022 by the Department of Wellbeing (SA Health) which has provided the opportunity to understand the more recent experience. Given that the rate of presentations to emergency departments for mental health-related problems in South Australia in the years to 2020/21 was among the highest, as was the increase from 2014/15, the South Australian experience is likely to be a useful indicator for other jurisdictions.

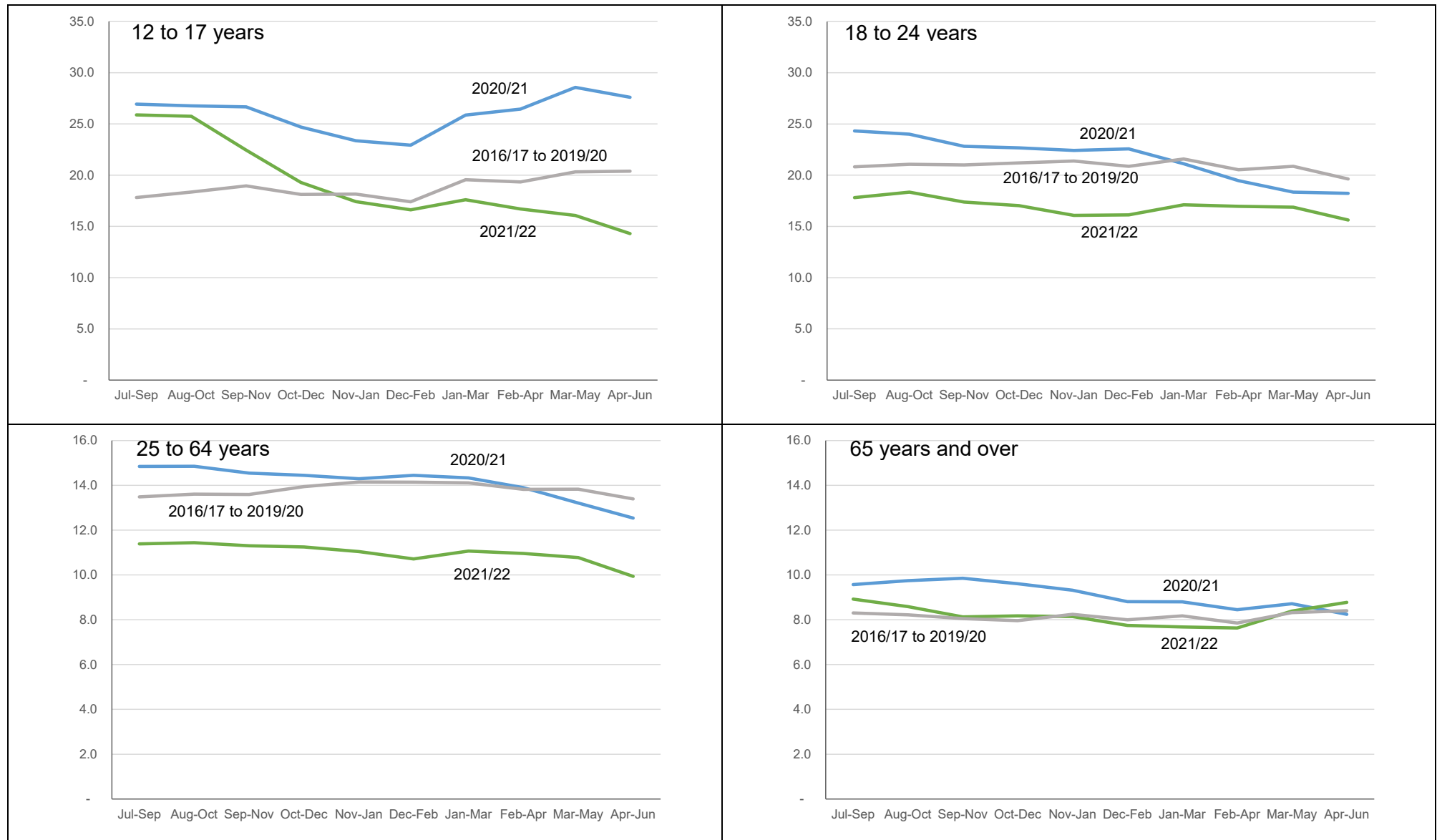
The charts on the following page show the monthly rates of presentation to emergency departments for mental health-related problems in South Australia from July 2016 to June 2022, presented as a three-month rolling average (Figure 1). Data are shown separately for the (predominant) pandemic years of 2020/21 and 2021/22, with data for the pre-pandemic years of 2016/17 to 2019/20 shown in aggregate. The early months of the pandemic, to June 2020, are, therefore, included in the pre-pandemic set.

The picture evident in the charts is that rates were generally highest over 2020/21 and lowest in 2021/22, other than for the 65 years and over age group, for whom rates barely fell below the pre-pandemic level in 2021/22 and ended the year with rates above those in the other years. It is also of note that rates for the 12 to 17-year age group rose strongly over the first months of 2021, then fell during the last six months of that year.

These data suggest that the impact in South Australia on presentations occurring as a result of the pandemic has eased, to below the pre-pandemic level, although not so for the oldest age group studied¹. Monitoring these data will show whether this is the case in South Australia and if the pattern is replicated in other jurisdictions.

¹ Note that this is not a comment on the pressure that emergency departments are under due to mental health-related or other conditions

Figure 1: ED presentations for mental health-related conditions, selected age groups, South Australia, 2016/17 to 2021/22
 3-month rolling average rate per 10,000 population – Note different scales between charts in top and bottom rows



Source: Data supplied by Department for Health and Wellbeing | SA Health. See [here](#) for coverage across South Australia

Supporting information

National data

Mental health services provided in emergency departments, Australian Institute for Health and Welfare (AIHW). Available from

<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjtiubHgOn6AhWP8DgGHWbvBTcQFnoECAsQAQ&url=https%3A%2F%2Fwww.aihw.gov.au%2Fgetmedia%2F1aa38d7a-31db-42b3-9782-cce1c461406e%2FMental-health-services-provided-in-emergency-departments-2021.xlsx.aspx&usq=AOvVaw3prtGBLdicqQnSbJRYyUq> ; accessed 18 October 2022

South Australian data

Department of Health and Wellbeing | SA Health

- > ICD-10-10th Edition
- > Period – July 2016 to June 2022
- > ED Hospitals reported:
Major Metro Hospital - WCH-paediatric, FMC, RAH, LMH, TQEH, Modbury, Noarlunga
Big Country Hospital: Gawler, Riverland, Mt Barker, Mt Gambier, Murray Bridge, Pt Pirie, Pt Lincoln, Pt Augusta, South Coast, Whyalla
- > Mental Health flag is derived in line with the national definition as follows: Diagnosis BETWEEN 'F20' AND 'F69999' OR Diagnosis BETWEEN 'F80' AND 'F99999' OR Diagnosis BETWEEN 'X60' AND 'X84999' OR Diagnosis = 'R4581'
- > Number of Presentations include all presentations to ED except DOA no resuscitation
- > Extracted from Emergency Department views in CDW on 20/09/2021, business sub-setting rules applied

Populations used to calculate rates

Data are from the Australian Bureau of Statistic (ABS): 2016 to 2019 from 3101.0 Australian Demographic Statistics; 2020 and 2021 from ABS.StatBETA: Quarterly Population Estimates, by State/Territory, Sex and Age. Rates for South Australia for dates post June 2021 have been calculated on the population at June 2021