

Healthcare Quarterly

COVID-19 Supplement

Emergency department, ambulance,
admitted patients and elective surgery

January to June 2020



BUREAU OF HEALTH INFORMATION

1 Reserve Road
St Leonards NSW 2065
Australia
Telephone: +61 2 9464 4444
bhi.nsw.gov.au

© Copyright Bureau of Health Information 2020.

This work is copyrighted. It may be reproduced in whole or in part for study or training purposes subject to the inclusion of an acknowledgement of the source. It may not be reproduced for commercial usage or sale. Reproduction for purposes other than those indicated above requires written permission from the Bureau of Health Information (BHI).

State Health Publication Number: (BHI) 200499-3

ISSN: 2207-9564 (online)

Suggested citation:

Bureau of Health Information. Healthcare Quarterly, COVID-19 Supplement – Emergency department, ambulance, admitted patients and elective surgery, January to June 2020. Sydney (NSW): BHI; 2020.

Please note there is the potential for minor revisions of data in this report.

Please check the online version at **bhi.nsw.gov.au** for any amendments or errata.

Published September 2020.

The conclusions in this report are those of BHI and no official endorsement by the NSW Minister for Health, the NSW Ministry of Health or any other NSW public health organisation is intended or should be inferred.

Summary

This *COVID-19 Supplement* is the second released by BHI. It tracks activity in the NSW healthcare system from January to June 2020, with a particular focus on April to June 2020.

Having peaked in mid March, weekly emergency department (ED) attendances decreased 40.6% to 35,653 by mid April 2020 before starting to steadily increase again. By the last week of June, attendances were 48,558, down 9.4% compared with the same week in 2019.

The most striking decreases in emergency presentations were seen in triage 3 (urgent) and triage 4 (semi-urgent) from mid March to the end of June 2020. In the week ending 11 April, emergency presentations for triage 3 and triage 4 were at their lowest, down 14.4% and 19.8%, respectively, compared with the same week in 2019.

Emergency presentations for respiratory system conditions were 54.1% higher in March compared with March 2019. However, by the last week of June, they were down 48.7% compared with the same week in 2019. Emergency presentations for other selected clinical cohorts (injury, mental health, circulatory system and nervous system) decreased from March but were close to 2019 levels by the end of June.

Ambulance responses declined in late March/early April. While there was then a steady increase to the end of June, responses in the last week of the month were still down 10.5% compared with the same week in 2019. The number of priority 1A (P1A) responses for life-threatening conditions remained at similar levels compared with the same period in 2019.

Admitted patient episodes declined 28.5% between mid March and mid April, followed by a steady increase to the end of June. In the last week of June, episodes were down 7.0% compared with the same week in 2019. Within this total, the vast majority

of episodes were for acute care, which was down significantly. Among those patients admitted for non-acute care, declines were most evident among rehabilitation episodes.

Admitted patient episodes for respiratory system conditions began a decline that commenced in mid March and then remained low throughout April to June. In the last week of June, respiratory system episodes of care were down 50.8% compared with the same week in 2019.

A progressive reduction in the number of elective surgical procedures – including public procedures contracted to private hospitals – was evident from early March, before declining sharply from 26 March when all non-urgent (category 3) elective surgery was suspended. Between the week ending 21 March and in the month following, the total number of procedures performed decreased 58.7% to 1,872 per week.

From 27 April, additional elective surgery up to 25% of normal levels was permitted, and from 15 May, three stages for reopening elective surgery were established, to be implemented at the discretion of each jurisdiction.

In the last week of June, 4,062 procedures were performed, down 15.8% compared with the same week in 2019. However, looking at each category for that week: the number of urgent procedures was comparable with 2019 (up 0.3%); the number of semi-urgent procedures was down 10%; and, the number of non-urgent procedures was down 29.7%.

There were 101,026 patients on the waiting list as at 30 June 2020, up 20.1% compared with the same day in 2019. Of these patients, 10,563 had waited longer than the clinically recommended time, compared with 541 on the same day in 2019.

Introduction

This report is a supplement to this issue of *Healthcare Quarterly*, which tracks public hospital and ambulance activity and performance in NSW for the April to June 2020 quarter.

This supplement provides additional information on activity in EDs, and for ambulance services, hospital admissions and elective surgery. It outlines weekly or monthly patterns of activity over this period to provide greater insights into the impact of the pandemic on the NSW public health system. It is intended to provide context to the April to June 2020 results presented in *Healthcare Quarterly, Activity and Performance*, and the *Trend report*.

This has been an unprecedented period for the people of NSW and their healthcare system. The arrival of COVID-19 has seen far-reaching changes to people's lives and a large-scale response to the COVID-19 pandemic by the health system.

This involved significant changes in how services were delivered during this period, including the establishment of dedicated COVID-19 testing clinics. Hospitals acted to maintain sufficient capacity and personal protective equipment, protecting the safety of staff and patients. From 26 March, National Cabinet suspended all non-urgent elective surgery. From 27 April, additional elective surgery up to 25% of normal levels was permitted, and from 15 May, three stages for reopening elective surgery were established, to be implemented at the discretion of each jurisdiction:

- Stage 1 – up to 50% of normal surgery activity levels
- Stage 2 – up to 75% of normal surgery activity levels
- Stage 3 – up to 100% of normal surgery activity levels or as close to normal activity levels as safely possible.

COVID-19 in NSW

-  12 March – World Health Organisation (WHO) declares pandemic.
-  16 March – Restrictions declared on public gatherings of more than 500 people.
-  18 March – Restrictions declared on indoor gatherings of more than 100 people.
-  20 March – Stricter social distancing guidelines introduced.
-  26 March – All non-urgent elective surgery suspended.
-  March – New cases peak.
-  27 April – Additional elective surgery up to 25% of normal levels permitted.
-  15 May – Staged reopening of elective surgery capacity permitted.

