Monitoring the performance of the South Australian health system

2018-19 to 2021-22

4-yearly indicator report to the South Australian Minister for Health and Wellbeing

February 2023 edition

An update to the November 2022 edition

Health Performance Council

Government of South Australia
Health Performance Council

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Contact

Health Performance Council Secretariat

Email: HealthHealthPerformanceCouncil@sa.gov.au

Acknowledgment of the Aboriginal peoples of South Australia

The Health Performance Council acknowledges the Aboriginal peoples of South Australia and their ongoing contributions to and participation in the life of South Australia. We acknowledge and respect their spiritual relationship with their respective countries.

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From the Chair

Government of South Australia
Health Performance Council

To:
Hon. Chris Picton MP,
Minister for Health and Wellbeing

Dear Minister,

Review of the performance of South Australian health systems, the health of South Australians and changes in health outcomes over the reporting period 2018–19 to 2021–22

I am pleased to present to you the fourth of the Health Performance Council's four-yearly reports, pursuant to the provisions of the *Health Care Act 2008*.

The Health Performance Council was created in 2008 under the ministry of one of your predecessors in the health portfolio, Minister John Hill, with a remit to provide advice about the operation of the state's health system, about health outcomes for South Australians (as a whole and for priority groups in the population), and about the effectiveness of health system engagement with community. Since its creation, the Council has been pleased to provide its independent and expert advice directly to five different health ministers in the various governments that have served this state and its people.

We follow a patient's journey in the organisation of this report — starting with access to a general practitioner, then emergency access and so on. We report on access, outcomes and experiences, as well as efficiency.

There is much of which to be proud in the South Australian health system. Patients in our hospitals typically report that they have good experiences. Our children are receiving their immunisations. Hospital admissions that are potentially preventable are trending down. Three-quarters of us identify ourselves as being in good health. Our state also provides more than our fair share of medical internships.

But there are also some ongoing challenges across the system, for example as ambulance ramping has continued to escalate recently.

There are some areas where I should highlight to you that South Australia is falling behind the rest of the nation. For instance, we see fewer of our emergency department patients on time than most other states. And although we have an ageing population and would expect some higher figures in age-related measures – such as mortality for some cancers – that does not mean that we must accept that our outcomes must sit worse than in other states and territories: we could alternatively see these as opportunities to recognise how our population makeup differs from the other states and so to target resources, interventions and effort appropriately to improve the health of all South Australians.

Our analysis reveals that the health system does not perform equally well or provide for equally good health outcomes across all parts of this geographically vast state. Rural and remote residents had less timely attendance in hospital emergency departments than those in the Adelaide area and were less likely to report themselves as being in good health.

The South Australian public hospital system is relatively inefficient. In the context of poor access, this is a missed opportunity: money is tied up in waste when people can't get admitted. The burden on our hospital networks of staff turnover – an indication of poor staff satisfaction – has been increasing in the last few years, and turnover is especially high for our country hospital networks.

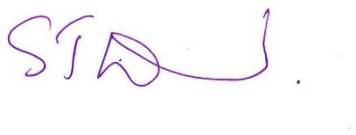
The Health Performance Council feels very strongly about equity in health. Sadly, our report has identified several indicators of health outcomes and system performance that vary according to gender or for which a gap remains open for Aboriginal and Torres Strait Islander persons contrary to the objectives of the Closing the Gap National Agreement. For example, we note that we are not meeting national targets on immunisation rates for Aboriginal and Torres Strait Islander children in South Australia. And we are perturbed to observe, for instance, that the diversity of cultures and languages is mirrored in an inequitable diversity of waiting time in our hospital emergency departments.

We use data from South Australia Health's own data collections which in turn are sourced from hospitals. In some cases, we use the aggregate data provided to national bodies. We highlight where we suspect there are data quality issues.

We recognise there are many gaps in this report. We have deliberately left blank certain indicators that we couldn't get information about, for example, the experience of people from culturally or linguistically diverse backgrounds. We are concerned that in some cases available data was not released to us by some business units of SA Health. In line with the old adage, what is not measured is not managed, we hope that our next report might not reveal the same lacunae.

I hope that you find the statistical indicators and commentary in this report a valuable tool to assist you set your agenda as Minister for Health and Wellbeing. My colleagues and I on the Health Performance Council are looking forward to working with you further as we continue to monitor and report on important aspects of health outcomes, system performance and community engagement effectiveness in the state's health system. As an independent Council, our commentary may at times be uncomfortable, but I intend that it should always be of value in achieving our common goals of improving the health system and the health outcomes for all South Australians.

Yours sincerely,



Professor Stephen Duckett,
Chair, South Australian Health Performance Council

22 November 2022

This 2023 edition is an update to the report tabled in Parliament by the Minister for Health and Wellbeing on 1 December 2022. This update contains 2021-22 ambulance, emergency department, elective surgery and aged care services wait times; and hospital acquired complications data that was not available at the time of finalising the tabled edition. Findings have not materially changed from the tabled edition.

22 February 2023

Summary

Indicator	Summary
1 - Getting access to care	
1.1 - Wait times	
1.1.1 - GP wait times	Around one in five South Australians feels they wait longer than acceptable to get an appointment with a GP. GP attendances have been trending down, but the use of GP telehealth and phone services increased during waves of the Covid-19 pandemic.
1.1.2 - Ambulance wait times	Among South Australians who need ambulance services, response times for emergency incidents have increased rapidly in the last two years, particularly across local health networks in Adelaide. Among those transferred to metropolitan hospitals, less than half are transferred into the care of emergency departments within 30 minutes (escalation of ramping). Ambulance service performance trends here are seen in many other states.
1.1.3 - Emergency department wait times	Among the more than 570,000 people who visit a public hospital emergency department in South Australia, too many wait too long to be seen by a clinician after being triaged. The percentages of patients seen on time in rural and remote South Australia is much higher than in metropolitan Adelaide, and there are longer wait times are experienced by culturally and linguistically diverse South Australians.
1.1.4 - Elective surgery wait times—Median and 90th percentile times	Fewer Southern Australians are being listed for planned surgery, and elective surgical volume was also down in 2021-22 compared to 2018-19. While patients receive care based on clinical urgency, the length of time that people on the waiting list is trending up. Waits are higher in metropolitan local health networks, than in Country SA.
1.1.5 - Outpatient wait times	Half of all South Australians seeking an outpatient appointment waited more than a year, up almost four months over the last several years.
1.1.6 - Aged care wait times	South Australians wait longer for an aged care bed than other Australians, with half waiting more than eight months, an increase of almost two months in the last several years.
1.2 - Experience of care	Almost 85% of overnight adult patients report good experiences of their care, and several measures of patients experience with care are trending down. Across vulnerable populations, Aboriginal and Torres Strait Islander and culturally and linguistically diverse patients offer lower ratings of experiences with care. The percentage of adults who reported that they experience unexpected harm or distress, as a result of their treatment or care, is trending up. Women are more likely than men to report unexpected harm or distress.
1.3 - Length of stay in hospital	In South Australia, 6.2% of all public hospital bed days in 2021-22 were used by people who no longer needed acute care (maintenance care patients), up from 5.4% since 2018-19. The prevalence of beddays attributed to maintenance care varies widely across local health networks. After many years of stability, total overnight inpatient length of stay has increased in 2021-22 in ways likely to impact patients in emergency departments waiting to be admitted.
1.4 - Culturally appropriate care	Only a third of overnight patients are being asked if they have cultural or religious beliefs that might affect their care. Older patients (75+) are particularly unlikely to be asked. Culturally and linguistically diverse patients are more likely to report needing an interpreter, and it is good to note that they are also more likely to report having had access to one when needed.
1.5 - Hospital acquired complications	The overall rate of hospital acquired complications is relatively low and trending down across the majority of local health networks.

2 - Outcomes: Preventable mortality and morbidity	
2.1 - Cancer mortality	South Australia has a slightly higher rate of breast cancer deaths among the female population than other states, but similar rates of lung, colorectal and prostate cancer deaths.
2.2 - Potentially preventable hospitalisations	The percentage of potentially preventable hospitalisations in South Australian public hospitals is trending down.
2.3 - Childhood immunisation	South Australia is largely exceeding national targets for immunisation rates among all children in the state. However, immunisation coverage is below target and worse for Aboriginal and Torres Strait Islander children in South Australia than many other parts of Australia.
2.4 - Self-reported good health	A large majority of South Australians report their health to be 'good' (or better), and there have been steady improvements in this self-reported measure. Aboriginal and Torres Strait Islander people, women and those living in more rural and remote regions less commonly reported good health.

3 - Costs of hospital care	
3.1 - Costs of hospital care — TOTAL	South Australian public hospitals are relatively less cost-efficient than the national average, after considering differences between states in types of patients served. The cost of treating a person in a South Australian public hospital is almost 10% more than the Australian average. In the Central Adelaide Local Health Network the cost of treating a patient is almost 30% more than the Australian average, though this region has more beds per capita and serves patients from other parts of the state that require specialist care only available in high volume centres. Increased efficiency, in costs and length of stay, can improve patient flow from emergency departments to hospital and reduce the length of time ambulance patients wait to be admitted to emergency departments.
3.2 - Costs of hospital care — Admitted acute	South Australia ranks second highest of the states and territories for admitted acute care hospital expenditure per episode of care.
3.3 - Costs of hospital care — Admitted sub-acute / non-acute	Sub-acute/non-acute hospital care provided by the Flinders and Upper North Local Health Network is 50.3% more costly than the Australian average, after considering differences in the types of patients served.
3.4 - Costs of hospital care — Emergency department	Emergency department hospital care provided by the Women's and Children's Health Network is 17.7% more costly than the Australian average, after considering differences in the types of patients served.
3.5 - Costs of hospital care — Mental health	South Australia ranks second highest of the states and territories for mental health care hospital expenditure per episode of care.
3.6 - Costs of hospital care — Non-admitted	South Australia ranks highest of the states and territories for non-admitted hospital care expenditure per episode of care.
3.7 - Costs of hospital care — Palliative services	Palliative hospital care provided by the Central Adelaide Local Health Network is 12.8% more costly than the Australian average, after considering the different types of patients served.

4 - Staffing services: Workforce	
4.1 - Workforce satisfaction	Data requested but not provided to the Health Performance Council, even though it has been collected by SA Health.
4.2 - Staff turnover	There has been a rise over the last three years in staff turnover across SA Health, with concerning turnover rates in 2021-22, particularly in local health networks in country SA.
4.3 - Medical interns	South Australia provides more than its fair share of the nationally available medical internships, and the number of internships in SA continues to grow at a faster rate than our state's population. Almost all South Australian internships are in metropolitan Adelaide, although there has been a modest development of new regional internship opportunities since 2018. Only three Aboriginal and/or Torres Strait Islander graduates were known to have accepted South Australian internships in 2021. South Australia continues to be a rarely chosen first preference for medical students' future state in which to practice.
4.4 - First-year professions employed	Using SA Health payroll data, an estimate for the number of new commencements has been derived based on the salary classification of an employee's first record.
4.5 - New entrants and retirements among clinical practitioners	Numbers of registered medical practitioners and nurses and midwives in South Australia have been increasing faster than the growth in the state's population. The replacement rate (new entrants compared to exist from the professions in South Australia) is positive in each year.

5 - South Australia's Covid-19 response	
5.1 - Covid-19 vaccination rates	Similar to the experience in other states, South Australia initially had a slow roll-out of vaccinations with rapid, and impressive, vaccination rates in mid-2021. More recently, the state has good two-dose vaccination rates but poorer three or four dose rates.
5.2 - Community satisfaction with state's response to Covid-19	South Australian community satisfaction with the state government's response to Covid-19 was generally positive, although it did fall in 2021, as it did in other states.
5.3 - Covid deaths	South Australia's Covid-19 cumulative death rate to 30 June 2022 is below the national average. South Australia's death rate during the Omicron wave is amongst the lowest of the states and territories.
5.4 - Excess mortality	All states and territories recorded more all-causes deaths per week on average over the first four months of 2022 than their baseline averages with similar results for South Australia.
5.5 - Covid active cases and hospitalisation rates	Compared to other states and territories, South Australia responded relatively well to Covid-19, as measured by active cases and hospitalisations per head of population.

Demographics

As at 30 June 2021, the population of South Australia was just over 1.8m people. The state's population has been growing slower, and is older, than most other states.

Some select summary demographics of the state are:

- Almost three-quarters (around 72% or 1.3m people) of this state's population reside in metropolitan Adelaide.
- South Australia's population is growing by an average 0.9% per year. Barossa Hills Fleurieu is the fastest growing local health network.
- Around one in five (19.5%) people living in South Australia is aged 65 years or older, which is the second-highest percentage of the states and territories. Within South Australia, the Yorke and Northern Local Health Network has the highest proportion (27.7%) of persons aged 65 years or older.
- One in fifty (2.0%) South Australians is an Aboriginal or Torres Strait Islander person. The local health networks of Eyre and Far North and Flinders and Upper North record the highest proportion of Aboriginal and Torres Strait Islander people, at 11.2% and 9.8%, respectively.
- Over one in five (20.3%) of South Australia's population is culturally and linguistically diverse, below the Australian average rate of 24.8%. The local health networks of Central Adelaide (28.7%) and Northern Adelaide (24.5%) record the highest proportion of culturally and linguistically diverse people.
- Around one in 17 (6.0%) South Australians need assistance with core activities. This is above the national average of 5.1%. Yorke and Northern Local Health Network (7.6%) and Riverland Mallee Coorong Local Health Network (6.8%) record the highest proportion of persons needing assistance with core activities.

Table 1: Demographic summary of the South Australian population by local health network

Local Health Network	**Population** 2021	**Average annual population growth** 2002–2021	**Persons aged 65 years or older** 2021	**Aboriginal and Torres Strait Islander persons** 2016	**Culturally and linguistically diverse persons** 2016	**Persons needing assistance with core activities** 2016	**Public hospital bed *capacity** per 1000 population** 2022
Central Adelaide	482,489	0.8%	19.2%	1.1%	28.7%	5.9%	2.7
Northern Adelaide	423,166	1.3%	15.4%	2.1%	24.5%	6.4%	1.4
Southern Adelaide	378,101	0.8%	20.1%	1.2%	16.2%	5.8%	2.3
Metropolitan Adelaide	**1,283,756**	**1.0%**	**18.2%**	**1.4%**	**23.6%**	**6.0%**	**2.1**
Barossa Hills Fleurieu	214,045	1.6%	22.9%	1.2%	10.7%	5.3%	0.3
Eyre and Far North	41,182	0.3%	20.2%	11.2%	12.3%	4.8%	1.4
Flinders and Upper North	44,404	-0.2%	16.4%	9.8%	14.5%	5.7%	4.6
Limestone Coast	68,542	0.5%	21.3%	1.9%	12.6%	5.3%	1.8
Riverland Mallee Coorong	73,097	0.3%	24.1%	3.7%	15.0%	6.8%	0.6
Yorke and Northern	78,166	0.4%	27.7%	2.6%	10.8%	7.6%	0.9
Country SA	**519,436**	**0.8%**	**22.8%**	**3.4%**	**12.1%**	**5.9%**	**1.1**
South Australia	**1,803,192**	**0.9%**	**19.5%**	**2.0%**	**20.3%**	**6.0%**	**2.0**

Sources: Australian Bureau of Statistics, *Population estimates by age and sex, by Statistical Area Level 2 (ASGS2016), 2001 to 2021* and *2016 Census;*
* Intrastate data is *total capacity for all inpatients in select major South Australian public hospitals (including psychiatric)* via SA Health Inpatient Activity Dashboard. WCHN beds included in state total.

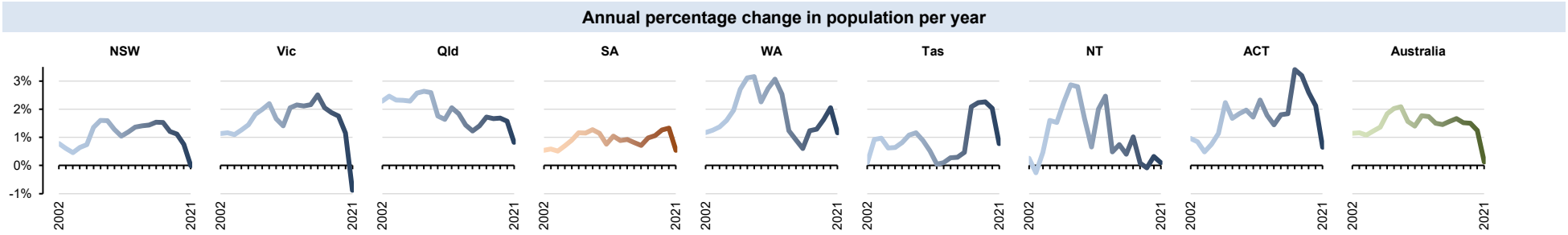
Table 2: Demographic summary of the South Australian population compared to states and territories

State and Territory	Population 2021	Average annual population growth 2002–2021	Persons aged 65 years or older 2021	Aboriginal and Torres Strait Islander persons 2016	Culturally and linguistically diverse persons 2016	Persons needing assistance with core activities 2016	Public hospital *available* beds** per 1000 population 2019-20
New South Wales	8,093,815	1.1%	17.2%	2.9%	27.8%	5.4%	2.6
Victoria	6,548,040	1.6%	16.4%	0.8%	28.8%	5.1%	2.3
Queensland	5,217,653	1.9%	16.6%	4.0%	18.4%	5.2%	2.5
South Australia	**1,803,192**	**0.9%**	**19.5%**	**2.0%**	**20.3%**	**6.0%**	**2.6**
Western Australia	2,749,864	1.9%	15.7%	3.1%	24.1%	3.9%	2.2
Tasmania	567,909	0.9%	20.4%	4.6%	13.1%	6.4%	2.8
Northern Territory	249,200	1.1%	8.7%	25.5%	24.7%	3.0%	4.0
Australian Capital Territory	453,558	1.7%	13.3%	1.6%	25.2%	4.2%	2.7
AUSTRALIA	**25,683,231**	**1.4%**	**16.8%**	**2.8%**	**24.8%**	**5.1%**	**2.5**

Sources: Australian Bureau of Statistics, *Population estimates by age and sex, by Statistical Area Level 2 (ASGS2016), 2001 to 2021* and *2016 Census;*

** State and territory comparison data is *available beds in public hospitals (including psychiatric)* via Productivity Commission, *Report on Government Services 2022* data tables

Figure 1: Population change per year by state and territory



Source: Australian Bureau of Statistics, *Population estimates by age and sex, by Statistical Area Level 2 (ASGS2016), 2001 to 2021*

1. Getting access to care

1.1 Wait times

1.1.1. GP wait times

Around one in five South Australians feels they wait longer than acceptable to get an appointment with a GP. GP attendances have been trending down, but the use of GP telehealth and phone services increased during waves of the Covid-19 pandemic.

During the month of June 2022, there were 580,852 GP attendances across South Australia.

A GP attendance is a non-referred Medicare benefits-funded patient/doctor encounter, excluding services provided by practice nurses and Aboriginal and Torres Strait Islander health practitioners on behalf of medical practitioners.

GP attendances in South Australia during June 2022 made up 6.3% of the 9.2 million GP attendances across Australia over the same month.

On a per capita basis, South Australia is ranked fourth highest of the states and territories, at 31,903 GP attendances per 100,000 population during the month of June 2022. This is below the Australian average 34,841 GP attendances per 100,000 population.

In 2019-20, almost one in five (19.8%) South Australians felt they waited longer than acceptable to get an appointment with a GP. This is down from 21.5% in 2013-14.

Dissatisfaction with wait times to see a GP is higher for rural and remote South Australian residents (24.4%).

Table 3: Satisfaction with GP wait times, South Australian summary

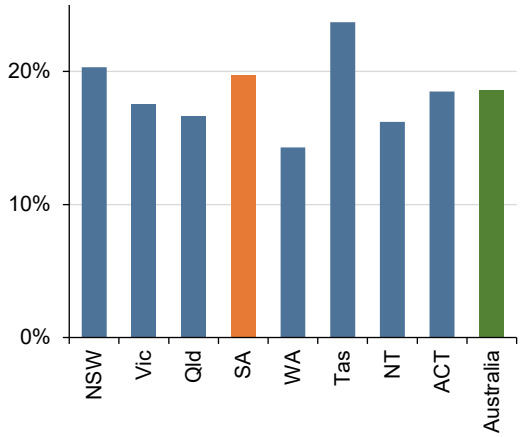
Percentage of adults who felt they waited longer than acceptable to get an appointment with a GP	2013-14	2018-19	2019-20
South Australia			
ATSI persons	NO DATA		
CALD persons			
Lowest SES residents			
Persons aged 65+ years			
Rural and remote residents	28.1%	24.2%	24.4%
South Australia total	**21.5%**	**18.8%**	**19.8%**
AUSTRALIA	**22.6%**	**18.8%**	**18.6%**
South Australia rank (out of 8)	7	4	3

Source: Australian Institute of Health and Welfare, *Patient experiences in Australia by small geographic areas in 2019–20* data tables

Figure 2: Satisfaction with GP wait times by state and territory

Percentage of adults who felt they waited longer than acceptable to get an appointment with a GP

2019-20



Source: Australian Institute of Health and Welfare, *Patient experiences in Australia by small geographic areas in 2019–20* data tables

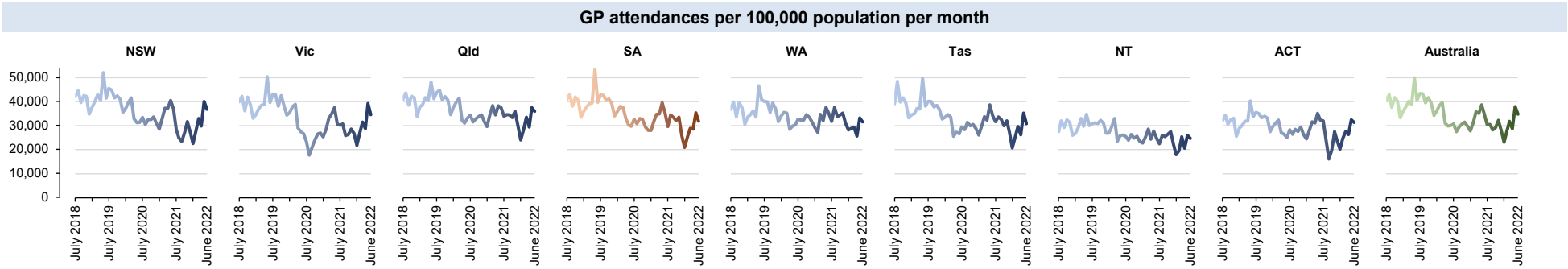
Between July 2018 and June 2022 the overall trend in GP attendances per 100,000 population in South Australia has declined.

This reflects trends seen in the other states and territories to varying degree.

Over the four-year period, the rate of GP attendances per head of population in South Australia was highest in May 2019 at 53,398 per 100,000 population, and lowest in January 2022 at 20,974 per 100,000 population.

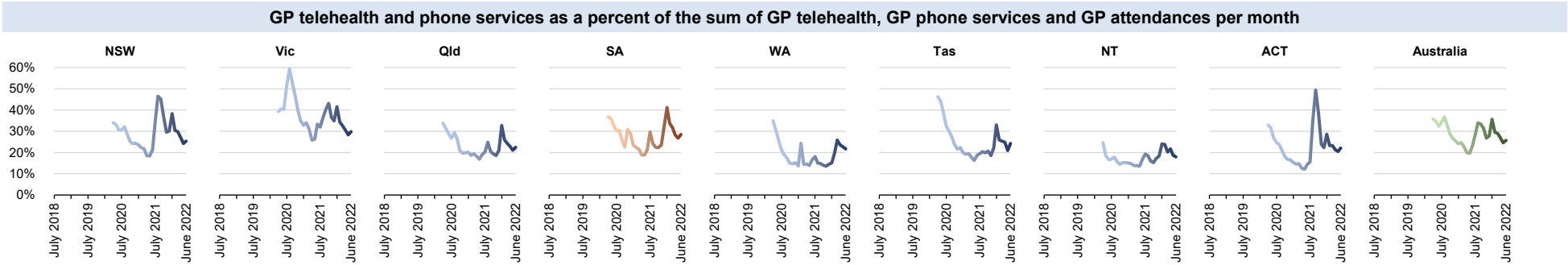
GP telehealth and phone services as a proportion of the sum of GP telehealth services, phone services and GP attendances was highest in South Australia in January 2022 at 41.2%.

Figure 3: GP attendances by state and territory



Source: Services Australia, *Medicare Group Reports* web report

Figure 4: GP telehealth and phone services by state and territory



Source: Services Australia, *Medicare Group Reports* web report

1.1.2. **Ambulance** wait times

Among South Australians who need ambulance services, response times for emergency incidents have increased rapidly in the last two years, particularly across local health networks in Adelaide. Among those transferred to metropolitan hospitals, less than half are transferred into the care of emergency departments within 30 minutes (escalation of ramping). Ambulance service performance trends here are seen in many other states.

Ambulance code 1 response times

In 2021-22 the median response time, based on 145,638 records, for *code 1* ambulance dispatches was 15.8 minutes in South Australia.

A dispatch code 1 represents emergency dispatches, commonly referred to as 'lights and sirens'. The median is the mid-point. That is, half of code 1 dispatches took longer and half took less time than the median.

The 2021-22 code 1 median response time of 15.8 minutes is a 47.7% increase from the 10.7 minutes recorded in 2018-19, based on 123,491 records. Median code 1 response times in South Australia increased each year over the last four financial years, as did the number of code 1 dispatches.

In 2021-22, South Australia recorded the highest median code 1 ambulance response time of the states and territories.

Table 4: Ambulance code 1 response times (minutes) – median

Median response times (minutes)	2018-19	2019-20	2020-21	2021-22
South Australia				
ATSI persons	NO DATA			
CALD persons				
Lowest SES residents				
Persons aged 65+ years				
Rural and remote residents	8.6	8.9	9.6	10.5
South Australia total	**10.7**	**10.9**	**12.5**	**15.8**
AUSTRALIA	**9.9**	**10.2**	**11.1**	**12.9**
South Australia rank (out of 8)	3	3	2	1

Sources: South Australian Ambulance Service, *customised report*; and Productivity Commission, *Report on Government Services* data tables

Between 2018-19 and 2021-22, the 90th percentile code 1 ambulance response time in South Australia almost tripled.

The 90th percentile measures "extreme" cases. The majority, nine out of ten, of cases will be below the 90th percentile, but the remaining one in ten cases are above.

That is, one out of every ten code 1 incidents in South Australia took 21.1 minutes or longer to respond in 2018-19. This rose to one in ten code 1 dispatches taking almost an hour, 58.3 minutes, to arrive at life-threatening or time-critical incidents in 2021-22.

Table 5: Ambulance code 1 response times (minutes) – 90th percentile

90th percentile response times (minutes)	2018-19	2019-20	2020-21	2021-22
South Australia				
ATSI persons	NO DATA			
CALD persons				
Lowest SES residents				
Persons aged 65+ years				
Rural and remote residents	18.7	19.7	23.5	28.0
South Australia total	**21.1**	**22.6**	**32.8**	**58.3**
AUSTRALIA	**19.5**	**20.5**	**23.7**	**30.8**
South Australia rank (out of 8)	3	3	2	1

Sources: South Australian Ambulance Service, *customised report*; and Productivity Commission, *Report on Government Services* data tables

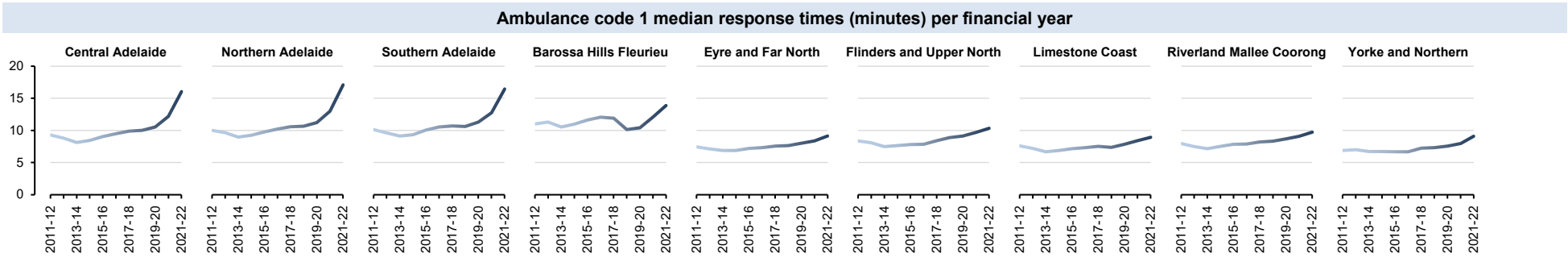
Ambulance 'ramping' — handover within 30 minutes

SA Health local health networks have a key performance target of 30 minutes between ambulance patients' arrival and handover to the hospital, 90% of the time.

In 2021-22, less than half (42.9%) of people arriving at metropolitan Adelaide public hospitals by ambulance were seen within the benchmark 30 minutes. This is down from 94.1% in 2013-14.

Trends in median ambulance code 1 response times are up across all SA Health local health networks between 2011-12 and 2021-22. Over the time series, the lowest median ambulance code 1 response time was 6.7 minutes recorded by the local health networks of Limestone Coast in 2013-14, and Yorke and Northern between the years 2013-14 to 2016-17. The highest median ambulance code 1 response time over the time series was 17.1 minutes recorded by Northern Adelaide Local Health Network in 2021-22.

Figure 5: Ambulance code 1 response times by local health network* – median

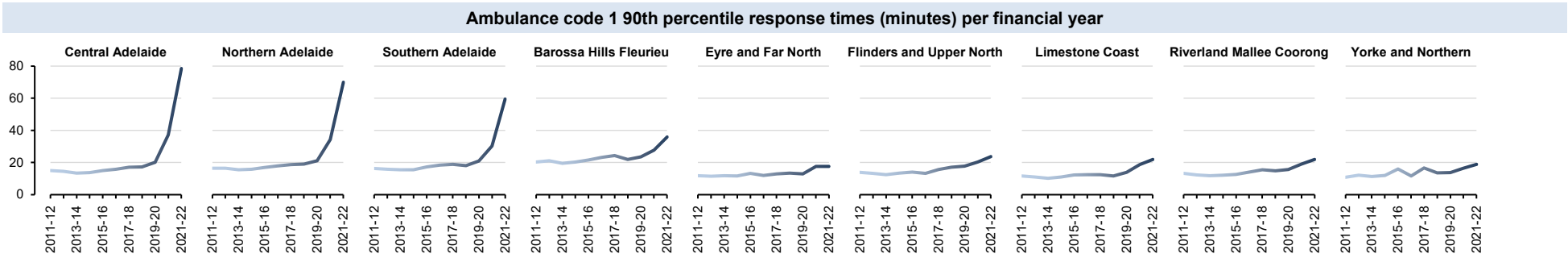


* South Australian Ambulance Service (SAAS) metropolitan service boundaries do not map exactly to SA Health metropolitan local health network boundaries so these are an approximation (Central Adelaide Local Health Network includes data for Women's and Children's Health Network). SAAS only provides response times in Country SA local health networks for urban centres with a population of 10,000 or more, not for the entire regional area.

Source: South Australian Ambulance Service, *customised report*

Trends in 90th percentile ambulance code 1 response times are also up across all SA Health local health networks between 2011-12 and 2021-22. Over the time series, the lowest 90th percentile ambulance code 1 response time is 10.1 minutes recorded by the Limestone Coast Local Health Network in 2013-14. The highest 90th percentile ambulance code 1 response time over the time series is 78.5 minutes recorded by Central Adelaide Local Health Network in 2021-22. Worsening 90th percentile ambulance code 1 response times have been much more pronounced in metropolitan Adelaide local health networks than in Country South Australia local health networks.

Figure 6: Ambulance code 1 response times by local health network* – 90th percentile

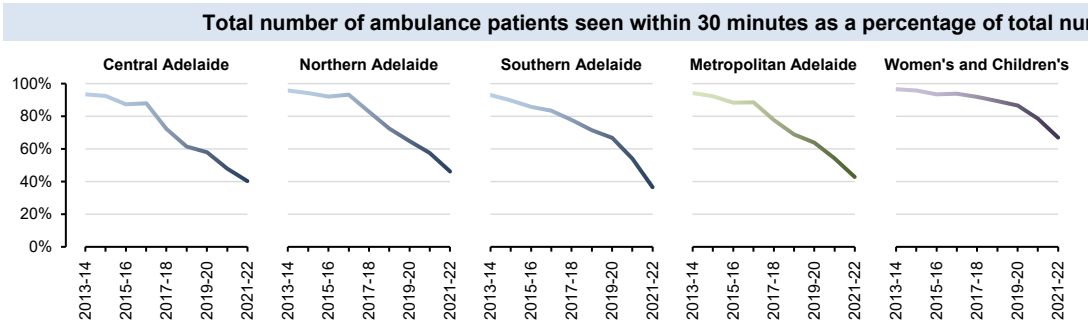


* South Australian Ambulance Service (SAAS) metropolitan service boundaries do not map exactly to SA Health metropolitan local health network boundaries so these are an approximation (Central Adelaide Local Health Network includes data for Women's and Children's Health Network). SAAS only provides response times in Country SA local health networks for urban centres with a population of 10,000 or more, not for the entire regional area.

Source: South Australian Ambulance Service, *customised report*

Between the years 2013-14 to 2021-22, the percentage of ambulance patients seen within 30 minutes has declined across the three metropolitan Adelaide local health networks and the statewide Women's and Children's Health Network. Data is not available for the Country South Australian local health networks for this indicator. Over the time series for the three metropolitan Adelaide local health networks, the highest percentage of ambulance patients seen within 30 minutes is 95.7% recorded by the Northern Adelaide Local Health Network in 2013-14. The lowest was 36.7% recorded by the Southern Adelaide Local Health Network in 2021-22.

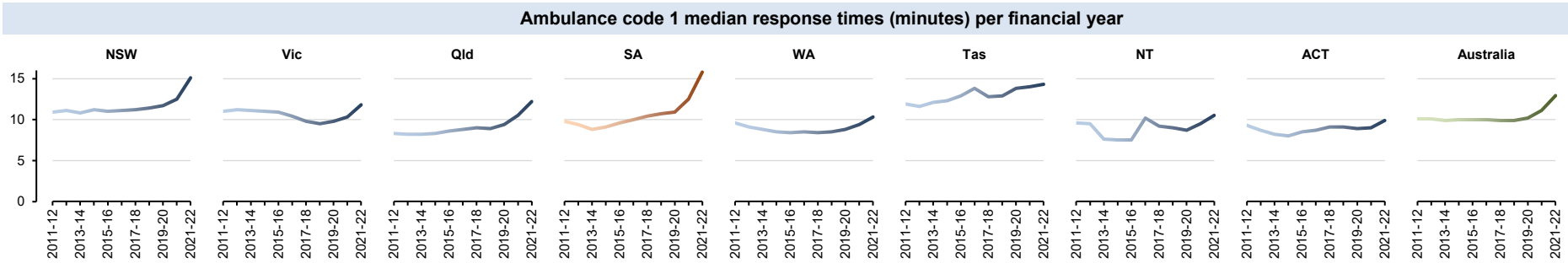
Figure 7: Ambulance patients seen within 30 minutes by local health network of hospital*



* Data for Country SA local health networks is not available. Women's and Children's Health Network is classified as a statewide network so not included in the metropolitan total but shown separately.
Source: South Australian Ambulance Service, *customised report*.

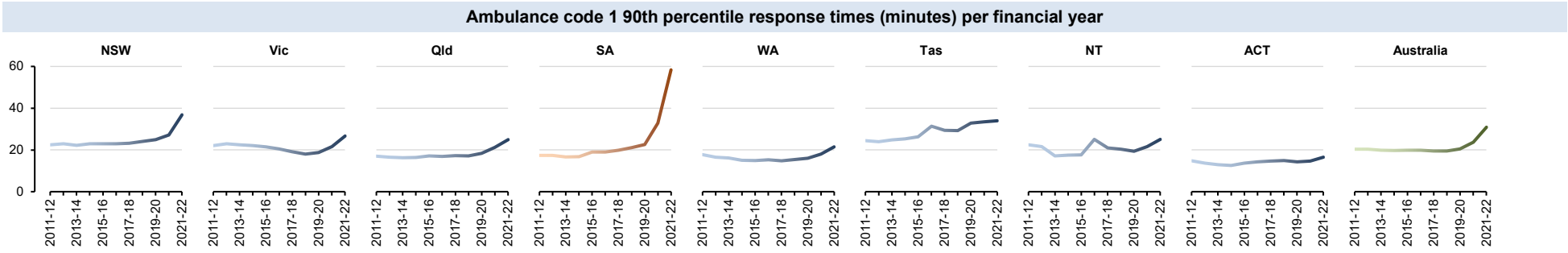
Increasing trends in median and 90th percentile ambulance code 1 response times are observed in other states and territories in recent years. However, South Australia recorded the highest median ambulance code 1 response time in 2021-22 at 15.8 minutes and the highest 90th percentile time at 58.3 minutes.

Figure 8: Ambulance code 1 response times by state and territory – median



Source: Productivity Commission, *Report on Government Services* data tables

Figure 9: Ambulance code 1 response times by state and territory – 90th percentile



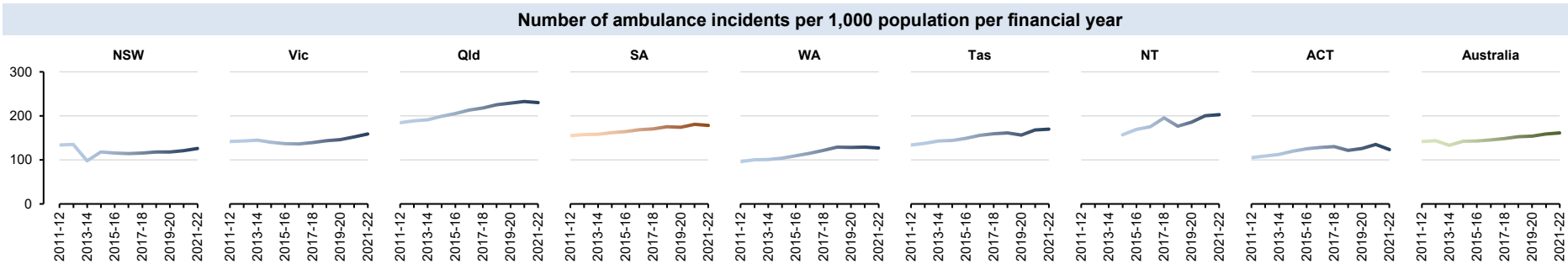
Source: Productivity Commission, *Report on Government Services* data tables

Corresponding with an increasing trend in ambulance code 1 response times — both median and 90th percentile — observed in South Australia and several other states and territories is an increase in overall ambulance utilisation. Ambulance utilisation is reported here by: number of incidents requiring an ambulance response, ambulance responses, and ambulance patients per 1,000 head of population.

Note that measures in the figures below refer to *all* ambulance incidents, responses and patients—including emergency, urgent, non-emergency, and casualty room attendances.

In 2021-22 there were 322,545 total ambulance *incidents* in South Australia, or 178.5 per 1,000 population, comprised of 175,072 (54.3%) incidents classified in the national data collection as emergency, 99,041 (30.7%) urgent, 48,432 (15.0%) non-emergency and no recorded casualty room attendances.

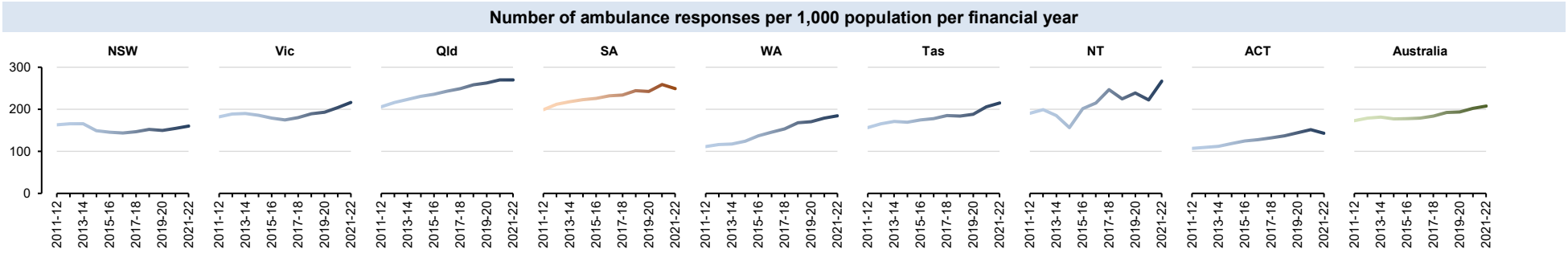
Figure 10: Ambulance activity by state and territory — Total incidents (including emergency, urgent, non-emergency and casualty room attendances)



Source: Productivity Commission, *Report on Government Services* data tables

In 2021-22 there were 450,487 total ambulance *responses* in South Australia, or 249.4 per 1,000 population, comprised of 253,094 (56.2%) responses classified in the national data collection as emergency, 134,239 urgent (29.8%), and 63,154 (14.0%) non-emergency.

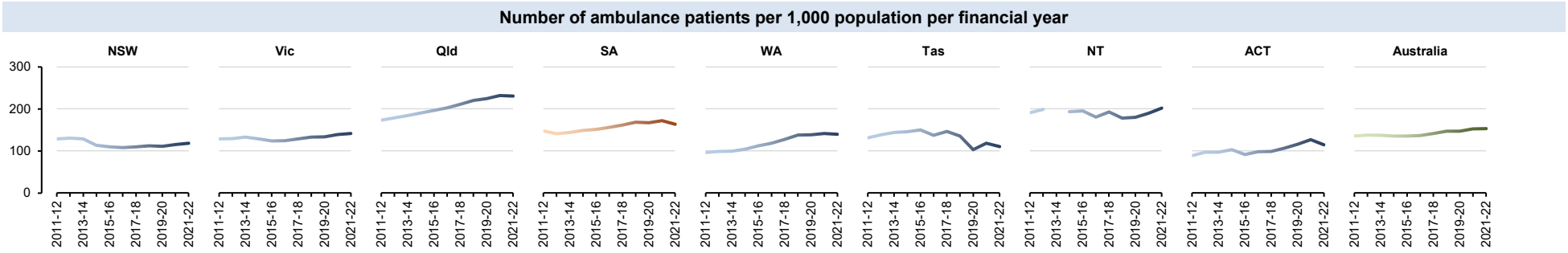
Figure 11: Ambulance activity by state and territory — Total responses (including emergency, urgent, non-emergency and casualty room attendances)



Source: Productivity Commission, *Report on Government Services* data tables

In 2021-22 there were 295,461 total ambulance *patients* in South Australia, or 163.5 per 1,000 population, comprised of 259,070 (87.7%) patients classified in the national data collection as transported, and 36,391 (12.3%) treated but not transported.

Figure 12: Ambulance activity by state and territory — Total patients (including emergency, urgent, non-emergency and casualty room attendances)



Source: Productivity Commission, *Report on Government Services* data tables

1.1.3. **Emergency department** wait times

Among the more than 570,000 people who visit a public hospital emergency department in South Australia, too many wait too long to be seen by a clinician after being triaged. The percentages of patients seen on time in rural and remote South Australia is much higher than in metropolitan Adelaide, and there are longer wait times are experienced by culturally and linguistically diverse South Australians.

In 2021-22, just over half (55%) of the 572,886 presentations to South Australian's major public hospital emergency departments were seen within nationally recognised benchmarks for their triage category. These benchmarks by the five triage categories are:
(1) Resuscitation — maximum wait time of immediately to 2 minutes; (2) Emergency — 10 minutes; (3) Urgent — 30 minutes; (4) Semi-urgent — 60 minutes; and (5) Non-urgent — 120 minutes.

In 2021-22, South Australia ranked fifth out of the eight states and territories for public hospital emergency department wait times performance. The national average in 2021-22 was 67%.

The population group that recorded the highest proportion of patients receiving timely emergency hospital care is people who reside in rural and remote areas of South Australia, with 81% of people in this cohort seen on time.

The lowest proportion was recorded for persons from culturally and linguistically diverse backgrounds, only 46% of whom were seen on time.

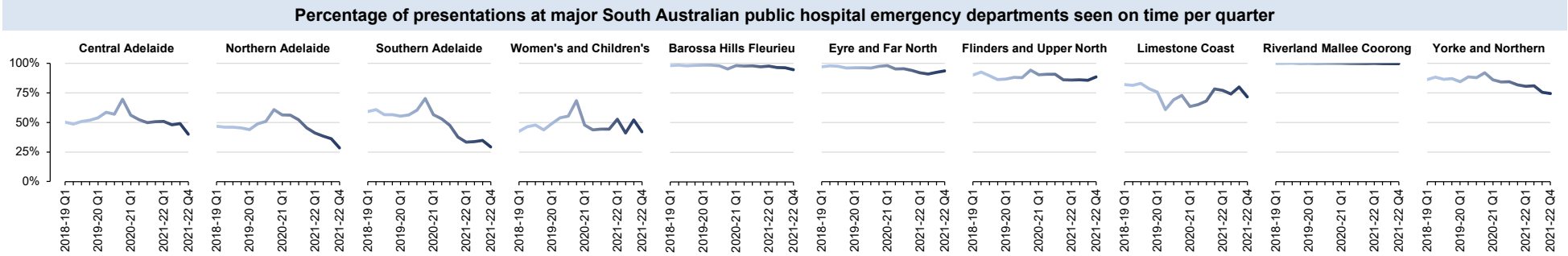
Seen-on-time trends for public hospitals in the three metropolitan Adelaide local health networks have been falling since the fourth quarter of 2019-20.

Table 6: Emergency department wait time performance, public hospitals

Seen on time (% of presentations)	2018-19	2019-20	2020-21	2021-22
South Australia				
ATSI persons	68%	71%	69%	63%
CALD persons	48%	55%	53%	46%
Lowest SES residents	65%	67%	64%	57%
Persons aged 65+ years	58%	64%	59%	53%
Rural and remote residents	83%	83%	82%	81%
South Australia total	**61%**	**65%**	**61%**	**55%**
AUSTRALIA	**71%**	**74%**	**71%**	**67%**
South Australia rank (out of 8)	7	6	4	5

Sources: SA Health, *Non-admitted Emergency Care data collection* customised extract; and Productivity Commission, *Report on Government Services* data tables

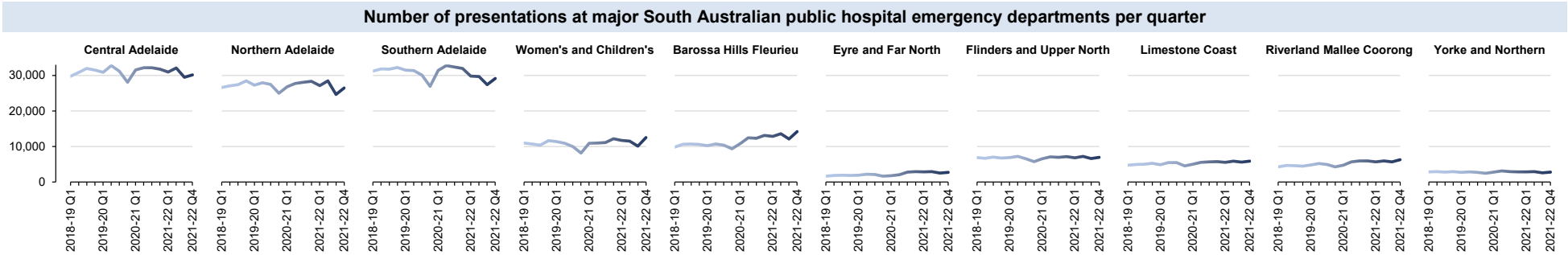
Figure 13: Emergency department wait time performance by local health network



Source: SA Health, *Non-admitted Emergency Care data collection* customised extract

In absolute terms, public hospital emergency departments in metropolitan Adelaide see around 30,000 presentations (around 10,000 for Women's and Children's Hospital) every quarter. This trend in raw activity has been relatively stable over the period 2018-19 to 2021-22. Major public hospitals in country South Australia see fewer presentations per quarter. An increasing trend in quarterly emergency department presentations amongst major public hospitals in the Barossa Hills Fleurieu Local Health Network is observed from the fourth quarter 2019-20.

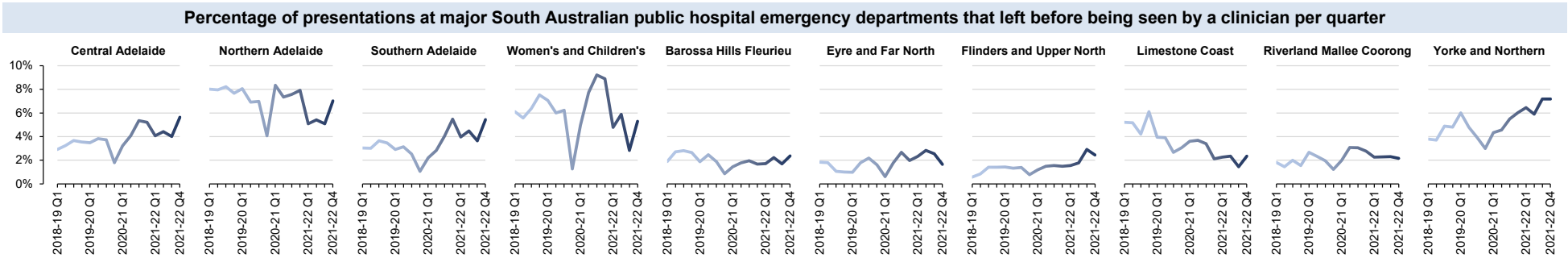
Figure 14: Emergency department number of presentations by local health network



Source: SA Health, *Non-admitted Emergency Care data collection* customised extract

Another way to monitor emergency department wait time performance is to look at percentage of people who leave after being triaged but before being seen by an emergency department clinician. Trends over the period 2018-19 to 2021-22 for this indicator are mixed and fluctuate over the time series but an improvement in Limestone Coast Local Health Network is observed.