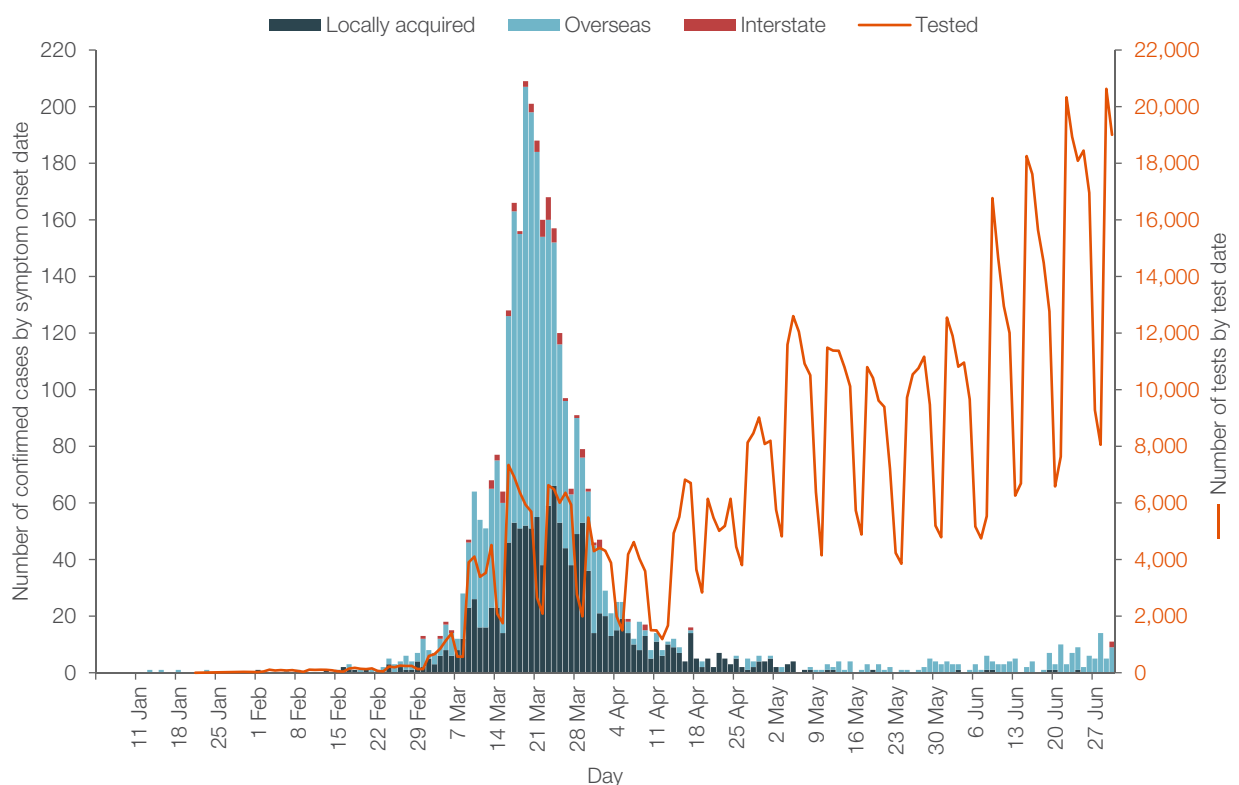
New cases of COVID-19 in NSW peaked in the middle of March and then decreased. By 30 June 2020, there were 3,231 confirmed cases in NSW, with 1,240 (38.4%) having been acquired locally (Figure 1).

COVID-19 testing increased significantly from the middle of March with a broadening of the criteria for, and increased availability of, those tests. By 30 June 2020, 907,625 tests had been carried out.

The number of tests per day peaked at 20,626 on 29 June 2020 (Figure 1).

Of confirmed cases of COVID-19 in NSW, the majority of people have remained outside of hospital settings to recover. More information on the hospitalisation of patients confirmed to have COVID-19 is provided in the NSW Health Weekly COVID-19 Surveillance report, available at: health.nsw.gov.au/Infectious/covid-19/Pages/weekly-reports.aspx

Figure 1 Confirmed COVID-19 cases by symptom onset date and COVID-19 tests performed by test date, NSW, January to June 2020



Notes: 'Confirmed COVID-19 cases by symptom onset date' is based on the date the person first developed symptoms. For asymptomatic cases or where symptom onset date is not available, the onset date is calculated from the earliest test date.
 'COVID-19 tests performed by test date' refers to the total number of diagnostic tests done in NSW by the date the person presented for the test. This means that people who have multiple tests on different days have each test counted separately. Multiple tests on the same person on any one day are only counted as one test. While public health facilities are open seven days a week, less testing occurs through general practitioners (GPs) and private collection centres on weekends and public holidays. This explains the lower number of tests on weekends.
 Source: COVID-19 weekly surveillance in NSW. 'Confirmed COVID-19 cases by symptom onset date' data drawn on 30 July 2020. 'COVID-19 tests performed by test date' data drawn on 30 July 2020.
 These reports have been published since 1 May 2020 and are available at health.nsw.gov.au/Infectious/covid-19/Pages/weekly-reports.aspx



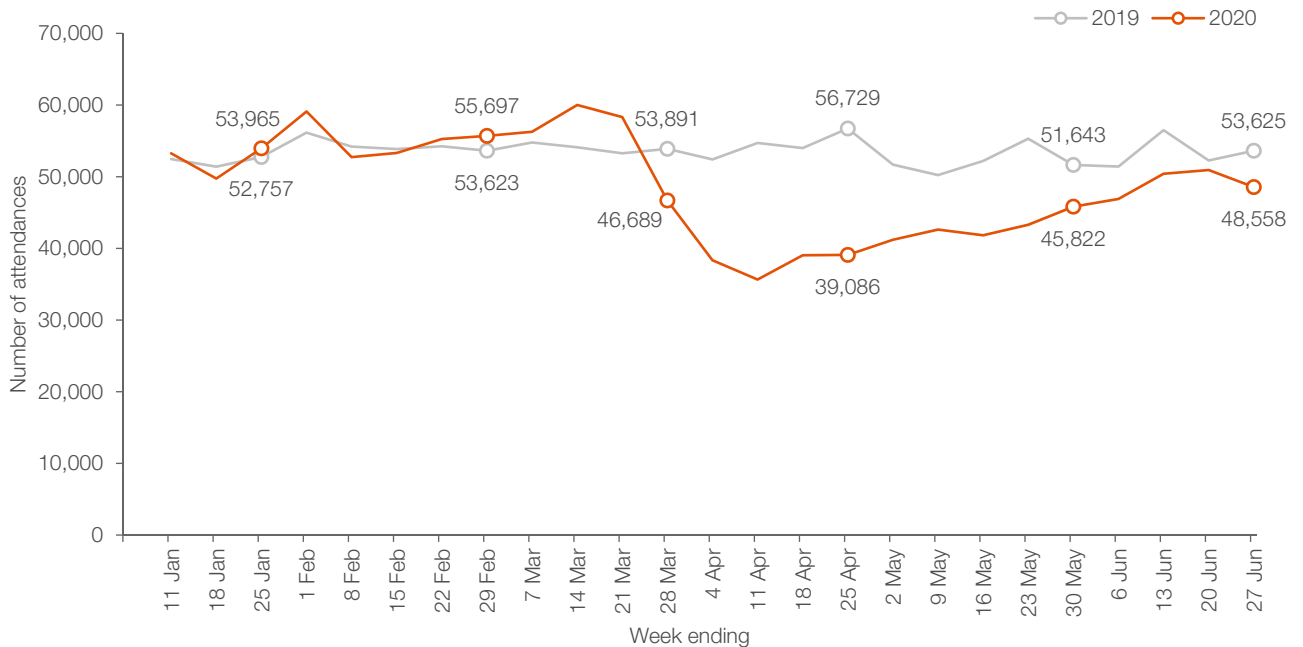
Emergency department activity

Emergency department attendances

Having peaked in the week ending 14 March 2020 at 60,012, weekly emergency department (ED) attendances decreased 40.6% to 35,653 by the week ending 11 April, before increasing again until late June. There were 48,558 ED attendances in the week ending 27 June, down 9.4% compared with the same week in 2019 (Figure 2).