Figure 15: Emergency department adverse patient outcomes by local health network — 'Left before seen'



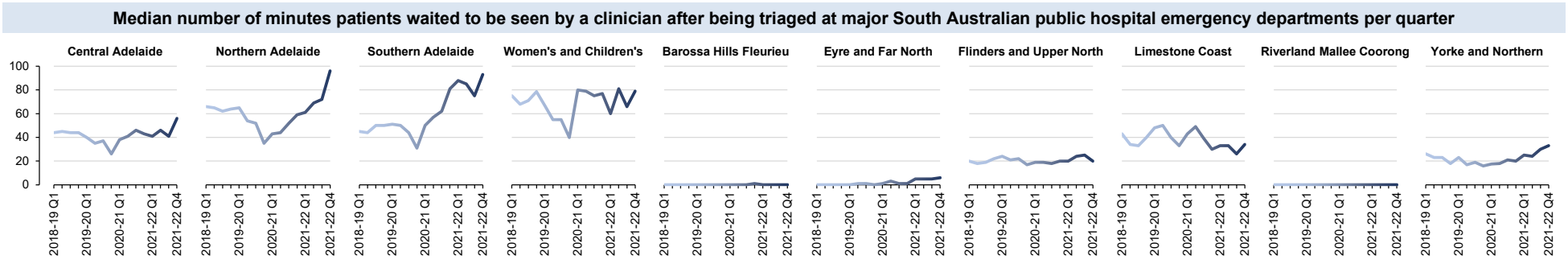
Source: SA Health, *Non-admitted Emergency Care data collection* customised extract

Corresponding with downward trends for the emergency department seen-on-time indicator is an increase in both the median and 90th percentile number of minutes people spent waiting to see a major public hospital emergency department clinician *after being triaged*. Wait time trends for public hospital emergency departments in metropolitan Adelaide's three local health networks have increased the most, with increasing trends commencing from the fourth quarter 2019-20. Limestone Coast Local Health Network saw the biggest decline in 90th percentile wait times over the period.

The graphs below present summary measures of wait times in minutes for patients *after been triaged* and are then waiting to be seen by an emergency department clinician. Also, the graphs below summarise typical and extreme waiting times for all emergency department triage categories combined, from resuscitation through to non-urgent, and so may be affected by extremely long waits for semi-urgent and/or non-urgent emergency department care.

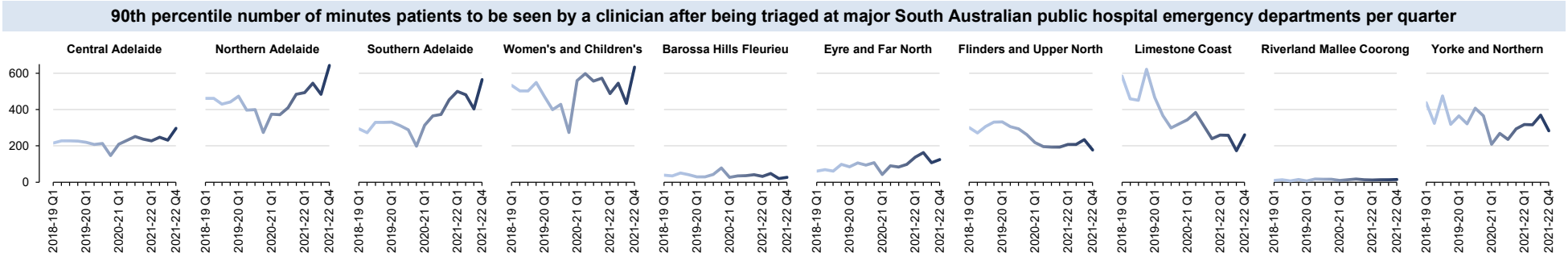
The median is the mid-point. That is, half of all patients waited to be seen by a clinician after being triaged less time than the median and half longer. The 90th percentile measures "extreme" cases. The majority, nine out of ten, of cases will be below the 90th percentile, but the remaining one in ten cases are above.

Figure 16: Emergency department median wait times by local health network



Source: SA Health, *Non-admitted Emergency Care data collection* customised extract

Figure 17: Emergency department 90th percentile wait times by local health network



Source: SA Health, *Non-admitted Emergency Care data collection* customised extract

1.1.4. **Elective surgery** wait times—Median and 90th percentile times

Fewer Southern Australians are being listed for planned surgery, and elective surgical volume was also down in 2021-22 compared to 2018-19. While patients receive care based on clinical urgency, the length of time that people on the waiting list is trending up. Waits are higher in metropolitan local health networks, than in Country SA.

Wait times for elective surgery are trending up in South Australia, from a median of 41 days (that is, half of people on the elective surgery waiting list waited longer and half waited less time) in 2018-19 to a median of 48 days in 2021-22.

90th percentile wait times are also trending up. One in ten people waited 278 days or longer for elective surgery in 2018-19 increasing to almost a year (339 days) in 2021-22.

National comparison data for 2021-22 for some specific population groups will not be available until February 2024.

In 2021-22, South Australia was ranked third highest of the states and territories for median wait time for elective surgery and third highest for 90th percentile wait time.

The number of days waited does not include days when the patient was not ready for care or the time waited for the initial appointment with the specialist after referral by the patient's general practitioner.

Table 7: Elective surgery median wait time performance

Median wait time (days)	2018-19	2019-20	2020-21	2021-22
South Australia				
ATSI persons	40	44	46	43
CALD persons	NO DATA			
Lowest SES residents	43	48	55	Avail. Feb. 2024
Persons aged 65+ years	NO DATA			
Rural and remote residents	31	33	36	Avail. Feb. 2024
South Australia total	**41**	**43**	**50**	**48**
AUSTRALIA	**41**	**39**	**48**	**40**
South Australia rank (out of 8)	5	4	3	3

Sources: Productivity Commission, *Report on Government Services* data tables; and SA Health, *Elective Surgery Waiting List data collection* customised extract

During 2021-22 there were 61,258 additions to the South Australian public hospital elective surgery waiting list, down 14.9% from the 72,020 additions recorded in 2018-19.

During 2021-22, a total of 52,460 people were admitted to public hospitals in South Australia for elective surgery off the waiting list, down 10.4% from the 58,538 recorded in 2018-19.

Table 8: Elective surgery 90th percentile wait time performance

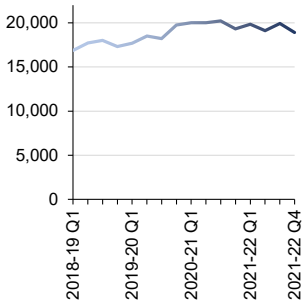
90th percentile wait time (days)	2018-19	2019-20	2020-21	2021-22
South Australia				
ATSI persons	187	277	347	324
CALD persons	NO DATA			
Lowest SES residents	279	282	351	Avail. Feb. 2024
Persons aged 65+ years	NO DATA			
Rural and remote residents	208	222	279	Avail. Feb. 2024
South Australia total	**278**	**278**	**351**	**339**
AUSTRALIA	**279**	**281**	**348**	**323**
South Australia rank (out of 8)	5	5	4	3

Sources: Productivity Commission, *Report on Government Services* data tables; and SA Health, *Elective Surgery Waiting List data collection* customised extract

As at the end of June 2022, there were 18,919 people still on the South Australian public hospital elective surgery waiting list, of which 2,939 (15.5%) were overdue. The average amount of time that a person had spent overdue for elective surgery was 86 days.

In periods between 2020 and 2022 during the Covid-19 emergency, South Australia had restrictions on non-urgent elective surgery in place to free up hospital capacity.

Figure 18: People on elective surgery wait list as at end of quarter



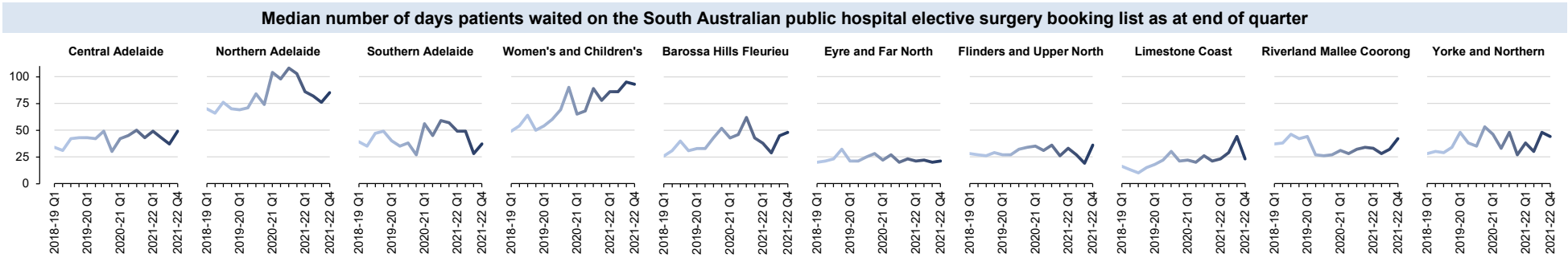
SA Health, *Elective Surgery Waiting List data collection* customised extract

Median and 90th percentile wait times for elective surgery at public hospitals vary between the local networks and have fluctuated over time.

The median is the mid-point. That is, half of all patients waited less time than the median and half longer. The 90th percentile measures "extreme" cases. The majority, nine out of ten, of cases will be below the 90th percentile, but the remaining one in ten cases are above.

Over the four year period 2018-19 to 2021-22, the highest median wait time for elective surgery was recorded in the Northern Adelaide Local Health Network at 108 days in the third quarter of 2020-21. However, median wait times in this local health network have fallen since then. Median wait times for elective surgery in the Women's and Children's Health Network have increased from 49 days in the first quarter of 2018-19 to 93 days in the fourth quarter of 2021-22.

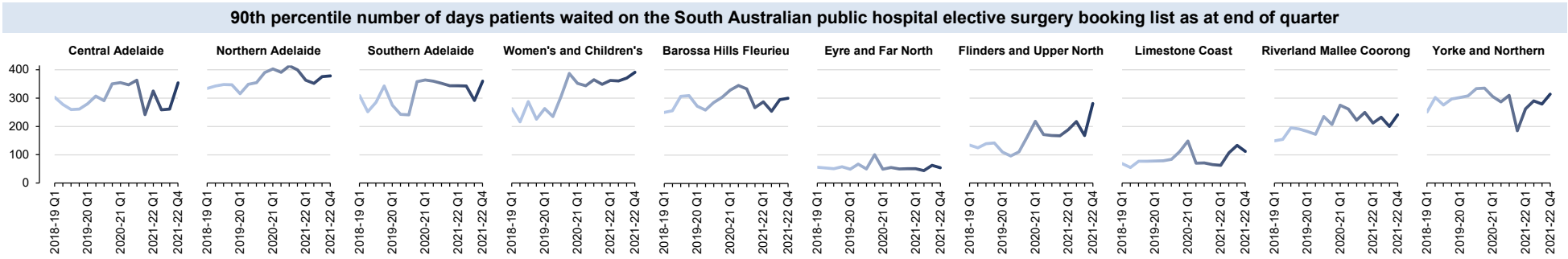
Figure 19: Elective surgery median wait time performance by local health network



SA Health, *Elective Surgery Waiting List data collection* customised extract

Between 2018-19 and 2021-22 the highest 90th percentile elective surgery wait time was recorded in the Northern Adelaide Local Health Network at 414 days in the third quarter of 2020-21. The lowest was recorded in the Eyre and Far North Local Health Network at 44 days in the second quarter of 2021-22. Flinders and Upper North Local Health Network has seen an increase in 90th percentile wait times for elective surgery from 96 days in the second quarter of 2019-20 to 281 days in the fourth quarter of 2021-22.

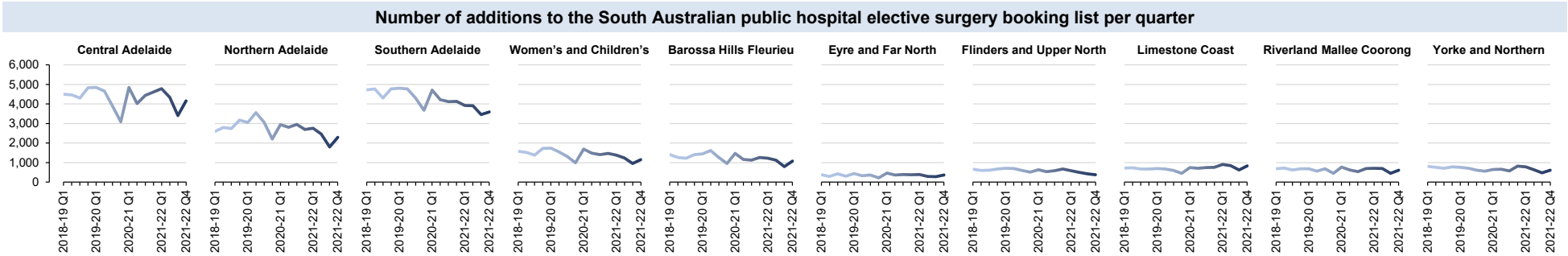
Figure 20: Elective surgery 90th percentile wait time performance by local health network



SA Health, *Elective Surgery Waiting List data collection* customised extract

Additions to the public hospital elective surgery wait list fluctuated in the Central Adelaide Local Health Network over 2018-19 to 2021-22 between a range of 3,093 and 4,846 additions per quarter. The trend for the Northern Adelaide Local Health Network is overall downward, from a peak of 3,562 in the second quarter of 2019-20 down to 1,796 in the third quarter of 2021-22. The trend for the Southern Adelaide Local Health Network is also downward over the time series, from a peak of 4,807 in the first quarter of 2019-20 down to 3,464 in the third quarter of 2021-22.

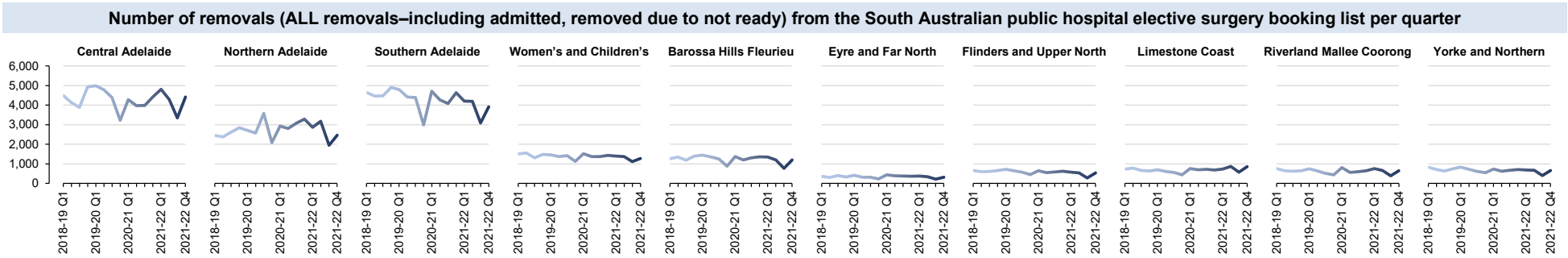
Figure 21: Elective surgery wait list additions by local health network



SA Health, *Elective Surgery Waiting List data collection* customised extract

The public hospital elective surgery wait list removals numbers by SA Health local health network in the graphs below include ALL removals, including patients who were removed due to not being ready for surgery and patients who were admitted for surgery.

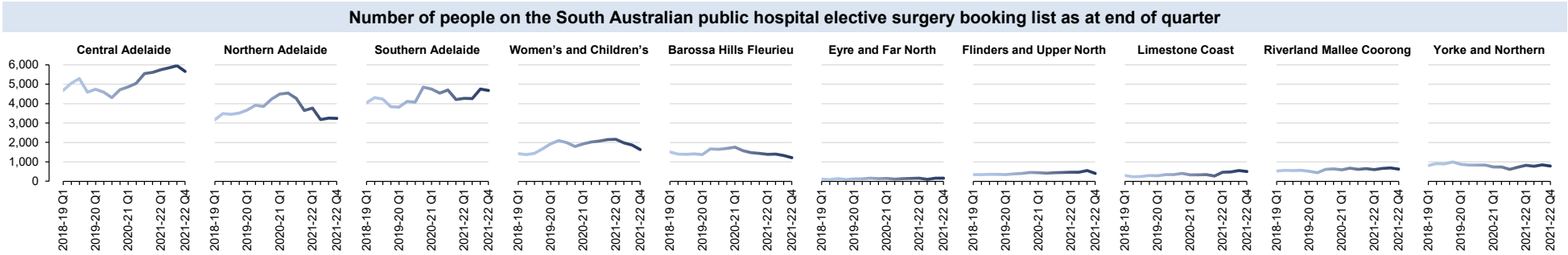
Figure 22: Elective surgery wait list removals by local health network



SA Health, *Elective Surgery Waiting List data collection* customised extract

The public hospital elective surgery wait list is largest in terms of raw size in the Central Adelaide Local Health Network, which peaked at 5,949 people on the list and ready for surgery as at the end of the third quarter of 2021-22. This is up from the lowest figure in the time series of 4,304 people on the list and ready for surgery as at the end of the third quarter of 2019-20. The Northern Adelaide Local Health Network saw a peak of 4,538 people on the elective surgery wait list as at the end of the second quarter of 2020-21 but it has since gone down to 3,245 as at the end of the 2021-22 financial year.

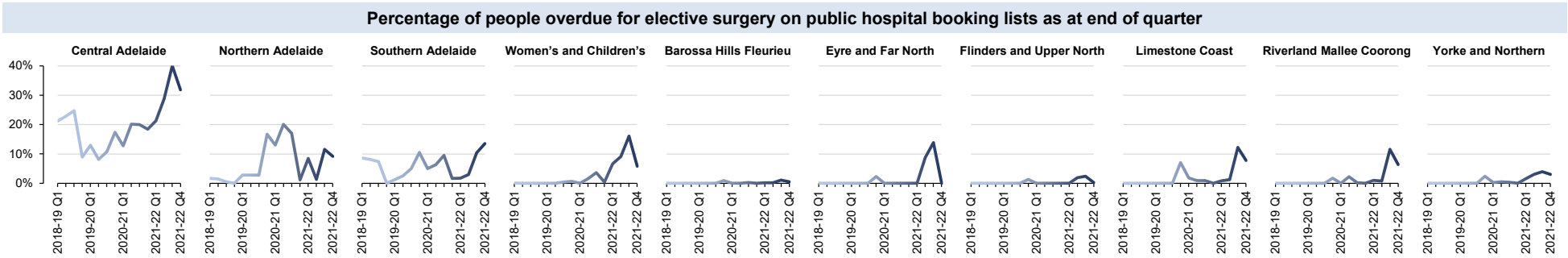
Figure 23: Elective surgery wait list size by local health network



SA Health, *Elective Surgery Waiting List data collection* customised extract

Amongst the local health networks, the public hospital elective surgery overdue waitlist was at its highest in the Central Adelaide Local Health Network at the end of the third quarter 2021-22. At this time, 40.0% of patients who were ready for surgery had been waiting longer than the clinically recommended time for their elective surgery.

Figure 24: Elective surgery overdue wait list by local health network



SA Health, *Elective Surgery Waiting List data collection* customised extract

1.1.5. **Outpatient** wait times

Half of all South Australians seeking an outpatient appointment waited more than a year, up almost four months over the last several years.

SA Health reports outpatient wait time information on a quarterly basis in its *Specialist Outpatient Waiting Time Report* for outpatient appointments across seven major metropolitan Adelaide public hospitals.

The seven hospitals covered in the SA Health report are Royal Adelaide Hospital, The Queen Elizabeth Hospital, Lyell McEwin Hospital, Modbury Hospital, Flinders Medical Centre, Noarlunga Hospital and Women's and Children's Hospital.

SA Health has provided a customised extract from its *Specialist Outpatient Waiting Time Report* data collection for summary analysis in this report.

SA Health produces these reports with some important caveats to note:

- *Information regarding hospital outpatient appointment waiting times has not previously been regularly reported by SA Health.*
- *SA Health has a number of patient administration systems that have different reporting capabilities for outpatient waiting list information. At this time, the quality, accuracy and consistency of the outpatient data is a significant challenge for local health networks and the Department for Health and Wellbeing.*
- *SA Health recognises the importance of reporting accurate outpatient appointment waiting times and have dedicated resources to improve the accuracy of waiting list information. The Southern Adelaide Local Health Network advises that Flinders Medical Centre and Noarlunga Hospital have a joint waiting list.*
- *This data details metropolitan specialist outpatient waiting times for Routine (category 2) and Non-urgent (category 3) patients who have not been given an appointment date at the census date (that is, they are unscheduled).*
- *Data has been produced over numerous years and the code and process to produce the data may have changed over the years. Therefore making comparisons difficult between the years and quarters that the data is provided.*
- *Data that is published on the SA Health website may not match the data that is in this report. This is due to another process that is undertaken once this data is provided to analysts, who allow local health networks to make changes, correct and review the data.*
- *SA Health continues to work with clinicians and administrative staff to improve the accuracy of the waiting lists and develop an outpatient reporting system that will provide timely and consistent information about outpatient waiting times.*

Over the last four years, the size of the outpatient wait list across the seven metropolitan Adelaide public hospitals reported in SA Health's *Specialist Outpatient Waiting Time Report* has grown, from 76,742 as at 30 June 2019 to 97,422 as at 30 June 2022.

Over the last four years, the amount of time people have spent on the outpatient wait list across the seven metropolitan Adelaide public hospitals has also grown, from a median of 11.0 months as at 30 June 2019 to 13.9 months as at 30 June 2022.

Table 9: Public hospital outpatient wait list size

Number of people waiting for outpatient services at major metropolitan Adelaide public hospitals, as at 30 June	**2018-19**	**2019-20**	**2020-21**	**2021-22**
South Australia				
ATSI persons	NO DATA			
CALD persons				
Lowest SES residents				
Persons aged 65+ years				
Rural and remote residents				
South Australia total	**76,742**	**79,623**	**91,480**	**97,422**
AUSTRALIA	NO DATA			
South Australia rank (out of 8)				

Source: SA Health, *Specialist Outpatient Waiting Time Report* data, customised report

Table 10: Public hospital outpatient wait time performance

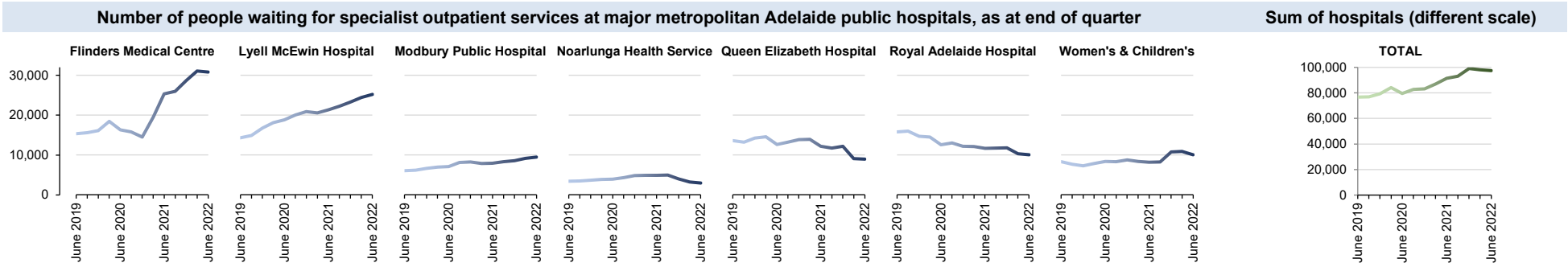
Median number of months waiting for outpatient services at major metropolitan Adelaide public hospitals, as at 30 June	**2018-19**	**2019-20**	**2020-21**	**2021-22**
South Australia				
ATSI persons	NO DATA			
CALD persons				
Lowest SES residents				
Persons aged 65+ years				
Rural and remote residents				
South Australia total	**11.0**	**12.7**	**13.0**	**13.9**
AUSTRALIA	NO DATA			
South Australia rank (out of 8)				

Source: SA Health, *Specialist Outpatient Waiting Time Report* data, customised report

Flinders Medical Centre records the most people on its wait list for outpatient clinical care, up to 31,063 people as at the end of the third quarter 2021-22. This is more than double the lowest number waiting on Flinders Medical Centre outpatient waiting lists of 14,507 people recorded at the end of the second quarter 2020-21.

Increasing trends for Flinders Medical Centre, Lyell McEwin Hospital and Modbury Public Hospital have been offset to some degree by falls observed in the Queen Elizabeth Hospital and Royal Adelaide Hospital.

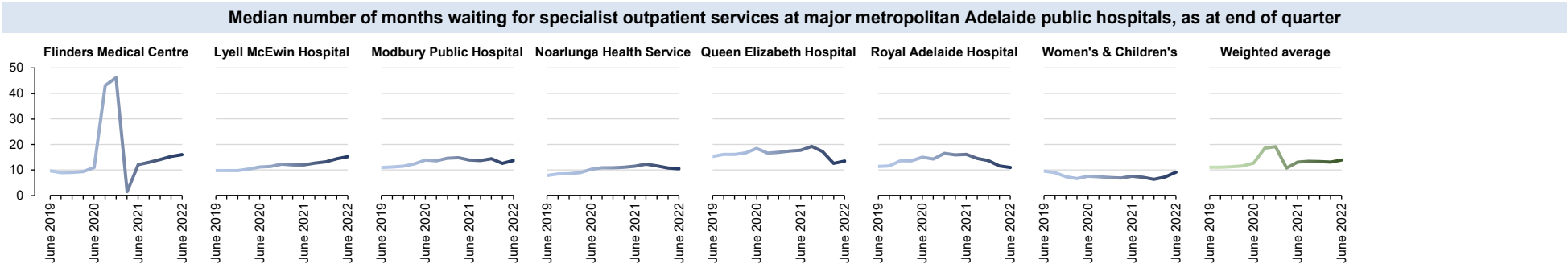
Figure 25: Outpatient wait list size by major metropolitan Adelaide public hospital



Source: SA Health, *Specialist Outpatient Waiting Time Report* data, customised report

The sudden change of trend observed in median outpatient wait times for Flinders Medical Centre in the graph below may reflect data quality issues with the SA Health outpatient data collection. Readers are advised to exercise caution in interpreting results.

Figure 26: Outpatient wait time performance by major metropolitan Adelaide public hospital



Source: SA Health, *Specialist Outpatient Waiting Time Report* data, customised report

1.1.6. **Aged care** wait times

South Australians wait longer for an aged care bed than other Australians, with half waiting more than eight months, an increase of almost two months in the last several years.

The median elapsed time between Aged Care Assessment Team (ACAT) approval and entry into residential aged care has increased in South Australia, from 194 days (6.5 months) in 2018-19 to 253 days (8.4 months) in 2021-22.

The measure of 'elapsed time' is utilised because the period between the ACAT approval and entry into residential aged care may be due to factors which cannot be categorised as 'waiting time'.

Results are from the Productivity Commission's *Report on Government Services*, which rounds data to the nearest month. For example, an elapsed time of 4 months and 23 days is rounded up to 5 months of elapsed time.

In 2021-22, South Australia was ranked second highest of the states and territories for median elapsed time between ACAT approval and entry into residential aged care.

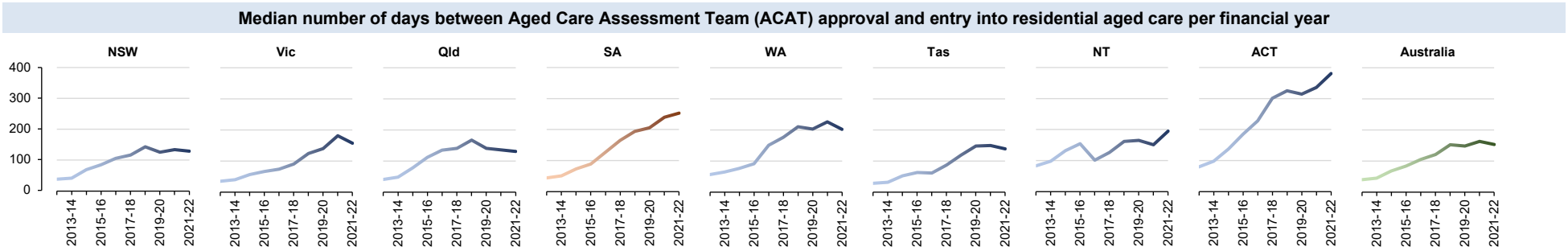
Median elapsed time between ACAT approval and entry into residential aged care is trending up for all states and territories.

Table 11: Aged care wait time performance

Median number of days between ACAT approval and entry into residential aged care	2018-19	2019-20	2020-21	2021-22
South Australia				
ATSI persons	NO DATA			
CALD persons				
Lowest SES residents				
Persons aged 65+ years				
Rural and remote residents				
South Australia total	**194**	**206**	**240**	**253**
AUSTRALIA	**152**	**148**	**163**	**153**
South Australia rank (out of 8)	3	2	2	2

Source: Productivity Commission, *Report on Government Services* data tables

Figure 27: Aged care wait time performance by state and territory



Source: Productivity Commission, *Report on Government Services* data tables

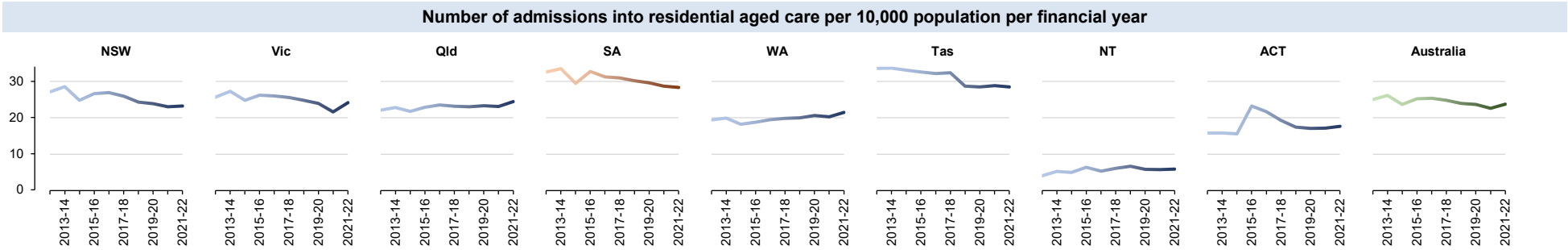
Although trends in wait times for residential aged care are up across the states and territories, including South Australia, admissions to residential aged care—both in absolute numbers and per head of population—are trending down.

In South Australia, there were 5,440 admissions to residential aged care during 2012-13, which represents 32.5 admissions per 10,000 population. By 2021-22 the number has fallen to 5,111 admissions, or 28.3 per 10,000 population.

By comparison nationally, there were 57,887 admissions to residential aged care during 2012-13, which represents 25.0 admissions per 10,000 population. By 2021-22 the absolute number of residential aged care admission in Australia has risen to 60,954 (23.7 admissions per 10,000 population).

South Australia is ranked second highest for admissions to residential aged care per 10,000 population of the states and territories in 2021-22.

Figure 28: Aged care admissions by state and territory



Sources: Productivity Commission, *Report on Government Services* data tables; and
Australian Bureau of Statistics, *ERP by SA2 and above (ASGS 2016), 2001 onwards*

1.2 Experience of care

Almost 85% of overnight adult patients report good experiences of their care, and several measures of patients experience with care are trending down. Across vulnerable populations, Aboriginal and Torres Strait Islander and culturally and linguistically diverse patients offer lower ratings of experiences with care. The percentage of adults who reported that they experience unexpected harm or distress, as a result of their treatment or care, is trending up. Women are more likely than men to report unexpected harm or distress.

An annual survey by SA Health of patients who stayed overnight in public hospitals provides self-reported data on a range of measures of their experiences of and satisfaction with their hospital care. Surveys are undertaken throughout the year and have most recently extended to around 4,320 South Australians interviewed per year.

Note that Riverland Mallee Coorong Local Health Network declined to provide data to the Health Performance Council for this indicator on the basis of data coverage and sample size, although their data is included in statewide figures.

Table 12: Overnight patients' views and concerns listened to

Views and concerns were always or mostly listened to	2018-19	2019-20	2020-21	2021-22
South Australia				
ATSI persons	79%	81%	71%	75%
CALD persons	84%	87%	81%	80%
Persons aged 75+	87%	88%	87%	85%
Rural and remote residents*	88%	90%	87%	82%
South Australia total	**86%**	**88%**	**84%**	**83%**

Well over 80% of adult overnight patients in South Australia are reporting that their **views and concerns were 'always' or 'mostly' listened to** and this varied little by location. In the last two years, men have become more likely to report that their views and concerns were listened to; although there was no difference observed according to whether people identified as culturally and linguistically diverse persons. Aboriginal and Torres Strait Islander patients have been consistently less likely to report success on this measure.

The target should be that patients always feel that their views and concerns are listened to, so there is clear room for improvement here.

Table 13: Overnight patients who feel their needs were met

Individual needs were always or mostly met	2018-19	2019-20	2020-21	2021-22
South Australia				
ATSI persons	86%	81%	71%	83%
CALD persons	86%	89%	85%	81%
Persons aged 75+	88%	92%	91%	88%
Rural and remote residents*	90%	92%	90%	86%
South Australia total	**88%**	**90%**	**87%**	**85%**

A large majority of patients – over 85% – report that their **individual needs were 'always' or 'mostly' met**. In recent years, a gap has opened up between genders: whereas in 2018-19 there was no difference to note between genders, by 2021-22 some 88% of male patients felt that their needs were met compared to 82% of female patients. Broadly, people who identified as culturally or linguistically diverse people were a little less likely to report feeling their needs were met, although the difference was slight; there was no observable difference according to Aboriginal and Torres Strait Islander person status or by location.

Table 14: Overnight patients feel involved as much as wanted in making decisions about treatment and care"

Always or mostly involved as much as wanted in treatment and care	2018-19	2019-20	2020-21	2021-22
South Australia				
ATSI persons	86%	86%	76%	86%
CALD persons	86%	87%	87%	83%
Persons aged 75+	82%	86%	87%	83%
Rural and remote residents*	87%	88%	87%	85%
South Australia total	**85%**	**86%**	**85%**	**84%**

As with other experiences, the large majority of overnight patients – 84% in the latest year – reported being 'always' or 'mostly' **involved as much as they wanted in making decisions about their treatment and care**. There has been almost no change in this rate over the four years of data, nor is there any observable difference between patients of different demographic characteristics such as age, gender, CALD person status or Aboriginal and Torres Strait Islander person status.

Table 15: Overnight patients reporting unexpected harm or distress as a result of treatment or care

Experienced unexpected harm or distress	2018-19	2019-20	2020-21	2021-22
South Australia				
ATSI persons	12%	15%	23%	16%
CALD persons	11%	13%	15%	22%
Persons aged 75+	10%	10%	11%	15%
Rural and remote residents*	11%	10%	11%	14%
South Australia total	**13%**	**13%**	**16%**	**17%**

The proportion of patients who reported that they **experienced unexpected harm or distress as a result of their treatment or care** has increased in recent years, principally driven by the metropolitan Adelaide LHNs.

Around one in six overnight adult patients in South Australia reported having experienced unexpected harm or distress as a result of their treatment or care in 2021-22, having steadily risen from closer to one in eight in 2018-19. There was generally no observable difference in rates between patients who identified as an Aboriginal and/or Torres Strait Islander person or culturally and linguistically diverse person compared to those who did not. However, over the four years of data, women have consistently been more likely than men to experience unexpected harm or distress, this being reported by 21% of female patients compared to 15% of male patients in 2021-22.

Table 16: Self-reported quality of care received by overnight patients

Quality of care reported as good or very good	2018-19	2019-20	2020-21	2021-22
South Australia				
ATSI persons	92%	86%	76%	83%
CALD persons	90%	91%	91%	84%
Persons aged 75+	91%	92%	92%	89%
Rural and remote residents*	92%	92%	89%	86%
South Australia total	**90%**	**90%**	**89%**	**87%**

The large majority of overnight adult patients in South Australia reported that **overall, the quality of the treatment and care they received was 'good' or 'very good'**. In 2021-22, 87% of patients so reported and this rate was consistent across time, location, and by demographic breakdowns. However, there is some evidence that in the last two years, there has been a small divergence between genders on this measure, for although still comparatively high when considered in the overall context of all patients, nonetheless a small gap opened up and in 2021-22 some 90% of male patients compared to 84% of female patients reported 'good' or 'very good' treatment and care.

The proportion of patients who reported that they experienced unexpected harm or distress as a result of their treatment or care has increased in recent years, principally driven by Central and Southern Adelaide local health networks.

Figure 29: Overnight adult patients who reported that their views and concerns were 'always' or 'mostly' listened to

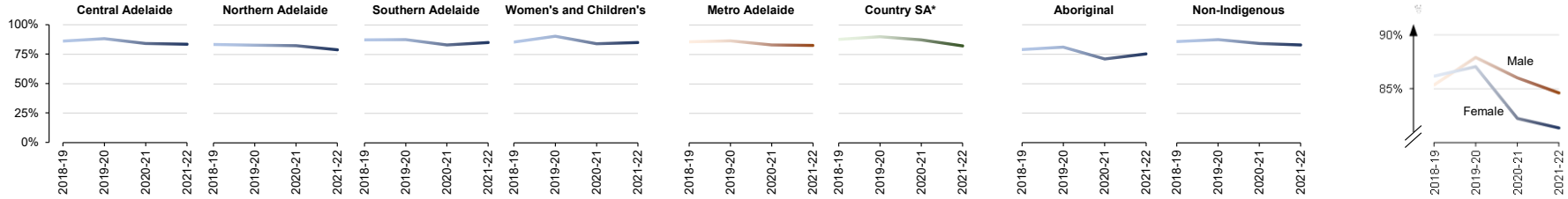


Figure 30: Overnight adult patients who reported that their individual needs were 'always' or 'mostly' met

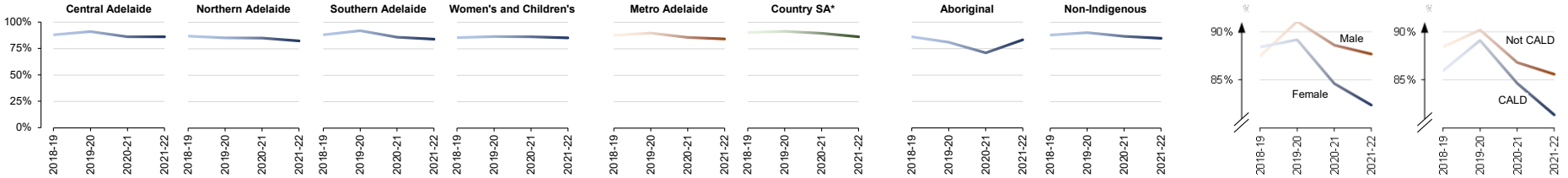


Figure 31: Overnight adult patients who reported that they were 'always' or 'mostly' involved as much as they wanted in decision making about their treatment or care

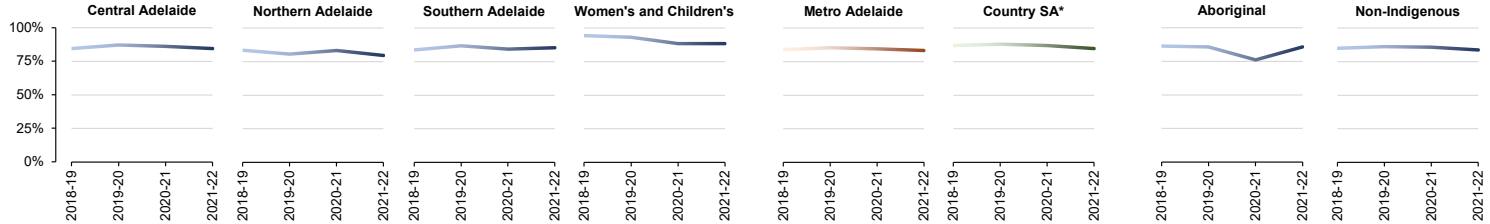


Figure 32: Overnight adult patients who reported that they experienced unexpected harm or distress as a result of their treatment or care

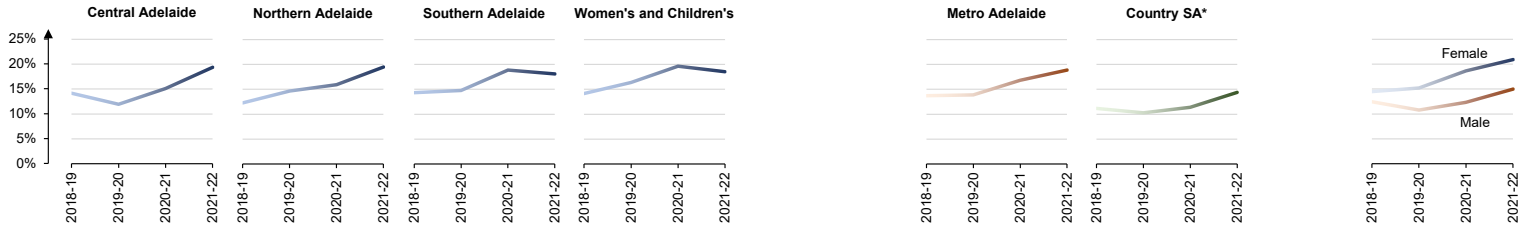
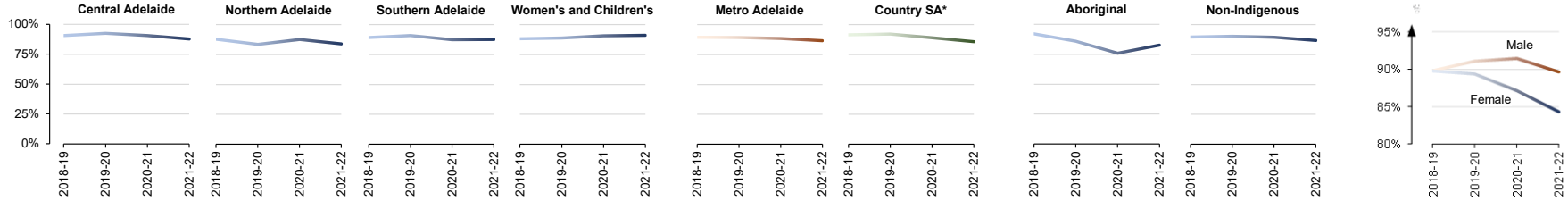


Figure 33: Overnight adult patients who reported that the quality of their treatment and care was 'good' or 'very good'



* Data for Riverland Mallee Coorong LHN patients included in statewide figures but not shown separately and excluded from regional (country SA) figures at their request on the grounds of being based on a small sample of patients at one site. Data for Women's & Children's Hospital is included in this analysis but does not necessarily reflect the experience of all consumers due to the small sample size of inpatients over 16 years of age.

Note: as sample sizes for regional Local Health Networks can be small, breakdowns have been made only for the metropolitan Adelaide LHNs and aggregate figures shown for country SA.

Source: Bespoke data extract from the Measuring Consumer Experience Survey, Prevention and Population Health, Wellbeing SA.

1.3 Length of stay in hospital

In South Australia, 6.2% of all public hospital bed days in 2021-22 were used by people who no longer needed acute care (maintenance care patients), up from 5.4% since 2018-19. The prevalence of beddays attributed to maintenance care varies widely across local health networks. After many years of stability, total overnight inpatient length of stay has increased in 2021-22 in ways likely to impact patients in emergency departments waiting to be admitted.

Maintenance care is care in which the clinical intent or treatment goal is prevention of deterioration in the functional and current health status of a patient.

The primary clinical purpose or treatment goal of maintenance care is support for a patient with impairment, activity limitation or participation restriction due to a health condition. Maintenance care patients have clinical issues generally associated with ageing, or disabilities and complex social issues. The aim of maintenance care is to reduce inappropriately long stays in acute and subacute beds and improve patient flow.

In South Australia over the 2021-22 financial year, 99,239 of the state's 1,605,919 public hospital inpatient total beddays (6.2%) were for maintenance care. This is an increase of 0.8 percentage points over the 5.4% recorded in 2018-19.

The highest rate of maintenance care beddays to all beddays is for persons admitted to hospital aged 65 years or older (9.5%), while the lowest rate is for Aboriginal and Torres Strait Islander persons (3.2%). The rate for Aboriginal and Torres Strait Islander persons in 2021-22 is almost double that from 2018-19 (1.7%).

Table 17: Hospital maintenance care patient performance

South Australian public hospital maintenance care beddays as a percentage of total South Australian public hospital beddays	2018-19	2019-20	2020-21	2021-22
South Australia				
ATSI persons	1.7%	2.4%	1.8%	3.2%
CALD persons	5.0%	6.2%	5.4%	6.7%
Lowest SES residents	4.6%	5.8%	5.3%	6.6%
Persons aged 65+ years	9.0%	8.9%	8.4%	9.5%
Rural and remote residents	7.4%	6.8%	5.7%	7.6%
South Australia total	**5.4%**	**6.3%**	**5.4%**	**6.2%**
Maintenance care beddays (no.)	**82,233**	**94,902**	**82,947**	**99,239**
Total beddays (no.)	1,524,919	1,513,549	1,527,569	1,605,919
Maintenance care inpatient average length of stay (days)	21.9 days	22.5 days	19.5 days	22.6 days
Total *overnight* inpatient average length of stay (days)	5.7 days	5.7 days	5.7 days	6.1 days

Source: SA Health, *Admitted Activity (ISAAC) data collection* customised extract

As a state percentage of the total, 64.4% of all maintenance care beddays were in metropolitan Adelaide (32.6% in the Central Adelaide Local Health Network) and the remaining 34.3% in Country SA (combined).

If South Australia halved the total number of maintenance care beddays from the 99,239 recorded in 2021-22 to 50,000 per year, by improved discharge processes and links with aged or disability care, more than 8,000 overnight patients could be admitted per year (if the average stay of 6.1 days remained constant).

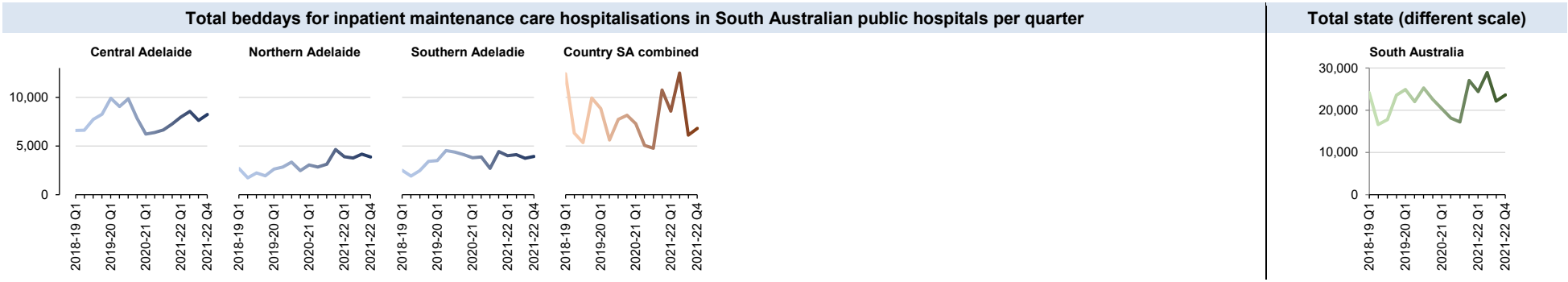
Table 18: Hospital maintenance care beddays by local health network

Local health network of hospital	Maintenance care beddays Total number 2021-22	Maintenance care beddays State percentage 2021-22
Central Adelaide	32,387	32.6%
Northern Adelaide	15,726	15.8%
Southern Adelaide	15,797	15.9%
Metropolitan Adelaide	**63,910**	**64.4%**
Country SA (combined)	**34,024**	**34.3%**
South Australia total*	**99,239**	**100.0%**

Source: SA Health, *Admitted Activity (ISAAC) data collection* customised extract
Country South Australia local health networks data is combined as inpatient activity for maintenance care type hospitalisations is too low to report separately.
* The South Australian total includes a small amount of data where the local health network of the hospital could not be defined at time of extraction. Women's and Children's Health Network did not record any maintenance care type hospitalisations.

Across the state, maintenance care beddays are trending up over the 2018-19 to 2021-22 time series. At the individual local health network level, most of the maintenance care beddays are in the Central Adelaide Local Health Network. Country South Australia local health network data is combined due to insufficient data.

Figure 34: Hospital maintenance care total beddays by local health network

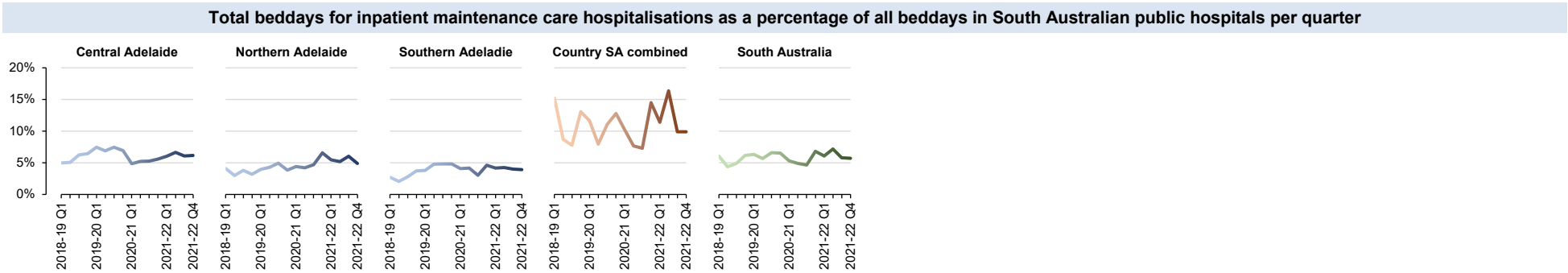


Source: SA Health, *Admitted Activity (ISAAC) data collection* customised extract. Country SA local health networks combined due to insufficient data to report separately.

Within the metropolitan Adelaide local health networks, maintenance care beddays as a percentage of all beddays ranged between a relatively narrow band of 2.0% to 7.5%. The percentage across the combined Country South Australia local health networks was higher and the variation greater. Across South Australia as a whole, the trend is relatively stable.

Country South Australia local health networks data is combined as inpatient activity for maintenance care type hospitalisations is too low to report separately.

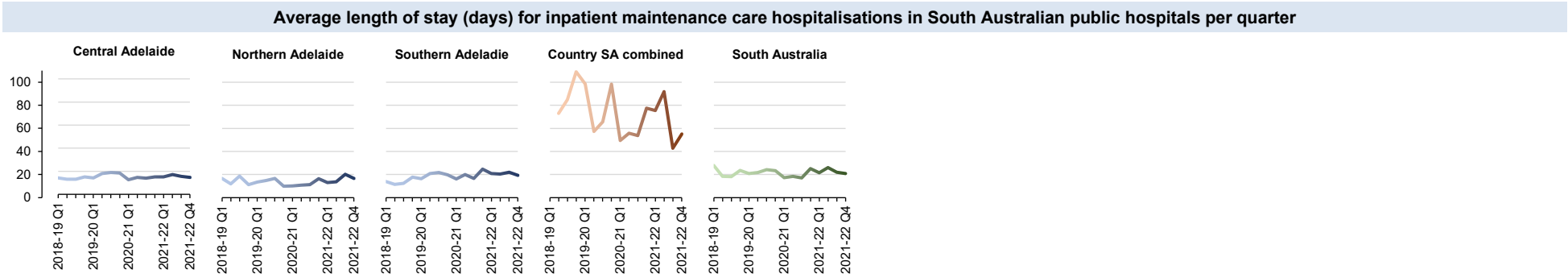
Figure 35: Hospital maintenance care percentage beddays by local health network



Source: SA Health, *Admitted Activity (ISAAC) data collection* customised extract. Country SA local health networks combined due to insufficient data to report separately.