While the increase in ED attendances in March 2020 was principally concentrated in large, metropolitan hospitals, the decline to the middle of April – followed by a steady increase to the end of June – was experienced by all LHDs and public hospital peer groups (data not shown).

Figure 2 Emergency department attendances, January to June 2019 and 2020



Notes: 'ED attendances' includes every patient visit to the ED during the defined period. The vast majority of ED attendances are classified as 'emergency presentations'. The remaining ED attendances include non-emergency visits such as planned returns, pre-arranged admissions, some outpatient visits and private referrals.
 Results for hospitals in principal referral, paediatric specialist, ungrouped acute – tertiary referral, major or district peer groups (A1, A2, A3, B, C1 and C2) are included, representing more than 90% of total ED attendances in January to June 2020.
 Weekly activity for 2020 is calculated by aggregating daily activities for a seven-day week from Sunday to Saturday, starting Sunday 5 January 2020 and ending Saturday 27 June 2020. Each day in 2019 is matched with the same day of the week in 2020, due to known variation in activity by day of the week.

Emergency presentations by triage category

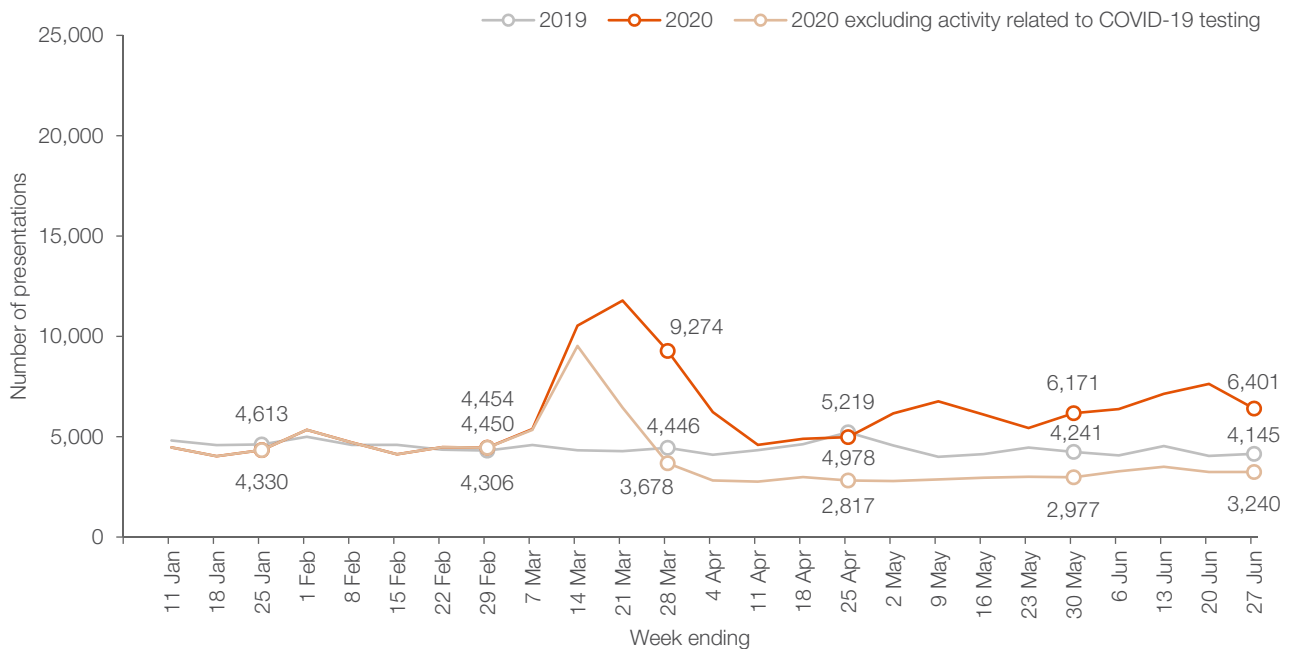
Triage category 5 (non-urgent) presentations increased during March 2020, peaking at 11,784 in the week ending 21 March before decreasing again to levels similar to 2019 in early April. Triage 5 presentations increased again in late April and remained above 2019 levels throughout May and June. There were 6,401 triage 5 presentations in the week ending 27 June, up 54.4% compared with the same week in 2019 (Figure 3).

The increase in triage 5 presentations over this period is primarily due to COVID-19 testing that occurred within EDs or co-located testing clinics, although most COVID-19 testing moved to separate dedicated testing clinics from late March.

Many hospitals had emergency presentations for COVID-19 testing. BHI has noted the exact proportion for each hospital which had more than 10% triage 5 presentations for COVID-19 testing in their activity and performance profiles. Of these 32 hospitals, the proportion of COVID-19 testing ranged from 10% to 94%, with the largest increases at Northern Beaches Hospital and Sutherland Hospital.

Triage 5 presentations unrelated to COVID-19 testing decreased from late March and remained lower than 2019 levels throughout April to June. There were 3,240 non-COVID-19 triage 5 presentations in the week ending 27 June, down 21.8% compared with the same week in 2019 (Figure 3).

Figure 3 Emergency presentations, triage category 5 (non-urgent), January to June 2019 and 2020



Notes: Results for hospitals in principal referral, paediatric specialist, ungrouped acute – tertiary referral, major or district peer groups (A1, A2, A3, B, C1 and C2) are included, representing more than 90% of total emergency presentations in January to June 2020. Weekly activity for 2020 is calculated by aggregating daily activities for a seven-day week from Sunday to Saturday, starting Sunday 5 January 2020 and ending Saturday 27 June 2020. Each day in 2019 is matched with the same day of the week in 2020, due to known variation in activity by day of the week.

Emergency presentations by triage category

The most striking decreases in emergency presentations were seen in triage 3 (urgent) and triage 4 (semi-urgent) from mid March to the end of June 2020. In the week ending 11 April, emergency presentations for triage 3 and triage 4 were at their lowest at 12,275 (down 37.3% compared with the same week in 2019) and 12,533 (down 42.2%), respectively (Figures 4, 5).

Emergency presentations for triage 3 and 4 gradually increased from mid April, but remained lower than 2019 levels to the end of June. In the week ending 27

June, there were 16,626 triage 3 presentations (down 14.4% compared with the same week in 2019) and there were 16,931 triage 4 presentations (down 19.8% compared with 2019) (Figures 4, 5).