The average length of stay for maintenance care type hospitalisations in Country South Australia local health networks is much higher than the metropolitan Adelaide local health networks. The overall trend for maintenance care average length of stay in Country South Australian local health networks is down.

Figure 36: Hospital maintenance care average length of stay by local health network

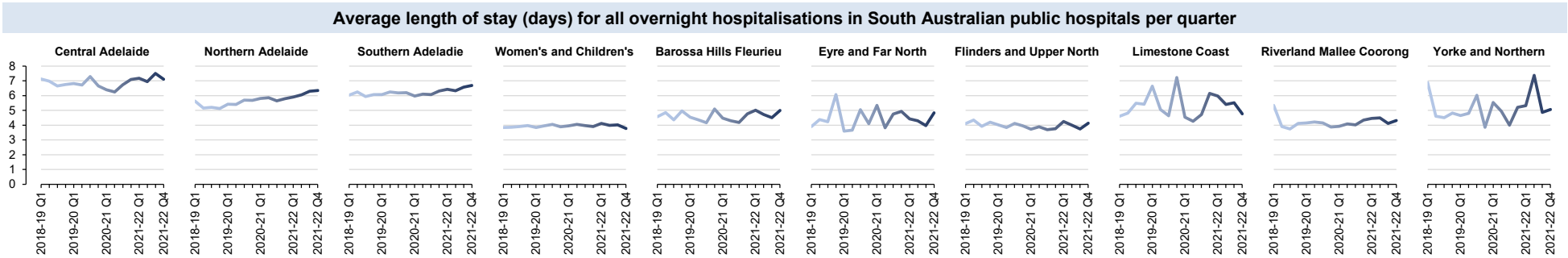


Source: SA Health, *Admitted Activity (ISAAC) data collection* customised extract. Country SA local health networks combined due to insufficient data to report separately.

The average length of stay for *all* overnight admissions is trending up in the Northern Adelaide and Southern Adelaide local health networks over the 2018-19 to 2021-22 time series.

- In the Northern Adelaide Local Health Network, overnight average length of stay has risen from 5.6 days in the first quarter of 2018-19 to 6.3 days in the fourth quarter of 2021-22.
- In the Southern Adelaide Local Health Network, overnight average length of stay has risen from 6.0 days in the first quarter of 2018-19 to 6.7 days in the fourth quarter of 2021-22.
- Average length of stay for overnight hospitalisations in the Central Adelaide Local Health Network are relatively stable but higher than the other networks at around 7.0 days.

Figure 37: Hospital overnight average length of stay by local health network



Source: SA Health, *Admitted Activity (ISAAC) data collection* customised extract. Does not include sameday inpatients.

1.4 Culturally appropriate care

Only a third of overnight patients are being asked if they have cultural or religious beliefs that might affect their care. Older patients (75+) are particularly unlikely to be asked.

Culturally and linguistically diverse patients are more likely to report needing an interpreter, and it is good to note that they are also more likely to report having had access to one when needed.

An annual survey by SA Health of patients who stayed overnight in public hospitals provides self-reported data on whether they were provided access to interpreter (of needed) and whether they were asked about cultural/religious beliefs affecting their care. Surveys are undertaken throughout the year and around 4,230 South Australians were interviewed in the latest calendar year.

Note that Riverland Mallee Coorong Local Health Network declined to provide data to the Health Performance Council for this indicator on the basis of data coverage and sample size, although their data is included in statewide figures.

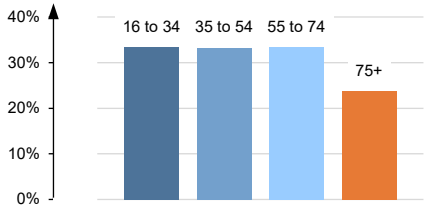
Patients asked if they had cultural or religious beliefs affecting their care

Overnight stay patients were asked 'Did anyone ask whether you had any cultural or religious beliefs that might affect the way you were treated in hospital?'

State-wide, only around a third of patients in each year report having been asked if they had cultural or religious beliefs that might affect their care. For those who were asked, around three to four times as many were asked after admission rather than pre-admission.

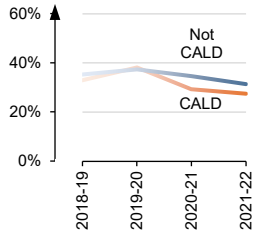
Partly because of small sample sizes at some sites, there is little variation to note between the LHNs. There is also no difference identified between the metropolitan Adelaide LHNs and the country LHNs. Increasing the numbers of patients surveyed in future may assist with identifying whether there is indeed regional variation.

About the same fraction of men and women reported having been asked this question in each year.



People aged 75+ are not being asked this important question of care needs to the same degree as younger people. Fewer than one quarter of respondents aged 75+ reported being asked this question in 2021-22, compared to around a third of all other age bands.

About one in every six people surveyed across the state identified as being 'culturally or linguistically diverse (CALD) patients. In last two financial years in particular, CALD persons were not being asked this question about their care needs to the same degree as people who do not so identify: 27% of CALD-identified patients compared to 31% of non-CALD-identified patients in the latest year.



The data does not suggest that Aboriginal and Torres Strait Islander persons are any more or less likely to be asked this question about their needs than other persons. However, numbers of Aboriginal and Torres Strait Islander persons surveyed may be too small to reliably detect any difference if it does exist.

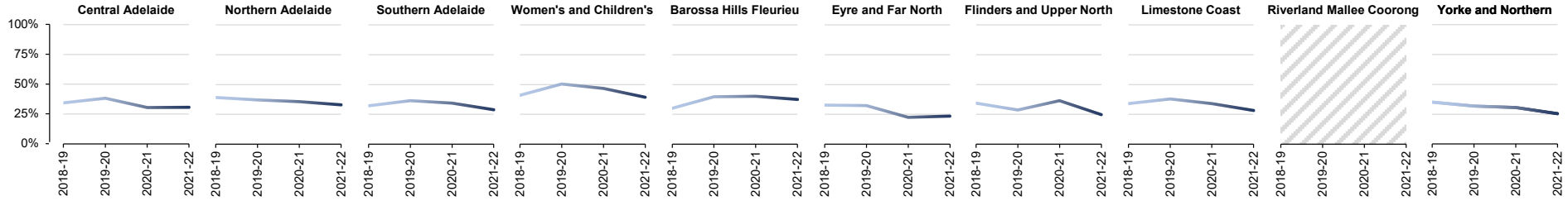
Table 19 and inline graphs: proportion of patients who were asked if they had any cultural or religious beliefs that might affect the way they were treated in hospital

Patients asked if any cultural or religious beliefs affecting care	2018-19	2019-20	2020-21	2021-22
South Australia				
ATSI persons	*numbers too small for analysis*			
CALD persons	33%	38%	29%	27%
Persons aged 75+	24%	27%	24%	24%
Rural and remote residents*	34%	33%	34%	29%
South Australia total	**35%**	**37%**	**34%**	**30%**
AUSTRALIA	NO DATA			
South Australia rank (out of 8)				

* Data for Riverland Mallee Coorong LHN patients included in statewide figures but not shown separately and excluded from regional (country SA) figures at their request on the grounds of being based on a small sample of patients at one site. Data for Women's & Children's Hospital is included in this analysis but does not necessarily reflect the experience of all consumers due to the small sample size of inpatients over 16 years of age.

Source: Bespoke data extract from the Measuring Consumer Experience Survey, Prevention and Population Health, Wellbeing SA.

Figure 38: Proportion of patients who were asked if they had any cultural or religious beliefs that might affect the way they were treated in hospital



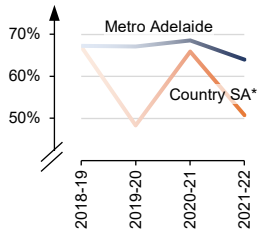
Note: based on surveys of adult (16+) patients only for all health networks including Women's & Children's; data not provided to Health Performance Council for Riverland Mallee Coorong LHN

Patients provided with an interpreter if required

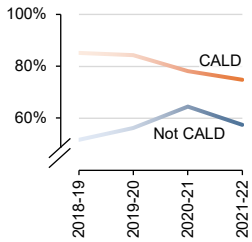
Overnight stay patients were asked 'If you needed one, did you have access to an interpreter?'.

In recent years, around one in seven patients in South Australia report having needed an interpreter. Of those who needed one, fewer than 70% reported that an interpreter was provided, and this figure dipped to just 61% for the 2021-22 financial year.

Because of small numbers of patients surveyed in each LHN who needed an interpreter, no meaningful comparison is possible to make between LHNs in whether an interpreter was provided. Increasing the size of the survey sample may assist with identifying any variation between LHNs in the future.



Although there was little difference in the proportion of patients who needed an interpreter, people in Metropolitan Adelaide have been more likely to be provided with one when needed than those in country South Australia.



Older patients were less likely to report needing interpreters than younger patients: in 2021-22, around 12% of patients aged 75+ needed an interpreter compared to 17% of those aged 16–34. However, for those patients who needed an interpreter, there is no difference to report in the extent to which they did have access.

Culturally and linguistically diverse (CALD) persons were more likely to report needing an interpreter: around 30% compared to 11% for non-CALD persons in 2021-22. Those CALD patients who did need an interpreter also reported much greater success at having access to one compared to non-CALD patients.

Very few patients who identified as Aboriginal and/or Torres Strait Islander reported requiring an interpreter, and due to the small numbers, no further analysis has been made.

Table 20 and inline graphs: proportion of patients who had access to an interpreter when one was needed

Patents provided with an interpreter if one was needed	2018-19	2019-20	2020-21	2021-22
South Australia				
ATSI persons	*numbers too small for analysis*			
CALD persons	85%	84%	78%	75%
Persons aged 75+	71%	62%	68%	63%
Rural and remote residents*	67%	48%	66%	51%
South Australia total	**69%**	**65%**	**69%**	**61%**
AUSTRALIA	NO DATA			
South Australia rank (out of 8)				

* Data for Riverland Mallee Coorong LHN patients included in statewide figures but not shown separately and excluded from regional (country SA) figures at their request on the grounds of being based on a small sample of patients at one site. Data for Women's & Children's Hospital is included in this analysis but does not necessarily reflect the experience of all consumers due to the small sample size of inpatients over 16 years of age.

Source: Bespoke data extract from the Measuring Consumer Experience Survey, Prevention and Population Health, Wellbeing SA.

1.5 **When things go wrong** — Hospital acquired complications

The overall rate of hospital acquired complications is relatively low and trending down across the majority of local health networks.

Rates of hospital acquired complications measure how well safety and quality in health services is targeted. This section uses nationally agreed definitions of hospital acquired complications, acknowledging that they do not incorporate all conditions that arise during the course of an inpatient admission.

The overall rate of hospital acquired complications is relatively low and varies across specific population groups. Inpatients aged 65 years or over recorded higher-than-average rates (2.2%) in 2021-22. Rates vary across local health networks, from 2.6% in Southern Adelaide down to 0.2% in Eyre and Far North. Trends in local health networks are mostly down.

Table 21: Hospital acquired complication rates by population group, 2021-22

Hospital acquired complications (% inpatient hospitalisations)	2018-19	2019-20	2020-21	2021-22
South Australia				
ATSI persons				0.9%
CALD persons				1.5%
Lowest SES residents		NO DATA		1.3%
Persons aged 65+ years				2.2%
Rural and remote residents				1.2%
South Australia total				**1.5%**
AUSTRALIA	**2.2%**	**2.1%**	**2.0%**	Aval. Oct. 2023
South Australia rank (out of 8)	NO DATA			

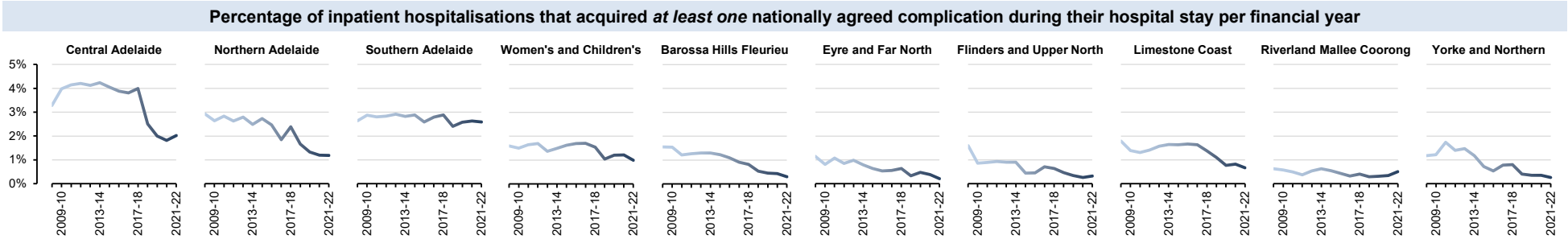
Sources: SA Health, *Admitted Patient Care data* customised extract; and AIHW, *Admitted Patient Care* data tables

A hospital acquired complication refers here to a complication for which clinical risk mitigation strategies may reduce (but not necessarily eliminate) the risk of that complication occurring. A nationally-agreed list of 16 high priority HACs was developed through a comprehensive process with clinicians, managers and others to work together to address and improve patient care.

The national list of 16 hospital acquired complications are:

1. Cardiac complications
2. Delirium
3. Falls resulting in fracture or intracranial injury
4. Gastrointestinal bleeding
5. Healthcare-associated infection
6. Malnutrition
7. Medication complications
8. Neonatal birth trauma
9. Persistent incontinence
10. Pressure injury
11. Renal failure
12. Respiratory complications
13. Surgical complications requiring unplanned return to theatre
14. Third and fourth degree perineal laceration during delivery
15. Unplanned intensive care unit admission
16. Venous thromboembolism.

Figure 39: Hospital acquired complication rates by local health network, 2008-09 to 2021-22



SA Health, *Admitted Patient Care data* customised extract

2. **Outcomes:** Preventable mortality and morbidity

2.1 **Cancer** mortality

South Australia has a slightly higher rate of breast cancer deaths among the female population, but similar rates of lung, colorectal and prostate cancer deaths.

Four common cancers, among the twenty leading causes of death in every part of Australia, are analysed for the period 2016 to 2020: lung cancer, colorectal cancer, breast cancer (female residents only) and prostate cancer (male residents only).

Over the five-year period 2016-2020, lung cancer and colorectal cancers were among the leading causes of death for both men and women in every area of South Australia, breast cancer was a leading cause of death in every area for women, and prostate cancer a leading cause of death in every area for men.

Cancer mortality varies with age and, South Australia having a more ageing population than some other states can therefore be expected to have a higher rate of cancer mortality before accounting for any other systemic state-specific reasons for a difference in deaths. After adjusting for differences in the population age structure, South Australians died from the four cancers presented here at a broadly similar rate to that of Australians overall during 2016-2020. However, albeit by a slim margin, breast cancer deaths among female residents were higher than in any other state or territory.

Although limited data means it has not been possible to account for differences in age structure between the South Australian LHNs, the Yorke and Northern LHN area, covering the Yorke Peninsula and the mid-north region of the state, ranked worst (or second worst) for mortality rate for all four of the cancers when considering crude death rates.

People in country South Australia had a higher mortality rate than people in metropolitan Adelaide for all four cancers.

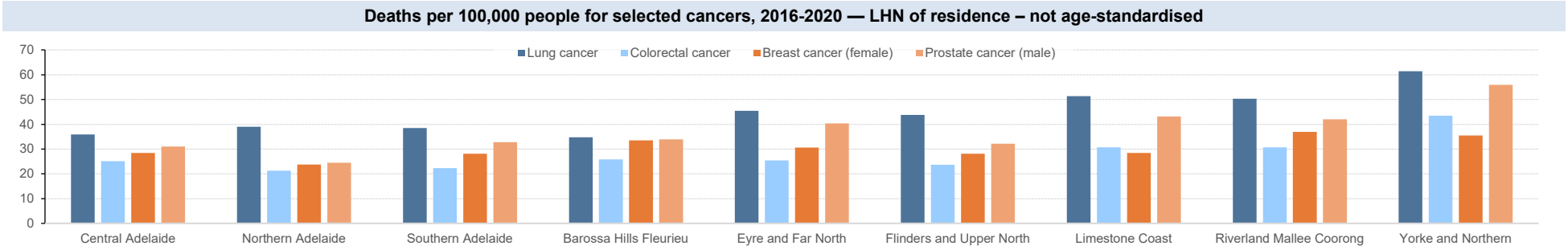
Table 22: Selected cancer deaths per 100,000 population, 2016-2020

Cancer deaths (age-standardised rate per 100,000 people)	Lung cancer	Colorectal cancer	Breast cancer (female)	Prostate cancer (male)
Metropolitan Adelaide	27.9	16.7	19.6	23.0
Country South Australia	28.6	19.4	21.2	26.8
South Australia overall	**28.1**	**17.5**	**20.1**	**24.2**
New South Wales	27.8	17.5	19.2	23.4
Victoria	26.5	17.2	19.6	24.3
Queensland	30.7	18.7	19.3	28.3
Western Australia	26.5	14.3	18.0	20.9
Tasmania	32.8	19.8	19.4	25.6
ACT	21.7	20.0	19.4	25.6
NT	43.4	20.0	18.5	26.6
AUSTRALIA	**28.1**	**17.4**	**19.3**	**24.5**
South Australia rank (out of 8) *lower is better*	5	3	8	3

Deaths data are collected centrally from registries of births, marriages and deaths, and from the National Coronial Information System; causes of deaths are coded by Australian Bureau of Statistics. Data for LHN regions based on analysis of data at Australian Bureau of Statistics 'SA3' level and aggregated to Local Health Network.

Source: Based on data from Australian Institute of Health and Welfare (2022) *Mortality Over Regions and Time (MORT) books: Statistical Area Level 3 (SA3), 2016–2020*, AIHW, Australian Government.

Figure 40: Selected cancer deaths per 100,000 population, 2016-2020



2.2 Potentially preventable hospitalisations

The percentage of potentially preventable hospitalisations in South Australian public hospitals is trending down.

People can attend hospital for reasons that could have been avoided with preventative health care—by GPs, dentists or in other community health care settings—or with broader, public health interventions.

In some cases, these hospitalisations should not have occurred at all (eg. vaccine-preventable conditions). In other cases, good primary care, community health care or public health can potentially reduce the rate of admissions for select acute or chronic conditions.

In South Australia during 2021-22, around 1 in 13 (7.6%) of hospitalisations in public hospitals were defined as potentially preventable. This is down from the 8.8% recorded in 2018-19.

For specific population cohorts, the percentage of potentially preventable hospitalisations in 2021-22 was highest amongst persons aged 65 years or over (8.7%) and lowest for Aboriginal and Torres Strait Islander persons (6.5%).

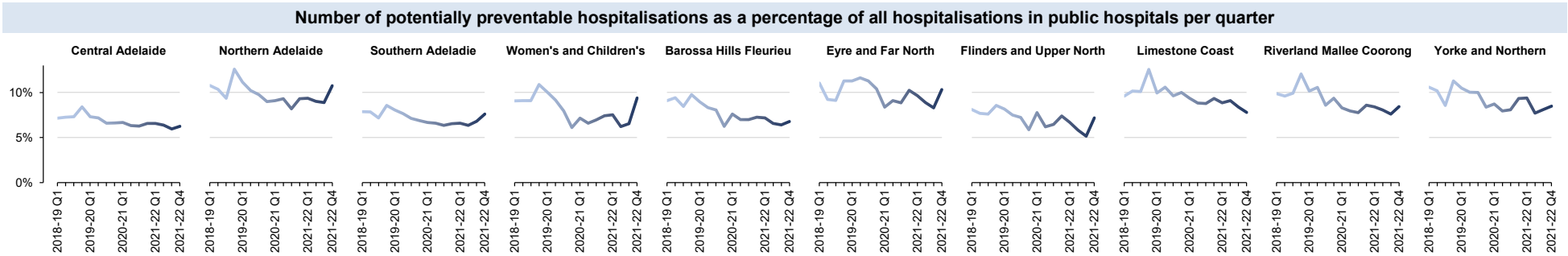
In the fourth quarter of 2021-22, the highest percentage of potentially preventable hospitalisations is recorded in the Northern Adelaide Local Health Network (10.8%). The lowest is recorded in the Central Adelaide Local Health Network (6.2%).

Table 23: Potentially preventable hospitalisations

Potentially preventable hospitalisations as a percentage of all hospitalisations in South Australian public hospitals	2018-19	2019-20	2020-21	2021-22
South Australia				
ATSI persons	8.1%	7.4%	7.2%	6.5%
CALD persons	7.6%	7.1%	6.6%	6.9%
Lowest SES residents	9.1%	8.6%	7.9%	8.0%
Persons aged 65+ years	10.1%	9.3%	8.6%	8.7%
Rural and remote residents	9.1%	8.5%	7.5%	7.3%
South Australia total	**8.8%**	**8.2%**	**7.4%**	**7.6%**
AUSTRALIA	NO DATA			
South Australia rank (out of 8)				

Source: SA Health, Admitted Activity (ISAAC) data collection customised extract.

Figure 41: Potentially preventable hospitalisations by local health network — percentage



Source: SA Health, *Admitted Activity (ISAAC) data collection* customised extract.

Diseases for which hospitalisation is considered potentially preventable are grouped across three categories:

Acute conditions

Cellulitis; convulsions and epilepsy; dental conditions; ear, nose and throat infections; eclampsia; gangrene; pelvic inflammatory disease; perforated/bleeding ulcer; pneumonia (not vaccine-preventable); urinary tract infections (including kidney infections).

Chronic conditions

Angina; asthma; bronchiectasis; chronic obstructive pulmonary disease (COPD); congestive cardiac failure; diabetes complications; hypertension; iron deficiency anaemia; nutritional deficiencies; rheumatic heart diseases.

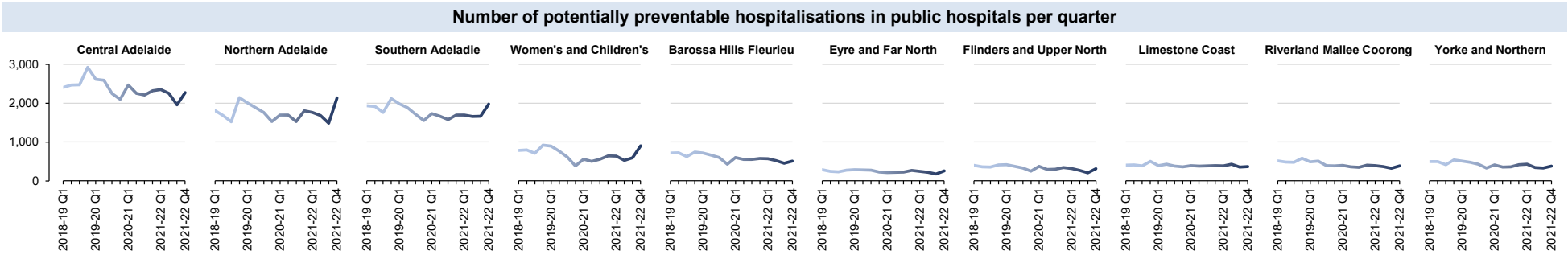
Vaccine-preventable conditions

Chicken pox (varicella); diphtheria; German measles (rubella); haemophilus meningitis; hepatitis B; influenza; measles; mumps; pneumonia (vaccine-preventable); polio; rotavirus; tetanus; whooping cough (pertussis).

For context, the raw numbers behind the percentages are graphed below. In 2021-22, of the more than 466,000 hospitalisations of all care types in public hospitals across the state, around 35,500 (7.6%) were defined as potentially preventable.

Metropolitan Adelaide local health networks make up the bulk of potentially preventable hospitalisations — Central Adelaide with 8,832 in 2021-22, Northern Adelaide with 7,057, and Southern Adelaide with 6,989.

Figure 42: Potentially preventable hospitalisations by local health network — number



Source: SA Health, *Admitted Activity (ISAAC) data collection* customised extract.

2.3 Childhood immunisation

South Australia is largely exceeding national targets for immunisation rates among all children in the state. However, immunisation coverage is below target and worse for Aboriginal and Torres Strait Islander children in South Australia than many other parts of Australia.

The National Immunisation Program provides children in Australia with access to free-of-charge immunisations against a variety of diseases. Standard schedules of immunisations by age are set separately for Aboriginal and Torres Strait Islander children. Children who have received all the vaccines recommended for their age are considered 'fully immunised'. A national 'aspirational' target immunisation rate of 95% is intended to provide sufficient herd immunity to prevent disease spread. Coverage is monitored nationally for ages 1, 2 and 5.

Table 24: Childhood immunisation rates — one year old

Children fully immunised at age 1	2018-19	2019-20	2020-21	2021-22
South Australia				
All children	94.6%	95.0%	95.0%	94.6%
ATSI children	90.6%	91.3%	92.4%	92.3%
CALD children	*Data not available to Health Performance Council*			
AUSTRALIA				
All children	**94.3%**	**94.9%**	**94.6%**	**94.2%**
ATSI children	**92.6%**	**93.8%**	**92.4%**	**91.5%**
South Australia rank (out of 8)				
All children	3	5	3	3
ATSI children	7	7	5	4

Although not always meeting the 95% target, South Australia has consistently had among the highest immunisation rates of any state for all children. However, Aboriginal and Torres Strait Islander children in South Australia have had consistently low immunisation coverage, not only failing to achieve the national 95% target but also trailing most other states' coverage. The latest year's figures show signs of possible improvement, but it is too early to say whether the trend is in fact changing for the better.