Emergency presentations in triage 2 (emergency) declined slightly from the middle of March 2020, before gradually increasing from the middle of April. By the end of June 2020, triage 2 presentations were close to 2019 levels. In the week ending 27 June 2020, there were 6,938 triage 2 presentations, down 389 compared with the same week in 2019 (Figure 6).

Figure 4 Emergency presentations, triage category 4 (semi-urgent), January to June 2019 and 2020

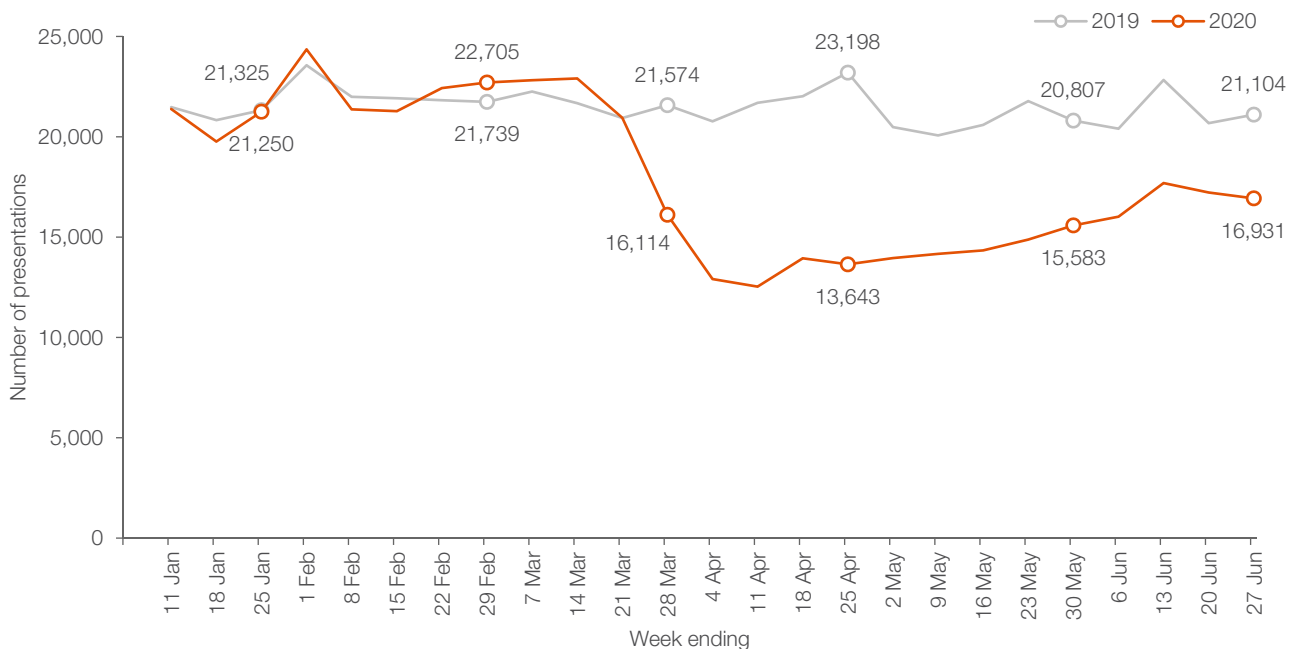


Figure 5 Emergency presentations, triage category 3 (urgent), January to June 2019 and 2020

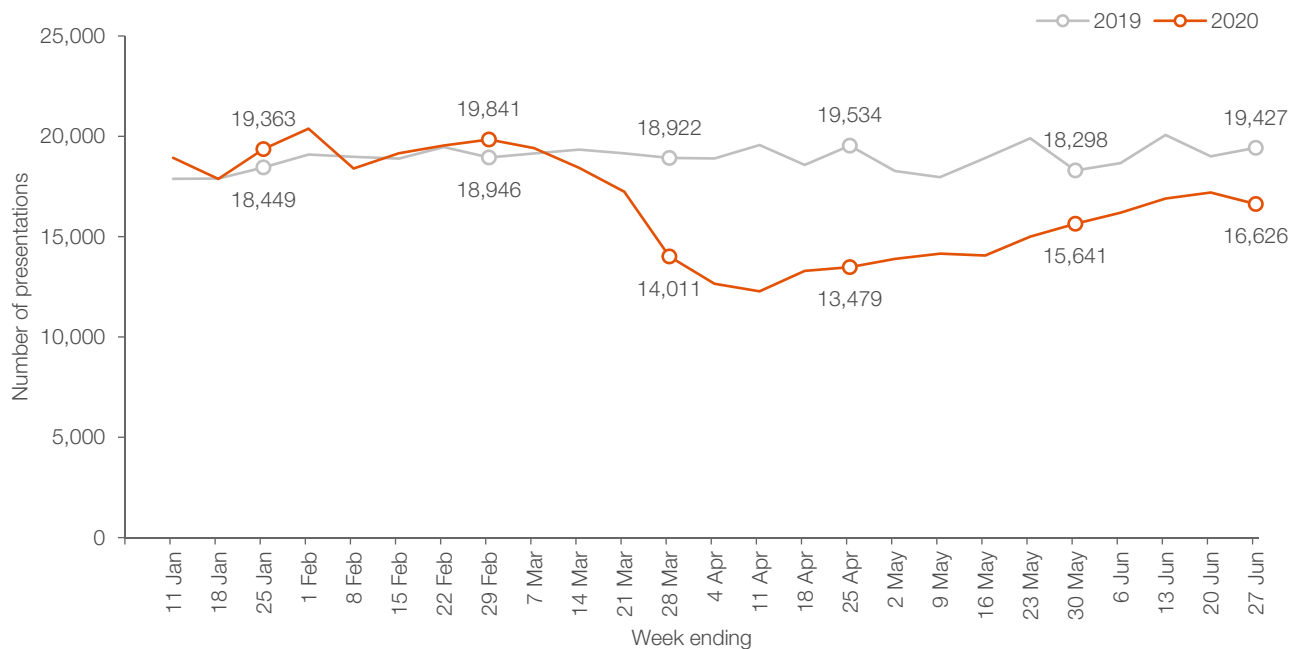
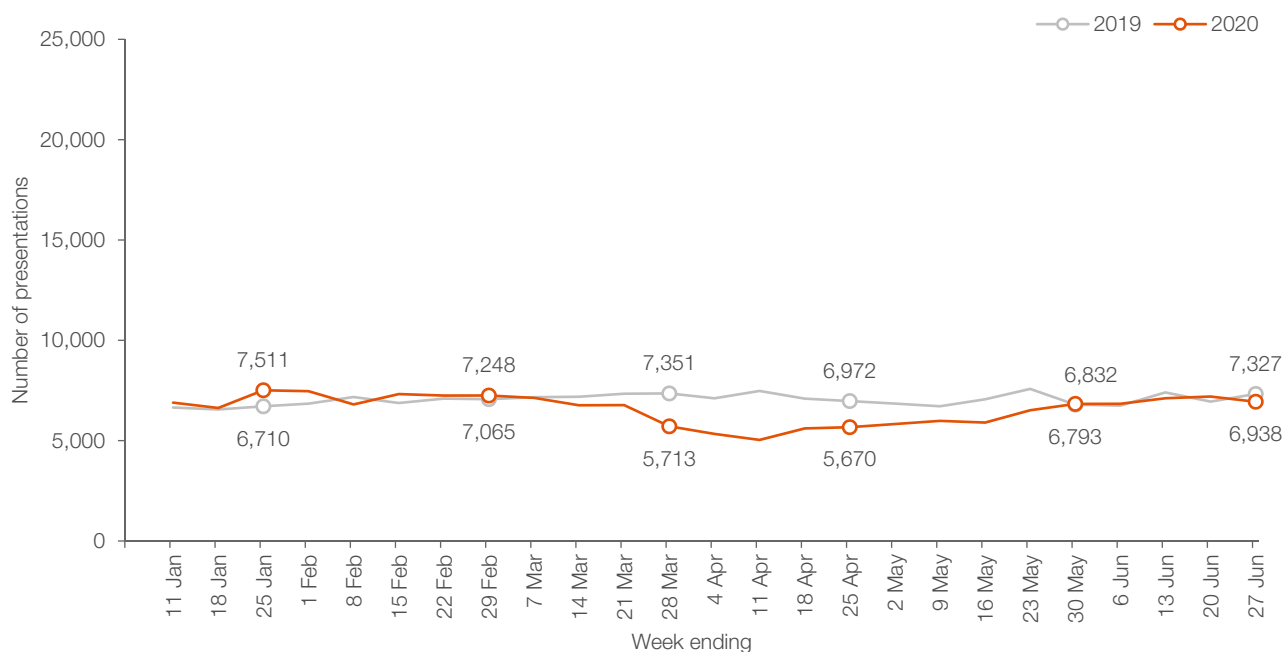


Figure 6 Emergency presentations, triage category 2 (emergency), January to June 2019 and 2020



Notes: Results for hospitals in principal referral, paediatric specialist, ungrouped acute – tertiary referral, major or district peer groups (A1, A2, A3, B, C1 and C2) are included, representing more than 90% of total emergency presentations in January to June 2020.

Weekly activity for 2020 is calculated by aggregating daily activities for a seven-day week from Sunday to Saturday, starting Sunday 5 January 2020 and ending Saturday 27 June 2020. Each day in 2019 is matched with the same day of the week in 2020, due to known variation in activity by day of the week.

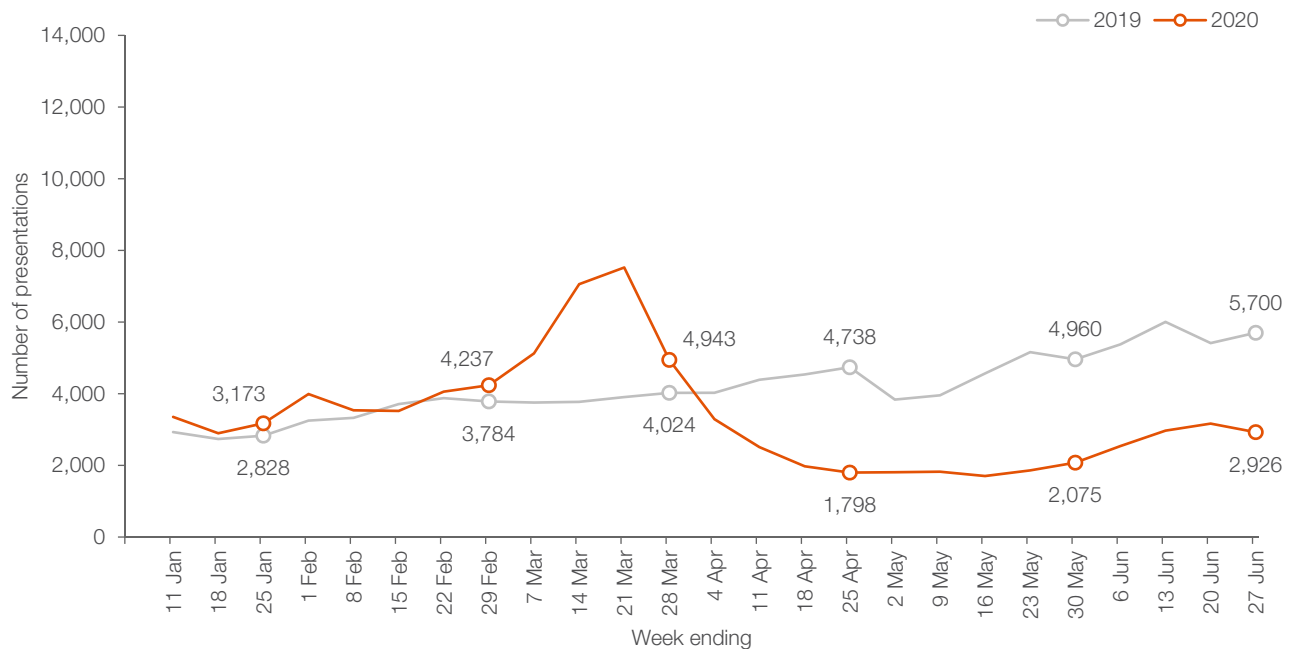
Emergency presentations by clinical cohort

Patients present to EDs for diagnosis and treatment of acute conditions, though diagnosis may only occur after admission or once a patient has returned home, following completion of diagnostic tests and procedures. It is possible, however, to assign presentations to clinical cohorts based on the types of symptoms patients present with or diagnoses made while the patient is in the ED. This approach enables reporting of clinical cohorts, including: respiratory system, injury, mental health, circulatory system and nervous system (Table 1). These cohorts account for 35.8% of all emergency presentations: respiratory system (7.0%), injury (20.8%), circulatory system (3.6%), mental health (3.3%) and nervous system (1.1%).

Emergency presentations for respiratory system conditions were 54.1% higher in March 2020 compared with March 2019. They decreased in April 2020 and remained below 2019 levels for the rest of the quarter. Respiratory system presentations peaked at 7,522 in the week ending 21 March 2020, almost twice as many as the same week in 2019. By the week ending 27 June 2020, weekly emergency presentations for respiratory system conditions were 2,926, down 48.7% compared with the same week in 2019 (Figure 7).

While approximately 10% of respiratory system presentations in April to June 2020 were recorded by ED health professionals as presumed or suspected COVID-19 cases, most of those patients did not subsequently receive a confirmed COVID-19 diagnosis.