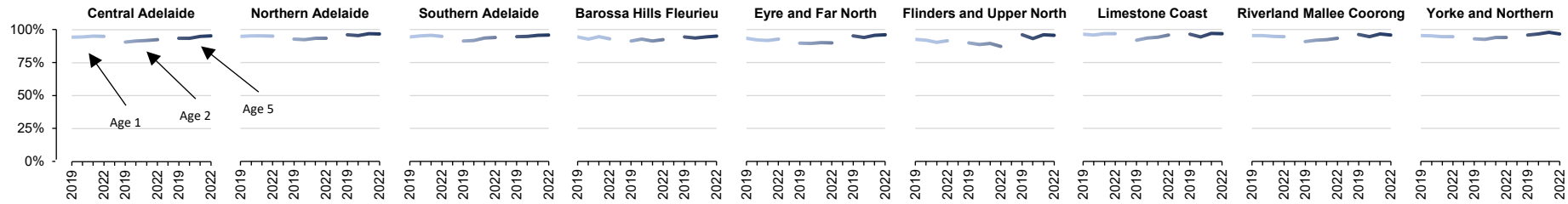
Table 25: Childhood immunisation rates — five years old

Children fully immunised at age 5	2018-19	2019-20	2020-21	2021-22
South Australia				
All children	94.8%	95.1%	96.1%	96.0%
ATSI children	≥ 95.0%	≥ 95.0%	≥ 95.0%	96.8%
CALD children	*Data not available to Health Performance Council*			
AUSTRALIA				
All children	**94.8%**	**95.1%**	**95.0%**	**94.5%**
ATSI children	**97.0%**	**97.3%**	**96.8%**	**96.5%**
South Australia rank (out of 8)				
All children	4	3	1	1
ATSI children	3	3	4	3

All LHN regions in South Australia achieved or exceeded the 95% target immunisation coverage for children aged five in the latest year. For children at age one, the coverage is more variable between regions. The Flinders & Upper North LHN region as generally lagged other regions a little, achieving only 92% coverage in 2021-22. We do not have coverage data by LHN region specifically for Aboriginal and Torres Strait Islander children so are unable to make a solid inference as to whether this lower coverage overall in Flinders & Upper North is due to poor immunisation rates for Aboriginal and Torres Strait Islander children in the region.

Data for immunisation rates broken down by dimensions of cultural and linguistic diversity were requested from the Federal Government's 'AIR-MADIP' data linkage program but have not been received at the time of preparing this report.

Figure 43: Childhood immunisation rates — fraction of children fully immunised at age 5 — LHN of residence



Sources: Department of Health and Aged Care, Australian Immunisation Register Coverage Reports; Australian Bureau of Statistics, Estimated Resident Population by SA2, age and sex

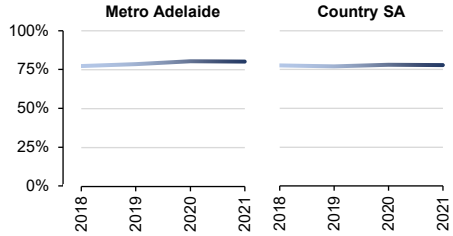
2.4 Self-reported good health

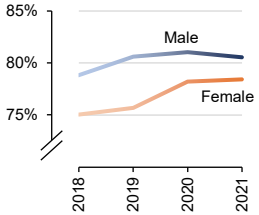
A large majority of South Australians report their health to be 'good' (or better), and there have been steady improvements in this self-reported measure.

Aboriginal and Torres Strait Islander people, women and those living in more rural and remote regions less commonly reported good health.

A large majority – four fifths – of South Australians self-report that their health is 'good', 'very good' or 'excellent', according to a state-wide population health survey. This has changed little over time, falling within a band of 77.4% in 2018 to 79.4% in 2021.

There is a modest regional variation. In the last couple of years, fewer people in country SA are reporting good or better health than in Metropolitan Adelaide*, and generally there is a slightly lower rate of good self-reported health in the outer regional and more remote areas than in the inner regional LHN areas; however, there may be an improvement observed over time for residents in the Eyre and Far North LHN area.





There is a small but significant tendency for men to report good health at a higher rate than women, although the gap has narrowed a little over four years, from 75.0% vs 78.8% in 2018 to 78.4% vs 80.6% in 2021.

Considering all four years of data combined (for statistical integrity owing to small numbers), only 72% of people who identified as Aboriginal and/or Torres Strait Islander reported good or better health, markedly less than the 79% for non-ATSI people. A larger sample of Aboriginal and Torres Strait Islander people in future might allow for deeper insights and possible improvements over time to be identified.

Table 26: Self-reported good health 'excellent', 'very good' or 'good' – adults 18+

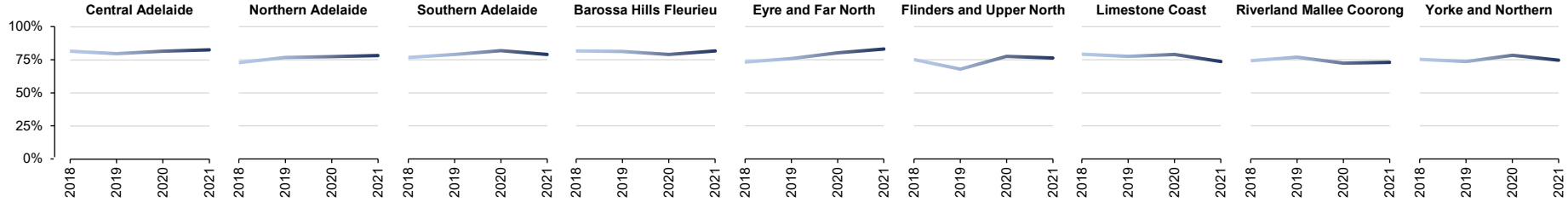
	2018	2019	2020	2021
Northern Adelaide	72.9%	76.8%	77.3%	78.2%
Central Adelaide	81.5%	79.8%	81.5%	82.7%
Southern Adelaide	76.8%	79.0%	82.0%	79.0%
Metropolitan Adelaide	**77.3%**	**78.5%**	**80.3%**	**80.1%**
Barossa Hills Fleurieu	81.7%	81.4%	78.9%	81.7%
Eyre and Far North	73.2%	76.0%	80.3%	83.1%
Flinders and Upper North	75.1%	67.9%	77.6%	76.4%
Limestone Coast	79.3%	77.5%	79.0%	73.6%
Riverland Mallee Coorong	74.2%	77.1%	72.4%	73.1%
Yorke and Northern	75.2%	73.8%	78.4%	74.7%
Country South Australia	**77.7%**	**77.1%**	**78.0%**	**77.8%**
South Australia	**77.4%**	**78.1%**	**79.6%**	**79.4%**

Sources: Bespoke extract from the South Australian Population Health Survey, Government of South Australia

All data based on calendar years as is conventional for reporting from this survey. Data for South Australians aged over 5.

* Differences stated are statistically significant

Figure 44: Self-reported good health is 'excellent', 'very good' or 'good – LHN of residence'



3. Costs of hospital care

3.1 Costs of hospital care — **TOTAL**

South Australian public hospitals are relatively less cost-efficient than the national average, after considering differences between states in types of patients served. The cost of treating a person in a South Australian public hospital is almost 10% more than the Australian average. In the Central Adelaide Local Health Network the cost of treating a patient is almost 30% more than the Australian average, though this region has more beds per capita and serves patients from other parts of the state that require specialist care only available in high volume centres. Increased efficiency, in costs and length of stay, can improve patient flow from emergency departments to hospital and reduce the length of time ambulance patients wait to be admitted to emergency departments.

Total costs of delivering all hospital care in this section are summarised from the Independent Hospital Pricing Authority's (IHPA) public benchmarking web portal. Latest data is for 2019-20.

There were 2,023,806 costed records for South Australia for the 2019-20 financial year for all care type streams combined as reported on the IHPA portal.

The average cost to deliver health service activity in South Australia is $6,757 per *national weighted activity unit* (NWAU), or $1,860 per episode of care.

The NWAU is a measure of health service activity expressed as a common unit, against which the National Efficient Price (NEP) is paid. The NWAU provides a way of comparing and valuing each public hospital service, whether it is an emergency department presentation, admission or outpatient episode, weighted for clinical complexity.

South Australia ranks third highest of the states and territories for total hospital expenditure per NWAU and highest for total hospital expenditure per episode.

South Australia's expenditure on delivering hospital care in its public hospitals was $3,764.3 million in 2019-20.

Total hospital care provided by the Central Adelaide Local Health Network is 27.5% more costly than the Australian average (comparing expenditure per NWAU).

Table 27: Total cost of delivering all hospital care by local health network

Local Health Network of service	Total costed episodes 2019-20	Expenditure per NWAU 2019-20	Expenditure per episode 2019-20	Total expenditure 2019-20
Metro. Adelaide (excl. WCHN*)	**1,541,900**	**$6,948**	**$1,995**	**$3,076.0m**
Central Adelaide	663,508	$7,891	$2,268	$1,505.1m
Northern Adelaide	394,009	$6,061	$1,634	$644.0m
Southern Adelaide	484,383	$6,360	$1,914	$927.0m
Women's and Children's*	280,884	$6,653	$1,233	$346.4m
Country SA	**201,022**	**$5,483**	**$1,700**	**$341.8m**
Barossa Hills Fleurieu	64,954	$5,114	$1,322	$85.9m
Eyre and Far North	13,351	$4,600	$1,989	$26.5m
Flinders and Upper North	43,795	$5,993	$1,873	$82.0m
Limestone Coast	29,017	$5,975	$2,212	$64.2m
Riverland Mallee Coorong	32,086	$5,183	$1,527	$49.0m
Yorke and Northern	17,819	$5,804	$1,918	$34.2m
South Australia	**2,023,806**	**$6,757**	**$1,860**	**$3,764.3m**
AUSTRALIA	**31,369,328**	**$6,190**	**$1,548**	**$48,552.8m**
South Australia rank (out of 8)	5	3	1	5

Source: Independent Hospital Pricing Authority web portal *Women's and Children's Health Network is a statewide service

Table 28: Total cost of delivering all hospital care by state and territory

2019-20	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Expenditure per NWAU	$5,952	$6,020	$6,064	$6,757	$7,065	$7,133	$6,167	$6,433	**$6,190**
Expenditure per episode	$1,451	$1,813	$1,369	$1,860	$1,570	$1,725	$1,676	$1,283	**$1,548**

Source: Independent Hospital Pricing Authority web portal

3.2 Costs of hospital care — **Admitted acute**

South Australia ranks second highest of the states and territories for admitted acute care hospital expenditure per episode of care.

Costs of delivering admitted acute hospital care in this section are summarised from the Independent Hospital Pricing Authority's (IHPA) public benchmarking web portal. Latest data is for 2019-20.

There were 378,157 costed records for South Australia for the 2019-20 financial year for the admitted acute care type stream reported on the IHPA portal.

The average cost to deliver admitted acute health service activity in South Australia is $6,523 per *national weighted activity unit* (NWAU), or $6,200 per episode of care.

The NWAU is a measure of health service activity expressed as a common unit, against which the National Efficient Price (NEP) is paid. The NWAU provides a way of comparing and valuing each public hospital service, whether it is an emergency department presentation, admission or outpatient episode, weighted for clinical complexity.

South Australia ranks third highest of the states and territories for admitted acute hospital expenditure per NWAU and second highest for admitted acute hospital expenditure per episode.

South Australia's expenditure on delivering admitted acute hospital care in its public hospitals was $2,344.5 million in 2019-20.

Admitted acute hospital care provided by the Central Adelaide Local Health Network is 20.1% more costly than the Australian average (comparing expenditure per NWAU).

Table 29: Cost of delivering admitted acute hospital care by local health network

Local Health Network of service	Total costed episodes 2019-20	Expenditure per NWAU 2019-20	Expenditure per episode 2019-20	Total expenditure 2019-20
Metro. Adelaide (excl. WCHN*)	**273,257**	**$6,726**	**$6,862**	**$1,875.1m**
Central Adelaide	123,064	$7,481	$7,777	$957.0m
Northern Adelaide	64,416	$5,781	$5,529	$356.2m
Southern Adelaide	85,777	$6,296	$6,551	$561.9m
Women's and Children's*	29,704	$6,135	$7,386	$219.4m
Country SA	**75,196**	**$5,572**	**$3,324**	**$250.0m**
Barossa Hills Fleurieu	23,991	$5,230	$2,503	$60.1m
Eyre and Far North	5,334	$5,104	$4,359	$23.2m
Flinders and Upper North	17,470	$6,197	$3,457	$60.4m
Limestone Coast	8,946	$5,879	$5,129	$45.9m
Riverland Mallee Coorong	12,736	$5,150	$2,758	$35.1m
Yorke and Northern	6,719	$5,673	$3,760	$25.3m
South Australia	**378,157**	**$6,523**	**$6,200**	**$2,344.5m**
AUSTRALIA	**5,941,764**	**$6,231**	**$5,296**	**$31,465.7m**
South Australia rank (out of 8)	5	3	2	5

Source: Independent Hospital Pricing Authority web portal *Women's and Children's Health Network is a statewide service

Table 30: Cost of delivering admitted acute hospital care by state and territory

2019-20	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Expenditure per NWAU	$6,108	$6,058	$6,090	**$6,523**	$7,135	$7,277	$5,820	$6,344	**$6,231**
Expenditure per episode	$5,786	$4,861	$4,879	**$6,200**	$5,791	$6,510	$3,669	$6,023	**$5,296**

Source: Independent Hospital Pricing Authority web portal

3.3 Costs of hospital care — **Admitted sub-acute / non-acute**

Sub-acute/non-acute hospital care provided by the Flinders and Upper North Local Health Network is 50.3% more costly than the Australian average, after considering differences in the types of patients served.

Costs of delivering admitted sub-acute/non-acute hospital care in this section are summarised from the Independent Hospital Pricing Authority's (IHPA) public benchmarking web portal. Latest data is for 2019-20.

There were 11,808 costed records for South Australia for the 2019-20 financial year for the admitted sub-acute/non-acute care type stream reported on the IHPA portal.

The average cost to deliver admitted sub-acute/non-acute health service activity in South Australia is $5,991 per *national weighted activity unit* (NWAU), or $18,231 per episode of care.

The NWAU is a measure of health service activity expressed as a common unit, against which the National Efficient Price (NEP) is paid. The NWAU provides a way of comparing and valuing each public hospital service, whether it is an emergency department presentation, admission or outpatient episode, weighted for clinical complexity.

South Australia ranks fifth highest of the states and territories for admitted sub-acute/non-acute hospital expenditure per NWAU and fourth highest for admitted sub-acute/non-acute hospital expenditure per episode.

South Australia's expenditure on delivering admitted sub-acute/non-acute hospital care in its public hospitals was $215.3 million in 2019-20.

Sub-acute/non-acute hospital care provided by the Flinders and Upper North Local Health Network is 50.3% more costly than the Australian average (comparing expenditure per NWAU).

Table 31: Cost of delivering admitted sub-acute/non-acute hospital care by local health network

Local Health Network of service	Total costed episodes 2019-20	Expenditure per NWAU 2019-20	Expenditure per episode 2019-20	Total expenditure 2019-20
Metro. Adelaide (excl. WCHN*)	**11,066**	**$5,853**	**$17,730**	**$196.2m**
Central Adelaide	3,118	$5,775	$14,873	$46.4m
Northern Adelaide	3,510	$5,675	$16,447	$57.7m
Southern Adelaide	4,438	$6,012	$20,754	$92.1m
Women's and Children's*	WOMEN'S AND CHILDREN'S HEALTH NETWORK NOT SHOWN DUE TO INSUFFICIENT DATA			
Country SA	**727**	**$7,569**	**$24,156**	**$17.6m**
Barossa Hills Fleurieu	82	$5,359	$16,394	$1.3m
Eyre and Far North	50	$5,618	$16,418	$0.8m
Flinders and Upper North	242	$9,165	$29,715	$7.2m
Limestone Coast	95	$7,656	$32,259	$3.1m
Riverland Mallee Coorong	182	$7,060	$21,193	$3.9m
Yorke and Northern	76	$6,683	$16,887	$1.3m
South Australia	**11,808**	**$5,991**	**$18,231**	**$215.3m**
AUSTRALIA	**180,519**	**$6,171**	**$17,442**	**$3,148.7m**
South Australia rank (out of 8)	4	5	4	5

Source: Independent Hospital Pricing Authority web portal *Women's and Children's Health Network is a statewide service

Table 32: Cost of delivering admitted sub-acute/non-acute hospital care by state and territory

2019-20	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Expenditure per NWAU	$5,908	$5,826	$6,629	**$5,991**	$7,048	$5,220	$8,262	$7,144	**$6,171**
Expenditure per episode	$14,865	$18,486	$16,172	**$18,231**	$26,292	$16,729	$51,289	$18,138	**$17,442**

Source: Independent Hospital Pricing Authority web portal

3.4 Costs of hospital care — **Emergency department**

Emergency department hospital care provided by the Women's and Children's Health Network is 17.7% more costly than the Australian average, after considering differences in the types of patients served.

Costs of delivering emergency department hospital care in this section are summarised from the Independent Hospital Pricing Authority's (IHPA) public benchmarking web portal. Latest data is for 2019-20.

There were 516,907 costed records for South Australia for the 2019-20 financial year for the emergency department care type stream reported on the IHPA portal.

The average cost to deliver emergency department health service activity in South Australia is $5,886 per *national weighted activity unit* (NWAU), or $827 per episode of care.

The NWAU is a measure of health service activity expressed as a common unit, against which the National Efficient Price (NEP) is paid. The NWAU provides a way of comparing and valuing each public hospital service, whether it is an emergency department presentation, admission or outpatient episode, weighted for clinical complexity.

South Australia ranks fifth highest of the states and territories for emergency department hospital expenditure per NWAU and fifth highest for emergency department hospital expenditure per episode.

South Australia's expenditure on delivering emergency department hospital care in its public hospitals was $427.3 million in 2019-20.

Emergency department hospital care provided by the Women's and Children's Health Network is 17.7% more costly than the Australian average (comparing expenditure per NWAU).

Table 33: Cost of delivering emergency department hospital care by local health network

Local Health Network of service	Total costed episodes 2019-20	Expenditure per NWAU 2019-20	Expenditure per episode 2019-20	Total expenditure 2019-20
Metro. Adelaide (excl. WCHN*)	**350,400**	**$6,068**	**$908**	**$318.1m**
Central Adelaide	122,463	$6,428	$994	$121.7m
Northern Adelaide	109,890	$6,102	$885	$97.2m
Southern Adelaide	118,047	$5,650	$840	$99.2m
Women's and Children's*	41,831	$6,927	$842	$35.2m
Country SA	**124,676**	**$4,902**	**$594**	**$74.1m**
Barossa Hills Fleurieu	40,855	$4,837	$598	$24.5m
Eyre and Far North	7,817	$2,309	$313	$2.4m
Flinders and Upper North	26,014	$4,563	$551	$14.3m
Limestone Coast	19,964	$6,005	$762	$15.2m
Riverland Mallee Coorong	19,107	$4,803	$524	$10.0m
Yorke and Northern	10,919	$6,150	$698	$7.6m
South Australia	**516,907**	**$5,886**	**$827**	**$427.3m**
AUSTRALIA	**7,454,730**	**$5,875**	**$790**	**$5,892.5m**
South Australia rank (out of 8)	5	5	5	5

Source: Independent Hospital Pricing Authority web portal *Women's and Children's Health Network is a statewide service

Table 34: Cost of delivering emergency department hospital care by state and territory

2019-20	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Expenditure per NWAU	$5,932	$5,661	$5,359	**$5,886**	$6,974	$7,856	$5,515	$7,120	**$5,875**
Expenditure per episode	$763	$765	$754	**$827**	$923	$1,016	$845	$949	**$790**

Source: Independent Hospital Pricing Authority web portal

3.5 Costs of hospital care — **Mental health**

South Australia ranks second highest of the states and territories for mental health care hospital expenditure per episode of care.

Costs of delivering mental health hospital care in this section are summarised from the Independent Hospital Pricing Authority's (IHPA) public benchmarking web portal. Latest data is for 2019-20.

There were 7,103 costed records for South Australia for the 2019-20 financial year for the mental health care type stream reported on the IHPA portal.

The average cost to deliver hospital mental health service activity in South Australia is $6,976 per *national weighted activity unit* (NWAU), or $26,673 per episode of care.

The NWAU is a measure of health service activity expressed as a common unit, against which the National Efficient Price (NEP) is paid. The NWAU provides a way of comparing and valuing each public hospital service, whether it is an emergency department presentation, admission or outpatient episode, weighted for clinical complexity.

South Australia ranks third highest of the states and territories for mental health hospital expenditure per NWAU and second highest for mental health hospital expenditure per episode.

South Australia's expenditure on delivering mental health hospital care in its public hospitals was $189.5 million in 2019-20.

Mental health hospital care provided by the Northern Adelaide Local Health Network is 3.8% more costly than the Australian average (comparing expenditure per NWAU).

Table 35: Cost of delivering mental health hospital care by local health network

Local Health Network of service	Total costed episodes 2019-20	Expenditure per NWAU 2019-20	Expenditure per episode 2019-20	Total expenditure 2019-20
Metro. Adelaide (excl. WCHN*)	**6,636**	**$7,050**	**$27,742**	**$184.1m**
Central Adelaide	3,321	$7,097	$27,469	$91.2m
Northern Adelaide	1,371	$7,241	$27,068	$37.1m
Southern Adelaide	1,944	$6,856	$28,682	$55.8m
Women's and Children's*	463	$5,085	$11,305	$5.2m
Country SA				
Barossa Hills Fleurieu				
Eyre and Far North				
Flinders and Upper North	COUNTRY SA LOCAL HEALTH NETWORKS NOT SHOWN DUE TO INSUFFICIENT DATA			
Limestone Coast				
Riverland Mallee Coorong				
Yorke and Northern				
South Australia	**7,103**	**$6,976**	**$26,673**	**$189.5m**
AUSTRALIA	**106,462**	**$6,046**	**$19,914**	**$2,120.1m**
South Australia rank (out of 8)	5	3	2	5

Source: Independent Hospital Pricing Authority web portal *Women's and Children's Health Network is a statewide service

Table 36: Cost of delivering mental health hospital care by state and territory

2019-20	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Expenditure per NWAU	$5,721	$5,774	$5,880	**$6,976**	$7,247	$5,671	$7,525	$5,320	**$6,046**
Expenditure per episode	$20,559	$19,320	$15,116	**$26,673**	$23,349	$14,309	$27,787	$18,877	**$19,914**

Source: Independent Hospital Pricing Authority web portal

3.6 Costs of hospital care — **Non-admitted**

South Australia ranks highest of the states and territories for non-admitted hospital care expenditure per episode of care.

Costs of delivering non-admitted hospital care in this section are summarised from the Independent Hospital Pricing Authority's (IHPA) public benchmarking web portal. Latest data is for 2019-20.

There were 1,109,831 costed records for South Australia for the 2019-20 financial year for the non-admitted care type stream reported on the IHPA portal.

The average cost to deliver non-admitted hospital care in South Australia is $9,476 per *national weighted activity unit* (NWAU), or $530 per episode of care.

The NWAU is a measure of health service activity expressed as a common unit, against which the National Efficient Price (NEP) is paid. The NWAU provides a way of comparing and valuing each public hospital service, whether it is an emergency department presentation, admission or outpatient episode, weighted for clinical complexity.

South Australia ranks highest of the states and territories for non-admitted hospital expenditure per NWAU and highest for non-admitted hospital expenditure per episode.

South Australia's expenditure on delivering non-admitted hospital care in its public hospitals was $587.7 million in 2019-20.

Non-admitted hospital care provided by the Central Adelaide Local Health Network is 32.6% more costly than the Australian average (comparing expenditure per NWAU).

Table 37: Cost of delivering non-admitted hospital care by local health network

Local Health Network of service	Total costed episodes 2019-20	Expenditure per NWAU 2019-20	Expenditure per episode 2019-20	Total expenditure 2019-20
Metro. Adelaide (excl. WCHN*)	**900,541**	**$9,685**	**$558**	**$502.5m**
Central Adelaide	411,542	$12,567	$702	$288.8m
Northern Adelaide	214,822	$7,137	$446	$95.7m
Southern Adelaide	274,177	$7,617	$430	$118.0m
Women's and Children's*	208,871	$8,415	$407	$85.1m
Country SA	**419**	**$2,932**	**$160**	**$0.1m**
Barossa Hills Fleurieu	BAROSSA HILLS FLEURIEU NOT SHOWN DUE TO INSUFFICIENT DATA			
Eyre and Far North	150	$3,164	$204	<$0.1m
Flinders and Upper North	67	$2,644	$137	<$0.1m
Limestone Coast	LIMESTONE COAST NOT SHOWN DUE TO INSUFFICIENT DATA			
Riverland Mallee Coorong	61	$2,906	$148	<$0.1m
Yorke and Northern	105	$2,410	$118	<$0.1m
South Australia	**1,109,831**	**$9,476**	**$530**	**$587.7m**
AUSTRALIA	**17,685,853**	**$6,373**	**$335**	**$5,925.8m**
South Australia rank (out of 8)	5	1	1	5

Source: Independent Hospital Pricing Authority web portal *Women's and Children's Health Network is a statewide service

Table 38: Cost of delivering non-admitted hospital care by state and territory

2019-20	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Expenditure per NWAU	$5,338	$6,625	$6,422	**$9,476**	$6,791	$6,925	$8,022	$6,302	**$6,373**
Expenditure per episode	$292	$307	$343	**$530**	$364	$336	$512	$288	**$335**

Source: Independent Hospital Pricing Authority web portal

3.7 Costs of hospital care — **Palliative services**

Palliative hospital care provided by the Central Adelaide Local Health Network is 12.8% more costly than the Australian average, after considering the different types of patients served.