Figure 7 Emergency presentations, respiratory system, January to June 2019 and 2020



Notes: Results for hospitals in principal referral, paediatric specialist, ungrouped acute – tertiary referral, major or district peer groups (A1, A2, A3, B, C1 and C2) are included, representing more than 90% of total emergency presentations in January to June 2020. The discharging diagnoses which patients receive in the ED were aggregated to represent clinical cohorts using methodology developed and validated in Australia. See the technical supplement to *Healthcare Quarterly, April to June 2020* for further information. Weekly activity for 2020 is calculated by aggregating daily activities for a seven-day week from Sunday to Saturday, starting Sunday 5 January 2020 and ending Saturday 27 June 2020. Each day in 2019 is matched with the same day of the week in 2020, due to known variation in activity by day of the week.

Compared with March 2019, the number of respiratory system presentations in March 2020 increased most for age groups: 15 to 24 years (up 113.2%), 25 to 44 years (up 207.3%) and 45 to 59 years (up 151.2%). Respiratory system presentations

for very young children (0–4 years) remained relatively stable between 2019 and 2020 (down 0.2%) (Figure 8). By June 2020, respiratory system presentations were lower for all age groups, compared with June 2019 (Figure 9).

Table 1 Example conditions in clinical cohorts

Clinical cohort	Example conditions
Respiratory system	Acute tonsillitis, acute tracheitis, influenza, pneumonia, acute bronchitis, allergic rhinitis, asthma, chronic bronchitis.
Injury	Injuries for different body region, burns and corrosions, toxic effects of substances.
Mental health	Dementia, mental and behavioural disorders due to psychoactive substance use, schizophrenia, delusional disorder, bipolar affective disorder, depressive episodes, anxiety disorders.
Circulatory system	Acute rheumatic fever, essential hypertension, various forms of heart diseases, stroke (haemorrhage or infarction).
Nervous system	Bacterial meningitis, encephalitis, Huntington's disease, Parkinson's disease, Alzheimer's disease, epilepsy, migraine.

Figure 8 Emergency presentations, respiratory system, by age group, March 2020 and 2019















	% of all respiratory system presentations	March 2020	March 2019	Change
All age groups		26,285	17,059	54.1%
0–4 yrs	 22.3%	5,873	5,883	-0.2%
5–14 yrs	 11.5%	3,016	2,514	20.0%
15–24 yrs	 10.7%	2,804	1,315	113.2%
25–44 yrs	 22.9%	6,016	1,958	207.3%
45–59 yrs	 12.5%	3,276	1,304	151.2%
60–75 yrs	 10.8%	2,851	1,852	53.9%
75+ yrs	 9.3%	2,449	2,233	9.7%

Figure 9 Emergency presentations, respiratory system, by age group, June 2020 and 2019

	% of all respiratory system presentations	June 2020	June 2019	Change
All age groups		12,760	24,153	-47.2%
0–4 yrs	 26.7%	3,401	7,207	-52.8%
5–14 yrs	 17.1%	2,182	3,660	-40.4%
15–24 yrs	 8.3%	1,058	1,894	-44.1%
25–44 yrs	 13.4%	1,715	3,334	-48.6%
45–59 yrs	 8.4%	1,069	2,004	-46.7%
60–75 yrs	 12.2%	1,554	2,729	-43.1%
75+ yrs	 14.0%	1,781	3,325	-46.4%

Emergency presentations by clinical cohort

Emergency presentations for injury declined from the middle of March 2020 and were lowest at 6,860 in the week ending 4 April (down 40.7% compared with the same week in 2019). They remained below 2019 levels up to the week ending 27 June (Figure 10).

Emergency presentations for mental health were slightly lower in March and April 2020 compared with 2019, but returned to levels similar to 2019 during May and June. In the week ending 27 June, there were 1,580 emergency presentations for mental health, up 91 compared with 2019 (Figure 11).

Figure 10 Emergency presentations, injury, January to June 2019 and 2020

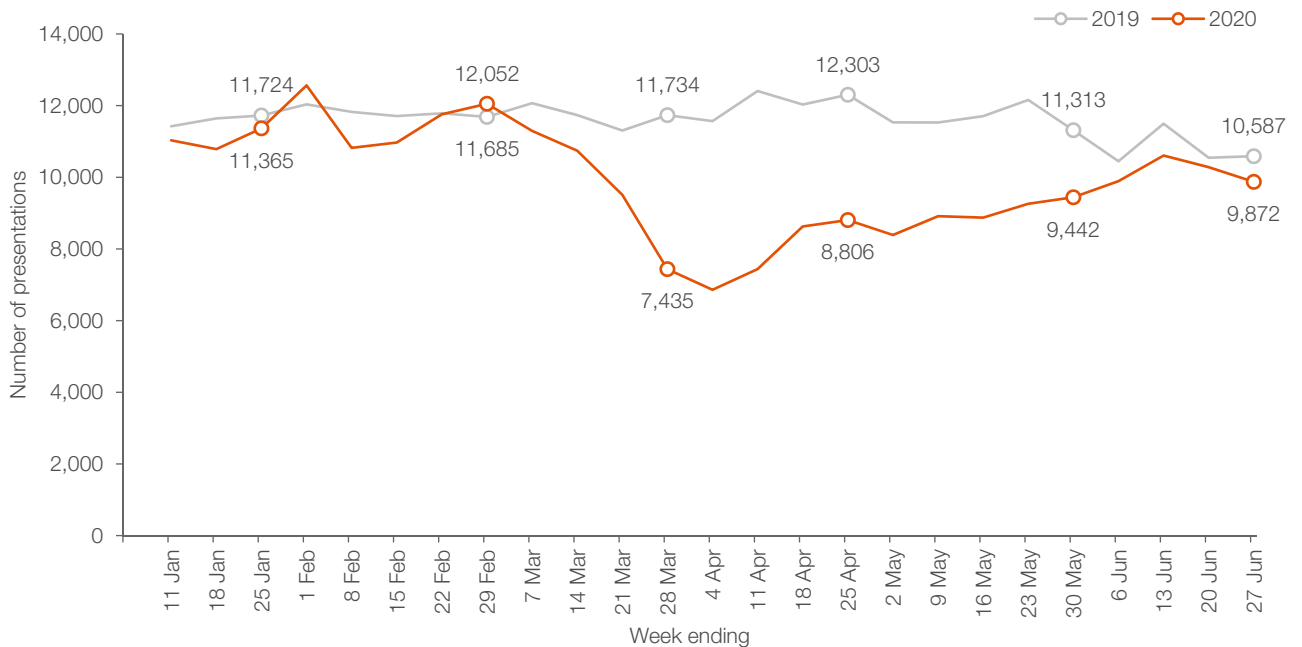
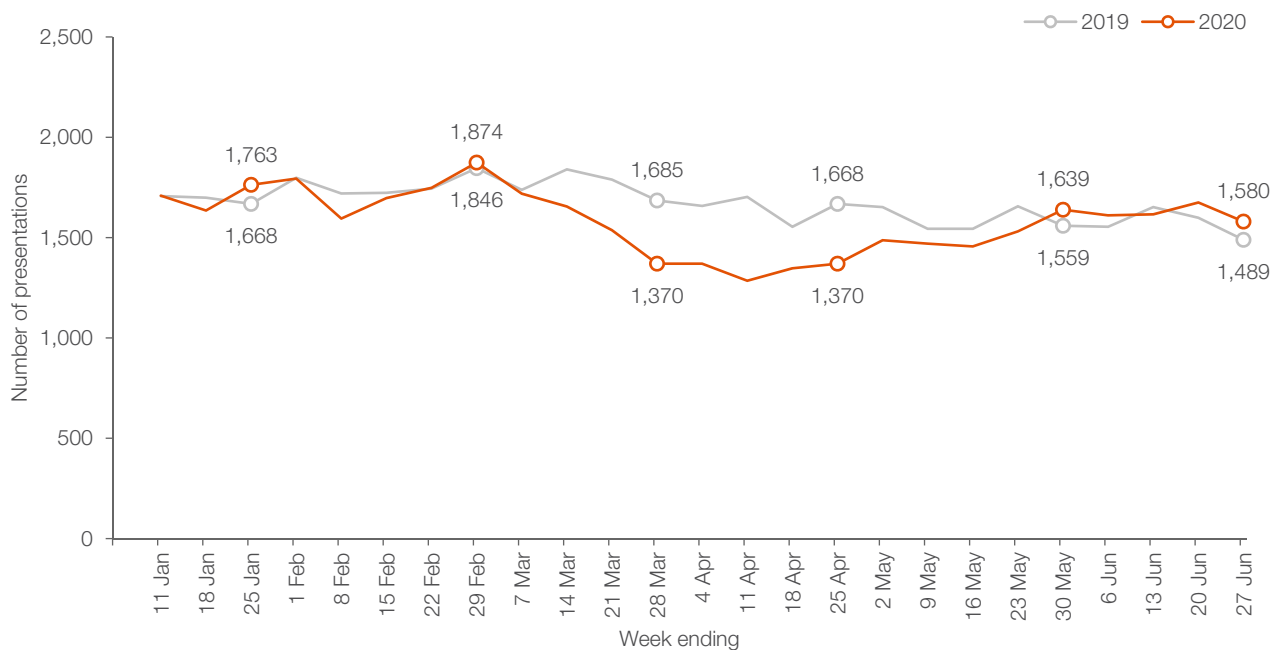