Costs of delivering palliative hospital care in this section are summarised from the Independent Hospital Pricing Authority's (IHPA) public benchmarking web portal. Latest data is for 2019-20.

There were 3,492 costed records for South Australia for the 2019-20 financial year for the palliative care type stream reported on the IHPA portal.

The average cost to deliver palliative hospital care activity in South Australia is $5,866 per *national weighted activity unit* (NWAU), or $5,366 per episode of care.

The NWAU is a measure of health service activity expressed as a common unit, against which the National Efficient Price (NEP) is paid. The NWAU provides a way of comparing and valuing each public hospital service, whether it is an emergency department presentation, admission or outpatient episode, weighted for clinical complexity.

South Australia ranks sixth highest of the states and territories for palliative care hospital expenditure per NWAU and sixth highest for palliative care hospital expenditure per episode.

South Australia's expenditure on delivering palliative hospital care in its public hospitals was $18.7 million in 2019-20.

Palliative hospital care provided by the Central Adelaide Local Health Network is 12.8% more costly than the Australian average (comparing expenditure per NWAU).

Table 39: Cost of delivering palliative hospital care by local health network

Local Health Network of service	Total costed episodes 2019-20	Expenditure per NWAU 2019-20	Expenditure per episode 2019-20	Total expenditure 2019-20
Metro. Adelaide (excl. WCHN*)	**3,491**	**$5,866**	**$5,363**	**$18.7m**
Central Adelaide	699	$6,614	$6,990	$4.9m
Northern Adelaide	1,571	$5,621	$4,644	$7.3m
Southern Adelaide	1,221	$5,662	$5,358	$6.5m
Women's and Children's*	WOMEN'S AND CHILDREN'S HEALTH NETWORK NOT SHOWN DUE TO INSUFFICIENT DATA			
Country SA				
Barossa Hills Fleurieu				
Eyre and Far North				
Flinders and Upper North	COUNTRY SA LOCAL HEALTH NETWORKS NOT SHOWN DUE TO INSUFFICIENT DATA			
Limestone Coast				
Riverland Mallee Coorong				
Yorke and Northern				
South Australia	**3,492**	**$5,866**	**$5,366**	**$18.7m**
AUSTRALIA	**58,329**	**$6,465**	**$6,369**	**$371.5m**
South Australia rank (out of 8)	4	6	6	4

Source: Independent Hospital Pricing Authority web portal *Women's and Children's Health Network is a statewide service

Table 40: Cost of delivering palliative hospital care by state and territory

2019-20	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Expenditure per NWAU	$6,191	$6,182	$7,705	**$5,866**	NO DATA	$7,258	$11,680	NO DATA	**$6,465**
Expenditure per episode	$5,831	$6,519	$8,282	**$5,366**		$6,329	$12,122		**$6,369**

Source: Independent Hospital Pricing Authority web portal

4. Staffing services: Workforce

4.1 Workforce satisfaction

Data requested but not provided to the Health Performance Council, even though it has been collected by SA Health.

Staff surveys were conducted across the South Australian public sector – including all SA Health – in 2018 and 2021. The surveys included questions on whether staff had any intention to leave their current agency and, if so, how soon. It is well established that 'intent to leave' is a strong leading indicator of staff turnover[i; ii] and is associated with poor job satisfaction among worker in the health sector[iii].

Across all SA Health[iv], 12,940 staff responded to the 2021 survey, a response rate of less than one in three (29%) and not all who did respond chose to answer questions related to recruitment and retention. On a question of working life intentions, 74% of staff who answered the question reported that they want to stay in their Local Health Network long-term, 18% want to leave their LHN but stay in the public sector and 8% want to leave the public sector. These figures are comparable to those for the whole of the South Australian public sector with an overall survey response rate of 36% and for which 76% of responding staff reported wanting to stay in their agency long-term, 16% to leave their agency but stay in the public sector and 8% to leave the public sector.

The Health Performance Council has requested access to data broken down by Local Health Networks. Having been referred to the Department for Health and Wellbeing for centrally coordinated access to the networks' data, at the time of preparing this report the data had not been released to us.

Sources: i) S. Cho, M. M. Johanson, P. Guchait. 2009. *Employees intent to leave: A comparison of determinants of intent to leave versus intent to stay*. International Journal of Hospitality Management, volume 28, issue 3. ii) E. E. T. Bolt, J. Winterton, K. Cafferkey. 2022. *A century of labour turnover research: A systematic literature review*. International Journal of Management Reviews, 1–22. iii) See, for instance: M. Bonenberger, M. Aikins, P. Akweongo, et al. 2014. *The effects of health worker motivation and job satisfaction on turnover intention in Ghana: a cross-sectional study*. Human Resources for Health, volume 12, article 43. iv) Office of the Commissioner for Public Sector Employment. 'I Work for SA – Your Voice Survey' 2021 Highlights report and SA Health agency report.

4.2 Staff turnover rates

There has been a rise over the last three years in staff turnover across SA Health, with concerning turnover rates in 2021-22, particularly in local health networks in country SA.

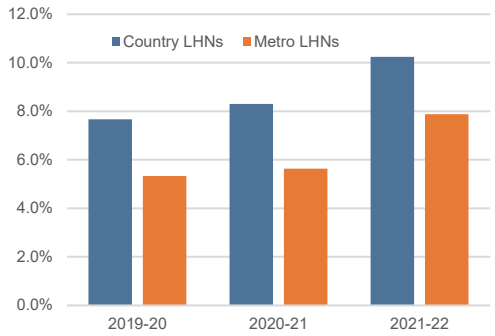
Although this is concerning, it is possible that post-pandemic structural or societal changes might at least partly explain the recent rise in staff turnover.

Staff turnover has consistently been higher in regional South Australia than in metropolitan Adelaide SA Health agencies.

Staff attrition imposes an increased burden on the hospital networks and central agencies for the costs of recruitment and training of replacement staff. As with expressed intention to leave employment, a high actual turnover rate can also be a strong indicator of poor staff satisfaction.

Analysis of SA Health employment data shows that over the last three years there has been a steady growth in staff turnover rate across the whole SA Health system to a concerningly high level. It is difficult to address this rise and what might be behind it without the benefit of contextual data at local level on staff satisfaction.

Figure 45: Staff turnover rates



The increase in staff turnover over the three years was seen across all Local Health Networks and central government department staff. Turnover rates have been consistently higher in country health networks than those in metropolitan Adelaide: across the six country Local Health Networks, rates rose from one in 13 in 2019-20 to one in ten in 2022-22, whereas the three metropolitan Adelaide health networks collectively saw a rise from one in 19 to one in 13 over the same period.

Table 41: Staff turnover rates

Employee turnover rate †	2018-19	2019-20	2020-21	2021-22
Central Adelaide		6.2%	5.9%	7.8%
Northern Adelaide		4.9%	5.9%	8.3%
Southern Adelaide		4.4%	5.1%	7.7%
All Metropolitan Adelaide LHNs		**5.3%**	**5.6%**	**7.9%**
Women's & Children's		**5.2%**	**5.7%**	**6.5%**
Barossa Hills Fleurieu		6.7%	7.1%	8.3%
Eyre and Far North		7.2%	8.7%	10.2%
Flinders and Upper North		10.3%	10.2%	12.4%
Limestone Coast		8.1%	8.5%	11.3%
Riverland Mallee Coorong		7.1%	9.2%	11.1%
Yorke and Northern		8.0%	7.6%	10.3%
Country South Australia LHNs		**7.7%**	**8.3%**	**10.2%**
All SA health networks		**5.9%**	**6.3%**	**8.3%**
All SA Health (inc. central functions)		**5.4%**	**5.6%**	**7.7%**
Whole population, South Australia		*15.7%*	*12.8%*	*15.8%*
Whole population, AUSTRALIA		*15.2%*	*14.0%*	*15.8%*

Although exactly comparable figures are not available, the possibility of broader structural or societal changes – perhaps related to the COVID pandemic – accounting for at least part of the higher turnover might be inferred from a similarly large rise for the latest year among the population at large in rates of leaving or losing a job – from 12.8% of the South Australian workforce in 2020-21 to 15.8% in 2021-22.

† Turnover rates for SA Health entities calculated using total ongoing external terminations in the year as a fraction of average published headcount during the year and may differ slightly from other available sources of turnover data due to methodological differences and source data definitions; external terminations exclude intra-SA Health and 'machinery of government' transfers; headcount figures include all personnel such as board and committee members and secondees; figures shown for Central Adelaide LHN exclude hosted state-wide services for the sake of inter-LHN comparability; comparable data not available prior to 2019-20 owing to database system changes. Whole population turnover rates, to be treated as for roughly indicative comparison purposes only, are calculated as people aged 15+ who left or lost a job as a fraction of number of employed persons.

Sources: i) SA Health, personnel data, unpublished. ii) Based on ABS data, 2022. *Job Mobility*, cat. no. 6223.0; iii) Business Queensland, Queensland Government

4.3 Medical interns

South Australia provides more than its fair share of the nationally available medical internships, and the number of internships in SA continues to grow at a faster rate than our state's population.

Almost all South Australian internships are in metropolitan Adelaide, although there has been a modest development of new regional internship opportunities since 2018.

Only three Aboriginal and/or Torres Strait Islander graduates were known to have accepted South Australian internships in 2021.

South Australia continues to be a rarely chosen first preference for medical students' future state in which to practice.

After graduating from a medical school, it is necessary to complete a recognised internship to be eligible for full registration as a medical practitioner. Internships are usually full-time for one year and involve a variety of clinical placements. Applications and offers for medical internships in South Australia are managed centrally by the South Australian Medical Education and Training Unit. Other than an audit scheme designed to identify post-graduates accepting internships in more than one state or territory, there is no national data collection or administration of available internships.

South Australia is providing 291 medical internships in the 2022 clinical year, 8% of all Australia's internships – by comparison, the state is home to only 7% of the country's population. This excess of internships over population share has been consistently in place over the last few years and indeed has grown slightly (see **Table 42**).

Almost all internships in the state are provided by one of the three metropolitan general Local Health Networks, with more provided by Central Adelaide Local Health Network than any other. Only 18 of the 291 internships – just one in 16 – are in regional hospitals, although this is a noticeable climb from 2018 when only five internships (one in 50) were outside Adelaide; this is due to a modest growth in internships at Limestone Coast and new programmes in the Northern and Eyre Training Network (covering Port Augusta, Port Lincoln and Whyalla) and, starting in the 2022 clinical year, in the Riverland Mallee Coorong Local Health Network. Although other hospital networks in South Australia – including the Women's & Children's Hospital – do not run internship programmes of their own, they may participate in hosting rotations.

In 2021 (for the 2022 clinical year) only three of the internships were accepted by graduates identified as being Aboriginal and/or Torres Strait Islander people.

Surveys of final-year medical students indicate that South Australia is not attractive to medical students. In the latest year, only around 2% of final year students indicated a career preference to practice in South Australia, and although this might be an under-statement of true preferences owing to a very low survey response by students at South Australian medical schools, previous years' data consistently places South Australia as a first preference for fewer than 5% of students, below this state's 7% of the Australian population.

Medical interns in South Australia receive a salary of $77,084 in the 2022 clinical year. This is less than is on offer in all states and territories except New South Wales, Tasmania and ACT.

Figure 46: medical internships in South Australia, 2018 – 2022 clinical years

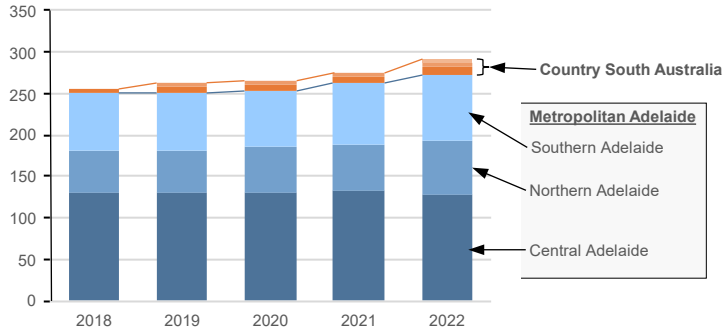


Table 42: medical internships by clinical year (recruitment in previous year)

Internships available	2019	2020	2021	2022
South Australia				
Metropolitan Adelaide	250	254	263	273
Country South Australia	12	12	12	18
South Australia total	**262**	**266**	**275**	**291**
Australia	**3,435**	**3,570**	**3,635**	**3,686**
South Australia share of internships	7.6%	7.5%	7.6%	7.9%
South Australia share of population	7.0%	7.0%	7.0%	7.0%

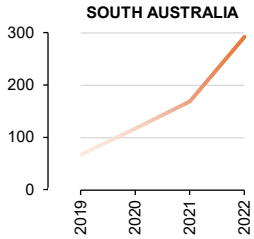
Sources: i) South Australian Medical Education and Training (SA MET) Unit, 2018–2021, *SA Health Junior Doctor Allocation Report South Australia*, reports for each year; ii) Australian Bureau of Statistics, 2022. *National, state and territory population*. 28 Jun 2022 edition; iii) Medical Deans Australia and New Zealand, 2022. *National data report from final year students at Australian medical schools*; iv) Llewellyn, A., 2021. *Medical Internship Australia 2021. For the 2022 Clinical Year.* Great Minds Pty Ltd t/a AdvanceMed.

4.4 First-year professions employed

Using SA Health payroll data, an estimate for the number of new commencements has been derived based on the salary classification of an employee's first record.

Table 43 and Figure 47: First year medical professionals employed

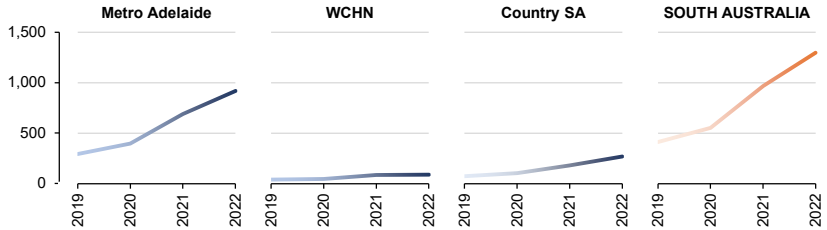
First year medical professionals employed (payroll)	2019	2020	2021	2022
South Australia public health system	67	117	169	292



New commencements at classification 'MDP11G' – the lowest increment for first year medical professionals – provide an estimate of 292 first years who commenced employment in 2022, which appears commensurate with the recent number of internship positions in the state (see section 4.3 above). However, there are underlying difficulties in extracting high quality measures from payroll-system derived estimates and it is believed that these figures, and especially the substantial growth over four years observed, may be due in part to changes or enhancements in the payroll-derived estimates system over the years.

Table 44 and Figure 48: First year graduate nurses employed (estimate)

First year graduate nurses (payroll)	2019	2020	2021	2022
South Australia public health system				
Metropolitan Adelaide	294	398	691	921
Women's & Children's	43	50	88	91
Country South Australia	77	107	184	270
South Australia	**414**	**555**	**968**	**1,297**
Nursing course completions, SA universities	*1,505*	*1,259*	*n/a*	*n/a*



New commencements at classification 'RN0101' – the lowest increment for first year registered nurses / midwives – provide an estimate of 1,297 such commencements in 2022. Owing to limitations in the data extraction method, this figure does not include nurses who commenced through SA Heath's 'Transition to Professional Practice' graduate registered nurse program.

As with medical professionals, the data appears to suggest a substantial rise of new employees over the last four years, but it is difficult to know to what extent this is a real rise in the number of first year nurses employed rather than an artefact of data limitations.

Around 80% of the estimated number of first year graduate nurses in each year are in the metropolitan Adelaide area (including Women's & Children's Hospital), similar to or perhaps a little higher than estimates for the population of the state in the Adelaide area. As the estimates for numbers of first year nurses in some Local Health Networks are very small, breakdowns have not been shown by Local Health Network.

For comparison, data for 2019 and 2020 (the most recent available) shows a substantially greater number of completions of general nursing courses at South Australian universities than first year graduate nurses in the SA Health system.

First year allied health professionals

New commencements at classification 'AHP0101' – the lowest increment for first year allied health professionals – provide an estimate of 22 such first year professionals who commenced in SA Health in 2022. Because of the small numbers estimated in each year and in each LHN, further analysis is not provided in this report.

Data quality caution

Caution to be used in the interpretation of this indicator: analysis is based on crude payroll-derived figures which are, at best, estimates and are included in this report only for the sake of completeness.

Estimates of first year professionals obtained for this indicator are derived solely from data extracts of payroll records for newly commenced employees at the relevant first year salary classification. Although a crude proxy for the true number of first year professional commencements, the data is very limited in its ability to provide an accurate approximation to the true count. Among other things, the counting method will omit professionals who commence at a salary classification/increment above the lowest level for their profession; there will be overcounts where employees receive a new payroll identifier on changing agency or where employee records are not updated correctly and staff on new rotations appear are not distinguishable from new starters.

Source: i) SA Health, personnel data, unpublished. ii) Nursing course completions are number of award course completions at South Australian Universities for general nursing courses required for full registration. Data from Department of Education, Australian Government.

4.5 New entrants and retirements among clinical practitioners

Numbers of registered medical practitioners and nurses and midwives in South Australia have been increasing faster than the growth in the state's population. The replacement rate (new entrants compared to exist from the professions in South Australia) is positive in each year.

Nurses and midwives

In each of the latest four years, the number of nurses and midwives who were registered in South Australia but not registered in SA in the previous year (new 'entrants') exceeded the number who were registered in SA in the previous year but not in the current year ('exits') by around 40%-60%. Disregarding other workforce planning considerations and needs analysis (which is outside the scope of this report), this does give an indication that there is a more than adequate rate of replacement of practitioners in the profession in South Australia.

In addition, in 2021 there were 35,271 nurses and midwives registered in South Australia, with numbers increasing in each of the last four years. The average rate of growth in numbers over the four years since 2017 was 2.5% per year, above the 1.0% average rate of growth of the state's population over the same period.

Table 45: Nurses and midwives: entrants, exits, replacement rate and total number

Nurses and midwives, South Australia	2018	2019	2020	2021
Entrants	2,573	2,563	2,724	2,941
Exits	1,876	1,816	1,953	1,804
Replacement rate	**1.4**	**1.4**	**1.4**	**1.6**
Registered practitioners	33,066	33,813	34,584	35,721
Annualised growth rate 2017–2021				2.5%
State population growth 2017–2021				*1.0%*

Medical practitioners

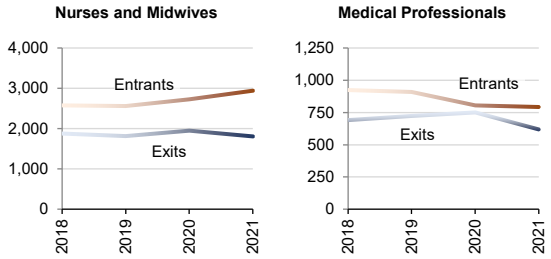
Numbers of medical practitioners registered in South Australia have also been increasing year on year. Although some data for 2021 was not available at the time of preparing this report, figures show that there has been an average of 1.9% growth in the number registered in SA over the three years 2017 to 2020, above the 1.2% average population growth over the same period.

New entrants to the profession in South Australia (registered in SA in the current year but not registered in SA in the previous year) also exceeded exits (registered in SA in the previous year but not in the current year) by around 10% - 30% each year. As with nurses and midwives, this is some indication of adequacy in the profession's replacement rate in South Australia.

Table 46: Medical practitioners: entrants, exits, replacement rate and total number

Medical practitioners, South Australia	2018	2019	2020	2021
Entrants	923	910	805	793
Exits	692	724	750	618
Replacement rate	**1.3**	**1.3**	**1.1**	**1.3**
Registered practitioners	8,204	8,390	8,445	Data not available
Annualised growth rate 2017–2020			1.9%	
State population growth 2017 –2020			*1.2%*	

Figure 49: New entrants and exists from clinical professions in South Australia



Source: i) National Health Workforce Dataset. ii) Health Workforce Data sector dashboards, Department of Health and Aged Care, Australian Government. iii) Based on Australian Bureau of Statistics data, 2022. *Regional Population, 2021*.

5. South Australia's Covid-19 response

5.1 Covid-19 vaccination rates

Similar to the experience in other states, South Australia initially had a slow roll-out of vaccinations with rapid, and impressive, vaccination rates in mid-2021. More recently, the state has good two-dose vaccination rates but poorer three or four dose rates.

The Australian Government's Covid-19 vaccination program began on 22 February 2021.

Priority population cohorts for the vaccine implementation were determined at a national level based on advice from the Australian Technical Advisory Group on Immunisation (ATAGI). Priority population groups were identified at the state and territory level to manage the distribution of vaccine that was rolled out across Australia in phases under the national Covid-19 vaccine roll-out strategy. Over the course of the rollout, age eligibility for first and second doses was lowered to five years.

Covid-19 vaccine – Second doses administered

As at 30 June 2022, 1,477,833 second doses of the Covid-19 vaccine had been administered in South Australia. This represents 88% of the state's population aged five years or older having received both doses, only slightly below the national average of 90%.

Rates vary between the states and territories, from 82% in the Northern Territory up to 98% in the Australian Capital Territory.

Table 47: Second doses of Covid-19 vaccines administered

States and territories	Population aged 5+ years vaccinated with two doses as at 30 June 2022	Number of second doses administered as at 30 June 2022
New South Wales	89%	6,827,964
Victoria	89%	5,604,973
Queensland	85%	4,152,380
South Australia	**88%**	**1,477,833**
Western Australia	91%	2,278,594
Tasmania	94%	481,956
Northern Territory	82%	187,711
Australian Capital Territory	98%	394,670
Australia	**90%**	**21,668,833**

Source: CovidLive website

Sum of states and territories is less than the Australian total due to residential aged care facility-administered vaccinations only being counted in the national figures

Covid 19 vaccine – Third doses (boosters) administered

The booster vaccination program began on 8 November 2021.

Everyone living in Australia aged 18 years and over (later lowered to 16 years, or 12 years with severe, complex or multiple health conditions) who had completed their primary two-dose course of vaccination at least six months prior (later lowered to three months) became eligible to have an additional booster shot.

Like the initial program, the booster rollout initially targeted residential aged care facilities and specific population groups that were prioritised for early vaccination.

As at 30 June 2022, 993,876 third doses of the Covid-19 vaccine had been administered in South Australia. This represents 68% of the state's population aged 15 years or older having received a booster dose, only slightly above the national average of 66%.

Rates vary between the states and territories, from 58% in Queensland up to 79% in both the Australian Capital Territory and Western Australia.

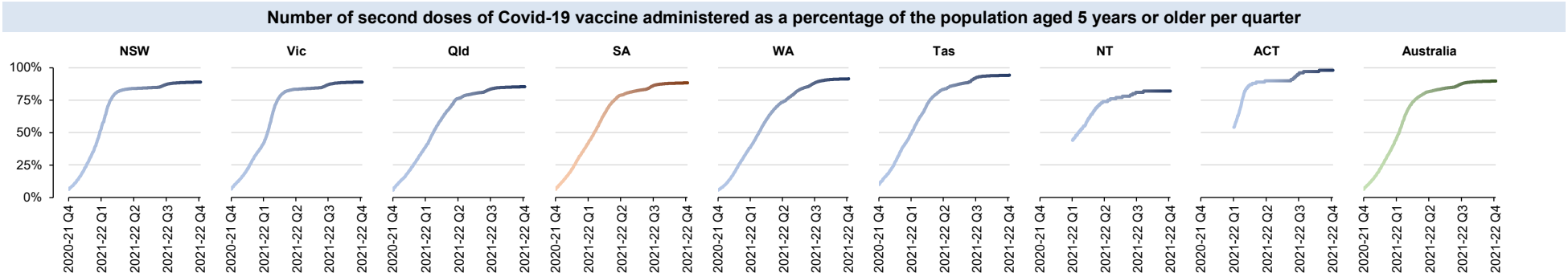
Table 48: Third (booster) doses of Covid-19 vaccines administered

States and territories	Population aged 15+ years vaccinated with third dose as at 30 June 2022	Number of third doses administered as at 30 June 2022
New South Wales	64%	4,237,342
Victoria	68%	3,701,588
Queensland	58%	2,405,590
South Australia	**68%**	**993,876**
Western Australia	79%	1,702,545
Tasmania	71%	317,636
Northern Territory	68%	131,458
Australian Capital Territory	79%	274,108
Australia	**66%**	**13,883,620**

Source: CovidLive website; and Australian Bureau of Statistics, *Population estimates by age and sex, 2020*

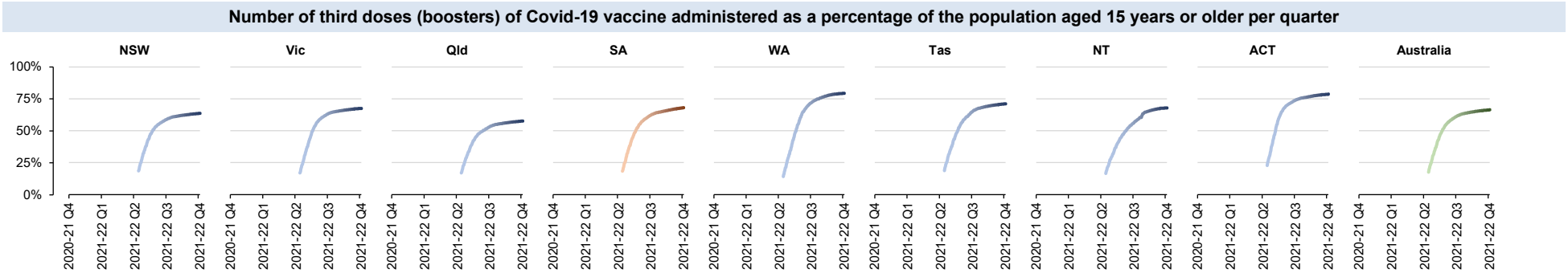
Sum of states and territories is less than the Australian total due to residential aged care facility-administered vaccinations only being counted in the national figures

Figure 50: Second doses of Covid-19 vaccines administered by state and territory



Source: CovidLive website

Figure 51: Third doses (boosters) of Covid-19 vaccines administered by state and territory



Source: CovidLive website; and Australian Bureau of Statistics, *Population estimates by age and sex, 2020*

On 7 July 2022 the Australian Technical Advisory Group on Immunisation (ATAGI) updated its recommendations to add a 'winter dose' of Covid-19 vaccine for eligible persons where the interval between a recent Covid-19 infection or the first booster dose and a winter booster dose is three months or more:

- aged 30 years or older (50 years and over recommended, while 30 to 49 years can receive a winter booster dose although the benefit for people in this age group is less certain)
- residents of aged care or disability care facilities
- Aboriginal and Torres Strait Islander people aged 50 years or older
- people who are severely immunocompromised (this will be their fifth dose)
- aged 16 years or older with a medical condition that increases the risk of severe Covid-19 illness
- people aged 16 years or older with disability, significant or complex health needs, or multiple comorbidities which increase the risk of a poor outcome.