Figure 11 Emergency presentations, mental health, January to June 2019 and 2020



Notes: Results for hospitals in principal referral, paediatric specialist, ungrouped acute – tertiary referral, major or district peer groups (A1, A2, A3, B, C1 and C2) are included, representing more than 90% of total emergency presentations in January to June 2020.

The discharging diagnoses which patients receive in the ED were aggregated to represent clinical cohorts using methodology developed and validated in Australia. See the technical supplement to *Healthcare Quarterly, April to June 2020* for further information.

Weekly activity for 2020 is calculated by aggregating daily activities for a seven-day week from Sunday to Saturday, starting Sunday 5 January 2020 and ending Saturday 27 June 2020. Each day in 2019 is matched with the same day of the week in 2020, due to known variation in activity by day of the week.

Emergency presentations by clinical cohort

Circulatory system and nervous system emergency presentations were lower in March and April 2020, but returned to levels close to 2019 during May and June (Figures 12, 13).

In the week ending 27 June 2020, circulatory system and nervous system emergency presentations were 1,852 (down 7.9% compared with the same week in 2019) and 562 (down 6.3%), respectively (Figures 12, 13).

Figure 12 Emergency presentations, circulatory system, January to June 2019 and 2020

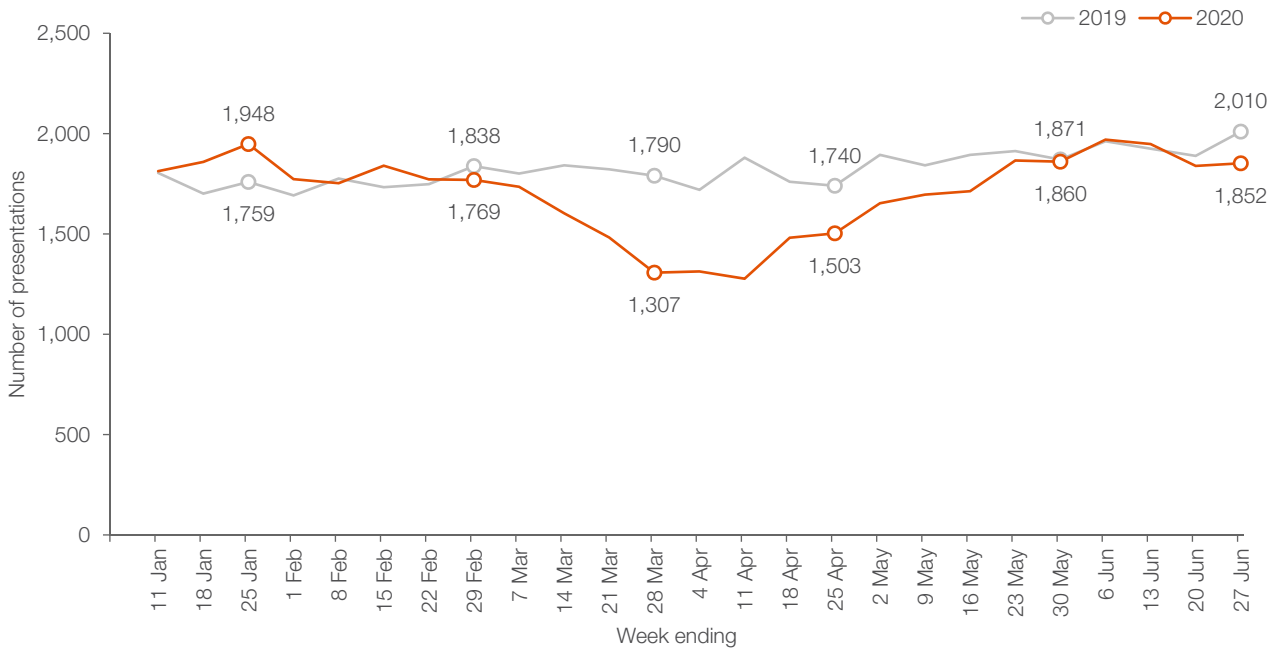
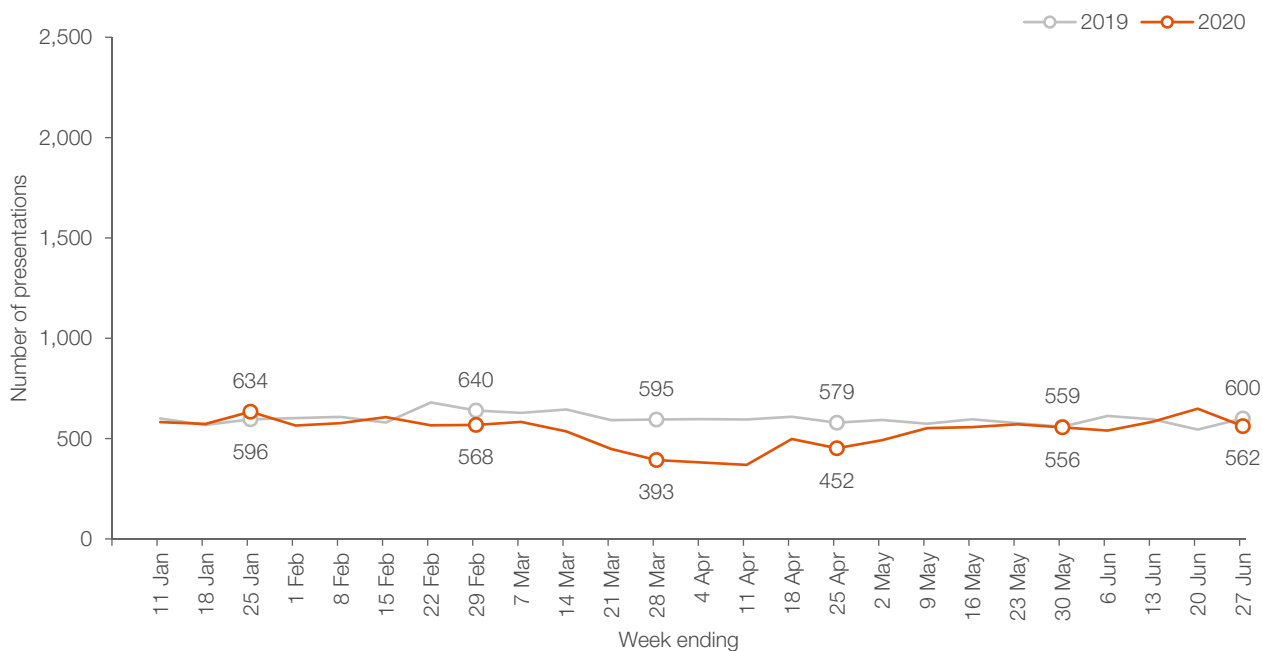