As at 22 July 2022, 282,741 fourth doses ('winter boosters') of the Covid-19 vaccine had been administered in South Australia. This represents 20% of the state's population aged 16 years or older, slightly above the national average of 17%.

Rates vary between the states and territories, from 8% in the Northern Territory up to 22% in Tasmania.

Table 49: Fourth ('winter booster') doses of Covid-19 vaccines administered

States and territories	Population aged 16+ vaccinated with fourth does ('winter' booster) as at 22 July 2022	Number of fourth doses ('winter boosters') administered as at 22 July 2022
New South Wales	17%	1,124,977
Victoria	16%	857,990
Queensland	17%	687,773
South Australia	**20%**	**282,741**
Western Australia	17%	352,041
Tasmania	22%	94,759
Northern Territory	8%	15,481
Australian Capital Territory	20%	67,971
Australia	**17%**	**3,500,741**

Source: CovidLive website; and Australian Bureau of Statistics, *Population estimates by age and sex, 2020*

5.2 **Community satisfaction with** state's response to Covid-19

South Australian community satisfaction with the state government's response to Covid-19 was generally positive, although it did fall in 2021, as it did in other states.

Between April 2021 and November 2021, *Essential Research* ran surveys, typically every fortnight, across five Australian states gauging community satisfaction with state governments' response to Covid-19.

Essential Research asked its survey respondents, *"How would you rate your state government's response to the Covid-19 outbreak?"*

Results are published on *The Essential Report Archive*.

At the beginning of the Essential Research survey collection, on 12 April 2021, 75% of respondents in South Australia answered "Good" to the question, *"How would you rate your state government's response to the Covid-19 outbreak?".*

By the end of the survey collection, on 8 November 2021, the South Australian percentage had dropped to 62%.

As at 8 November 2021, of the five states included in the Essential Research survey collection, Western Australia recorded the highest percentage of respondents who answered that satisfaction with their state government's Covid response is good.

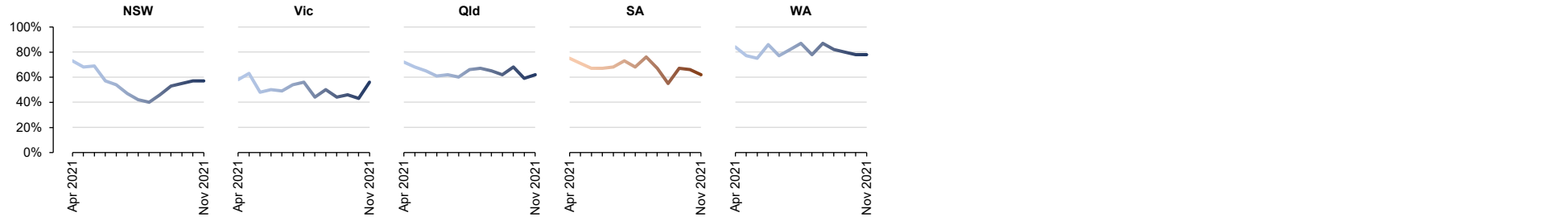
Victoria recorded the lowest percentage at 56%.

Table 50: Community satisfaction with state's response to Covid-19

Total "Good" to question, "How would you rate your state government's response to the Covid-19 outbreak?"	12 April 2021	8 November 2021
New South Wales	73%	57%
Victoria	58%	56%
Queensland	72%	62%
South Australia	**75%**	**62%**
Western Australia	84%	78%
Tasmania	NO DATA	
Northern Territory		
Australian Capital Territory		
Australia	**n.a.**	**n.a.**

Source: Essential Research report archive

Figure 52: Community satisfaction with state's response to Covid-19 by select state



Source: Essential Research report archive

5.3 Covid deaths

South Australia's Covid-19 cumulative death rate to 30 June 2022 is below the national average. South Australia's death rate during the Omicron wave is amongst the lowest of the states and territories.

Covid-19 cumulative death rate

Up to 30 June 2022, there had been 530 cumulative confirmed deaths in South Australia due to Covid-19.

As a population rate, this represents a cumulative 299.4 Covid-19 deaths per million people in South Australia.

South Australia's Covid-19 cumulative death rate to 30 June 2022 is below the national figure of 385.1 deaths per million people (9,897 Covid-19 deaths in total).

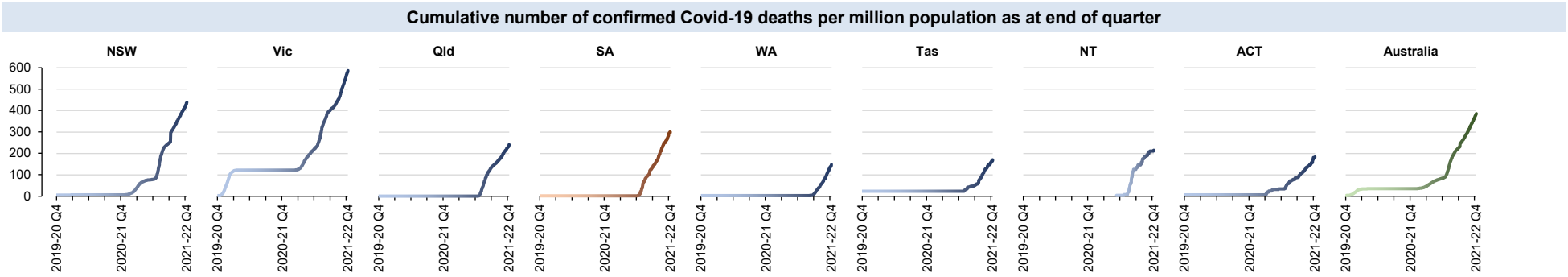
The cumulative Covid-19 death rate to 30 June 2022 varies between the states and territories, from 147.2 per million people in Western Australia, up to 585.7 in Victoria.

Table 51: Covid-19 cumulative deaths and death rate

Cumulative confirmed Covid-19 deaths to 30 June 2022	Cumulative deaths number	Cumulative deaths per million population
New South Wales	3,581	438.4
Victoria	3,922	585.7
Queensland	1,248	241.1
South Australia	**530**	**299.4**
Western Australia	392	147.2
Tasmania	92	170.1
Northern Territory	53	215.3
Australian Capital Territory	79	183.1
Australia	**9,897**	**385.1**

Source: CovidLive website; and Australian Bureau of Statistics, *Population estimates by age and sex, 2020*

Figure 53: Covid-19 cumulative death rate by state and territory



Source: CovidLive website; and Australian Bureau of Statistics, *Population estimates by age and sex, 2020*

Covid-19 death rate by wave

The Australian Bureau of Statistics (ABS) has released its analysis of Covid-19 mortality by "wave", age adjusted, by state and territory, with a focus on deaths occurring during the Omicron variant wave.

In Australia, apart from the main virus strain, variants of concern that have circulated have been Delta and the currently circulating (at time of preparing this report) Omicron variant. The Omicron variant has also had a number of sub-variants, for example BA.1, BA.2. As a new variant can affect changes in disease severity, clinical presentation and effectiveness and implementation of public health measures, analysis of Covid-19 by variant can provide important insights. When a variant circulates predominantly for a period of time in a community this is referred to as a "wave". As the variant of Covid-19 contributing to death is not listed on the death certificate (the source of Covid-19 mortality information for the ABS), waves are defined by time periods when the infectious variant was circulating predominantly in the community.

Waves are defined by the ABS in its analysis as the following:

1. Wave 1: as occurring between March and May 2020. The predominant variant during Wave 1 was the original virus strain.
2. Wave 2: as occurring between June and November 2020. Wave 2 predominantly occurred in Victoria. The variant during Wave 2 was the original virus strain.
3. Delta wave: as occurring between July and December 2021.
4. Omicron wave: as occurring during 2022 (until the end of September 2022).

As waves are defined by time period there may be some deaths due to the Delta variant that occurred in 2022 and fall into the scope of the Omicron wave. Not all jurisdictions across Australia have experienced four waves of Covid-19. A small amount of deaths occurred outside of the defined "wave" periods. These points should be considered when interpreting the ABS analysis presented below.

South Australia recorded 24.3 Covid-19 deaths per 100,000 population (age adjusted) during the Omicron Wave of 2022. This death rate ranks South Australia sixth highest of the states and territories for Covid-19 deaths for that period (note that New South Wales and the Australian Capital Territory rank equal first with 33.4 deaths per 100,000, age adjusted).

Table 52: Age-standardised Covid-19 death rates per 100,000 population by state and territory*, by wave

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT
Wave 1	2.0	1.1	np	**np**	np	np	0	np
Wave 2	np	17.2	0	**0**	0	np	0	0
Delta Wave	11.8	16.2	np	**np**	0	0	np	np
Omicron Wave	33.4	33.1	27.0	**24.3**	15.0	21.2	31.8	33.4
Rank (Omicron Wave)	=1	3	5	**6**	8	7	4	=1

Source: Australian Bureau of Statistics, COVID-19 Mortality by wave 16/11/2022

* State and territory of registration

5.4 Excess mortality

All states and territories recorded more all-causes deaths per week on average over the first four months of 2022 than their baseline averages with similar results for South Australia.

Over the first 16 weeks of 2022—that is from 3 January 2022 to 24 April 2022—there were, on average, 285 deaths from all causes per week in South Australia.

This is 40 deaths more per week than the baseline average number of all-causes deaths per week in South Australia (245).

The baseline average is the average of the years 2017, 2018, 2019 and 2021. 2020 has been excluded as it did not resemble a typical mortality year.

As a population rate, the average 285 all-causes deaths per week in South Australia from January to April 2022 represents 160.7 all-causes deaths per million population per week.

This is 22.3 per million population per week higher than the state's baseline rate of 138.4 all-causes deaths per million population per week over this period.

South Australia is ranked second-highest of the states and territories for all-causes deaths per million population per week, behind Tasmania.

All states and territories recorded more all-causes deaths per week on average over the first four months of 2022 than their baseline averages, with the exception of the Northern Territory.

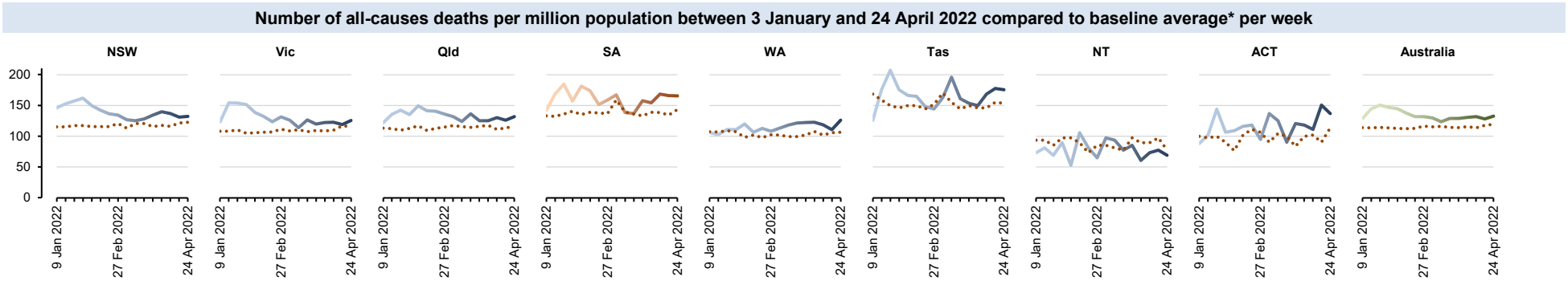
Table 53: Excess deaths (all causes) over period 3 January 2022 to 24 April 2022

States and territories	Deaths per week average number Jan-Apr 2022	Deaths per week average number Baseline avg.*	Deaths per week avg. no. per million popn. Jan-Apr 2022	Deaths per week avg. no. per million popn. Baseline avg.*
New South Wales	1,141	960	139.7	117.5
Victoria	873	732	130.3	109.3
Queensland	690	590	133.3	114.0
South Australia	**285**	**245**	**160.7**	**138.4**
Western Australia	305	276	114.5	103.5
Tasmania	90	82	165.7	152.4
Northern Territory	19	22	78.2	88.1
Australian Capital Territory	50	42	116.8	97.9
Australia	**3,453**	**2,949**	**134.4**	**114.8**

* Baseline average is the average of the years 2017, 2018, 2019 and 2021. 2020 has been excluded as it did not resemble a typical mortality year.

Source: Australian Bureau of Statistics, *Provisional Mortality Statistics, Australia, Jan-Apr 2022;* and Australian Bureau of Statistics, *Population estimates by age and sex, 2020*

Figure 54: Excess deaths (all causes) over period 3 January 2022 to 24 April 2022 by state and territory



* Baseline average is the average of the years 2017, 2018, 2019 and 2021. 2020 has been excluded as it did not resemble a typical mortality year.

Source: Australian Bureau of Statistics, *Provisional Mortality Statistics, Australia, Jan-Apr 2022;* and Australian Bureau of Statistics, *Population estimates by age and sex, 2020*

5.5 **Covid** active cases and hospitalisation rates

Compared to other states and territories, South Australia responded relatively well to Covid-19, as measured by active cases and hospitalisations per head of population.

Active cases

Up to 30 June 2022, South Australia had recorded the peak of its Covid-19 active cases on 10 April 2022 with 38,033 daily active cases, representing 21,483.0 per million population.

As a population rate, this was the second lowest maxima of Covid-19 active cases of the states and territories up to 30 June 2022. New South Wales recorded the highest rate of 41,975.7 Covid-19 daily active cases per million population on 16 January 2022.

As at 30 June 2022, South Australia recorded 16,579 daily active Covid-19 cases, or 9,364.7 per million population, the fifth highest rate of the states and territories.

Hospitalisations

Up to 30 June 2022, South Australia recorded its peak Covid-19 hospitalisations on 21 January 2022 with 298 people hospitalised for Covid-19, representing 168.3 per million population.

As a population rate, this was the third lowest maxima of the states and territories up to 30 June 2022. The Northern Territory recorded the highest rate of 723.2 Covid-19 hospitalisations per million population on 8 February 2022.

As at 30 June 2022, South Australia recorded 30,247 daily active Covid-19 cases, or 9,364.7 per million population, the fifth highest rate of the states and territories.

Persons in ICU

Up to 30 June 2022, South Australia recorded its peak Covid-19 ICU utilisation—expressed here as a 7-day moving average percentage per Covid-19 hospitalisations—on 9 March 2022 with 11.8% of Covid-19 hospitalisations in ICU. As a percentage of hospitalisations, this was the third highest maxima of the states and territories that reported sufficient data for this measure up to 30 June 2022. New South Wales recorded the highest 7-day moving average percentage of Covid-19 hospitalisations in ICU at 29.7% on 30 July 2021.

As at 30 June 2022, South Australia recorded 3.9% of Covid-19 hospitalisations in ICU.

Persons on ventilation

Up to 30 June 2022, South Australia recorded its peak Covid-19 rate of hospitalised persons on ventilation as a 7-day moving average percentage per Covid-19 hospitalisations on 16 January 2022 with 2.8% of Covid-19 hospitalisations on ventilation. Of the states and territories that reported sufficient data for this measure, New South Wales recorded the highest 7-day moving average percentage per Covid-19 hospitalisations on ventilation at 12.9% on 26 October 2021.

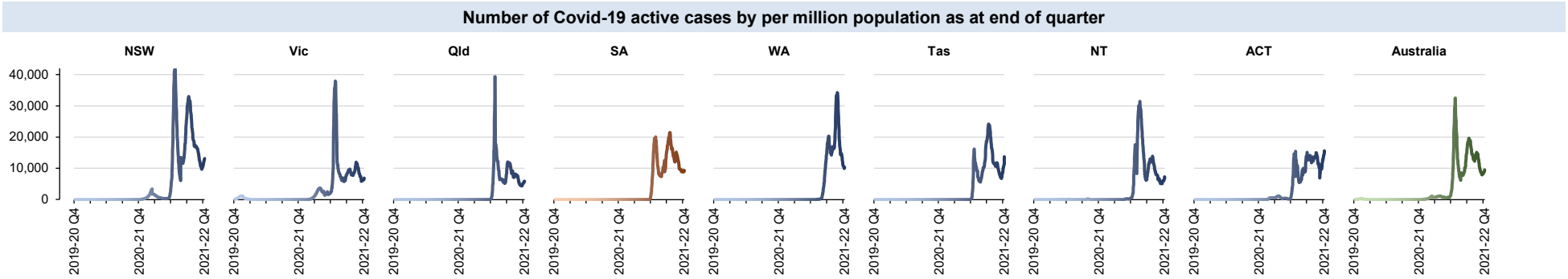
As at 30 June 2022, South Australia recorded no Covid-19 hospitalised persons on ventilation.

Table 54: Covid-19 active cases and hospitalisations, including ICU and ventilation — maxima and as at 30 June 2022

States and territories	Persons with active Covid-19 per million popn. Maximum recorded (on date)	Persons with active Covid-19 per million popn. As at 30 June 2022	Persons in hospital with Covid-19 per million popn. Maximum recorded (on date)	Persons in hospital with Covid-19 per million popn. As at 30 June 2022	Persons in ICU with Covid-19 as percent of all in hospital with Covid-19* Maximum recorded (on date)	Persons in ICU with Covid-19 as percent of all in hospital with Covid-19* As at 30 June 2022	Persons on ventilation with Covid-19 as percent of all in hospital with Covid-19* Maximum recorded (on date)	Persons on ventilation with Covid-19 as percent of all in hospital with Covid-19* As at 30 June 2022
New South Wales	41,975.7 (16 Jan 2022)	13,157.8	360.3 (25 Jan 2022)	187.8	29.7% (30 July 2021)	3.1%	12.9% (26 Oct 2021)	0.9%
Victoria	37,903.5 (19 Jan 2022)	6,886.0	183.5 (17 Jan 2022)	69.4	27.7% (10 Sep 2021)	6.0%	19.4% (19 Jul 2020)	1.8%
Queensland	39,345.0 (16 Jan 2022)	5,843.5	179.3 (25 Jan 2022)	121.9	9.0% (25 Feb 2022)	1.8%	3.9% (18 Feb 2022)	INSUFFICIENT DATA
South Australia	**21,483.0 (10 Apr 2022)**	**9,364.7**	**168.3 (21 Jan 2022)**	**133.9**	**11.8% (9 Mar 2022)**	**3.9%**	**2.8% (16 Jan 2022)**	**INSUFFICIENT DATA**
Western Australia	34,225.6 (21 May 2022)	10,296.7	122.8 (18 May 2022)	82.2	4.3% (28 Mar 2022)	4.2%	INSUFFICIENT DATA	INSUFFICIENT DATA
Tasmania	24,179.9 (3 Apr 2022)	13,713.5	107.3 (21 Apr 2022)	81.4	INSUFFICIENT DATA	INSUFFICIENT DATA	INSUFFICIENT DATA	INSUFFICIENT DATA
Northern Territory	31,416.7 (12 Feb 2022)	7,251.9	723.2 (8 Feb 2022)	60.9	5.4% (1 Mar 22)	INSUFFICIENT DATA	INSUFFICIENT DATA	INSUFFICIENT DATA
Australian Capital Territory	15,601.1 (30 Jun 2022)	15,601.1	282.8 (30 Jun 2022)	282.8	0.9% (30 Jun 2022)	0.9%	0.1% (29 Jun 2022)	0.1%
Australia	**32,494.6 (17 Jan 2022)**	**9,485.9**	**209.7 (25 Jan 2022)**	**127.1**	**25.2% (30 Jul 2021)**	**3.4%**	**16.4% (20 Jul 2020)**	**0.7%**

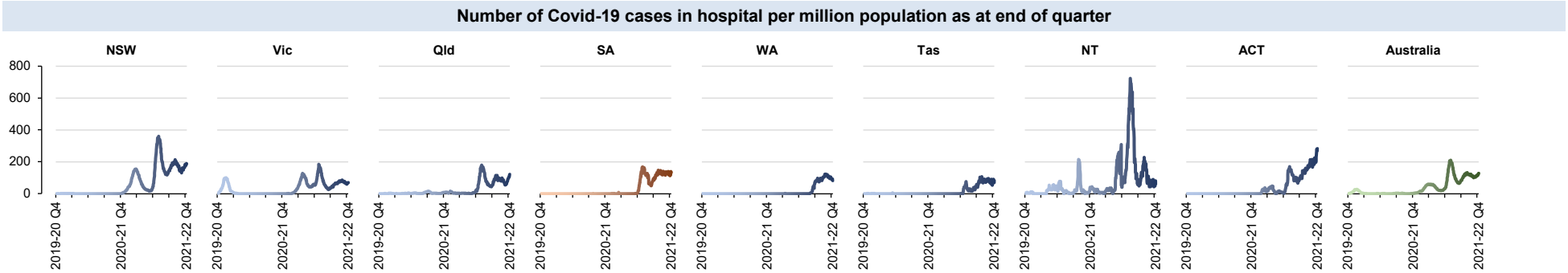
Source: CovidLive website; and Australian Bureau of Statistics, *Population estimates by age and sex, 2020. * ICU and ventilation percentages are 7-day moving averages where hospitalised cases>100*

Figure 55: Covid-19 active cases by state and territories



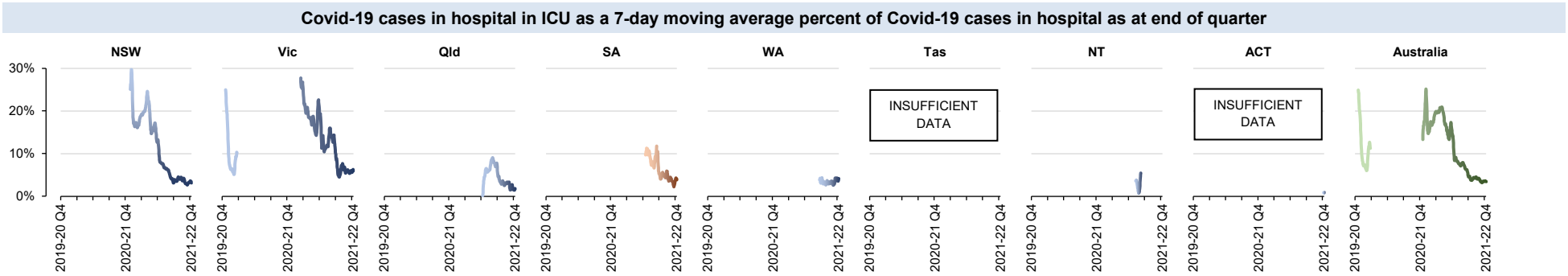
Source: CovidLive website; and Australian Bureau of Statistics, *Population estimates by age and sex, 2020*

Figure 56: Covid-19 hospitalisations by state and territory



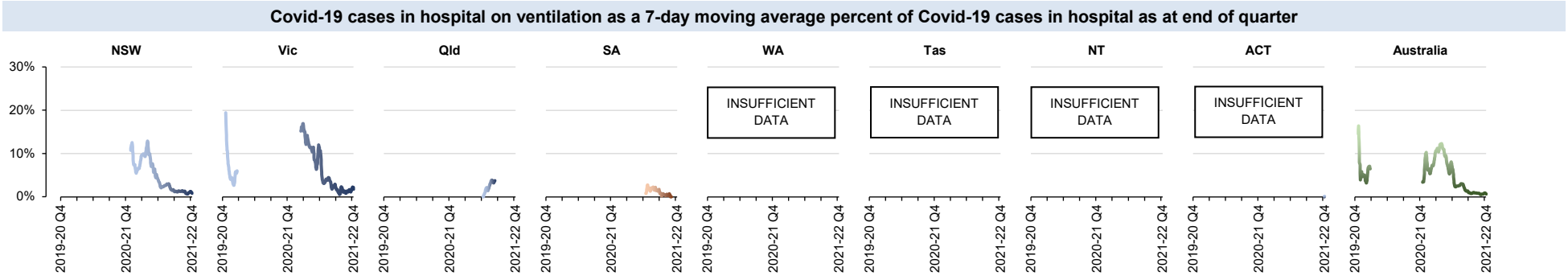
Source: CovidLive website; and Australian Bureau of Statistics, *Population estimates by age and sex, 2020*

Figure 57: Covid-19 hospital ICU admissions by state and territory



Source: CovidLive website

Figure 58: Covid-19 hospital ventilation admissions by state and territory



Source: CovidLive website

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