Figure 13 Emergency presentations, nervous system, January to June 2019 and 2020



Notes: Results for hospitals in principal referral, paediatric specialist, ungrouped acute – tertiary referral, major or district peer groups (A1, A2, A3, B, C1 and C2) are included, representing more than 90% of total emergency presentations in January to June 2020.

The discharging diagnoses which patients receive in the ED were aggregated to represent clinical cohorts using methodology developed and validated in Australia. See the technical supplement to *Healthcare Quarterly, April to June 2020* for further information.

Weekly activity for 2020 is calculated by aggregating daily activities for a seven-day week from Sunday to Saturday, starting Sunday 5 January 2020 and ending Saturday 27 June 2020. Each day in 2019 is matched with the same day of the week in 2020, due to known variation in activity by day of the week.



Ambulance activity

Ambulance responses

Between late March and mid April, the number of ambulance responses decreased 20.5% from 24,156 to 19,193 per week. Responses then increased each week to the end of June, with 22,654 ambulance responses in the week ending 27 June, down 10.5% compared with the same week in 2019 (Figure 14).

The number of priority 1A (P1A: highest priority) responses for life-threatening conditions in April to June 2020 remained at similar levels compared with the same period in 2019 (Figure 15).

Figure 14 Ambulance responses, all priority categories, January to June 2019 and 2020

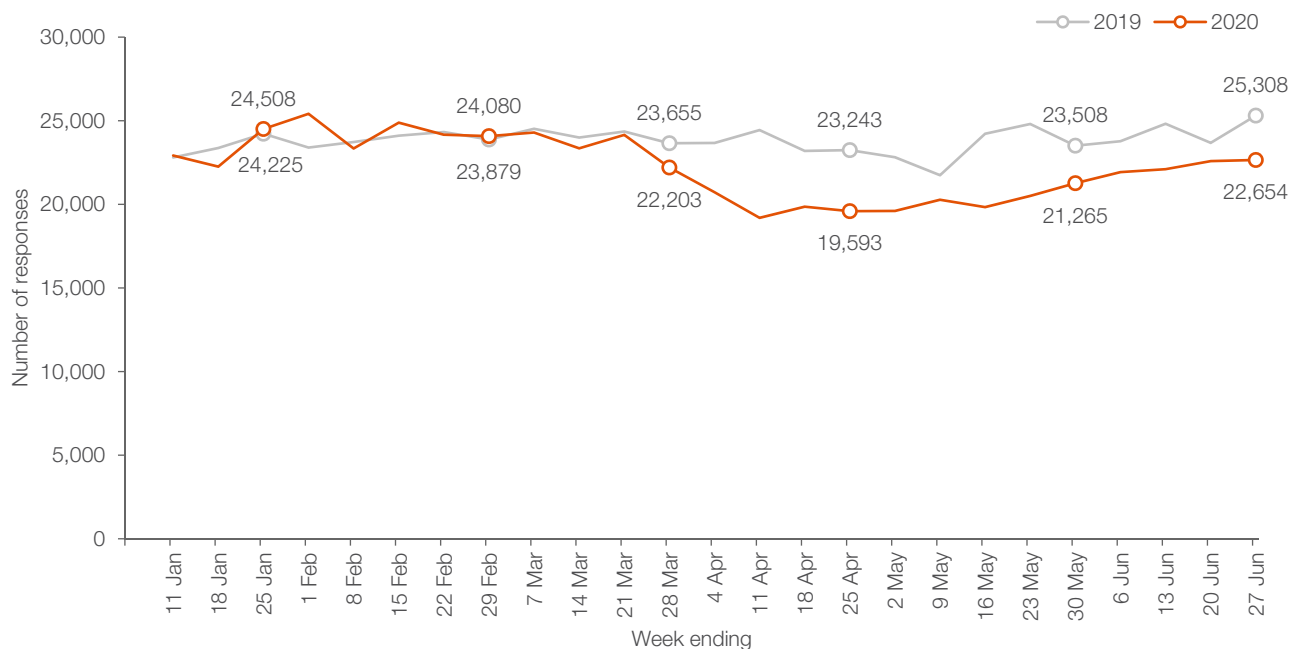
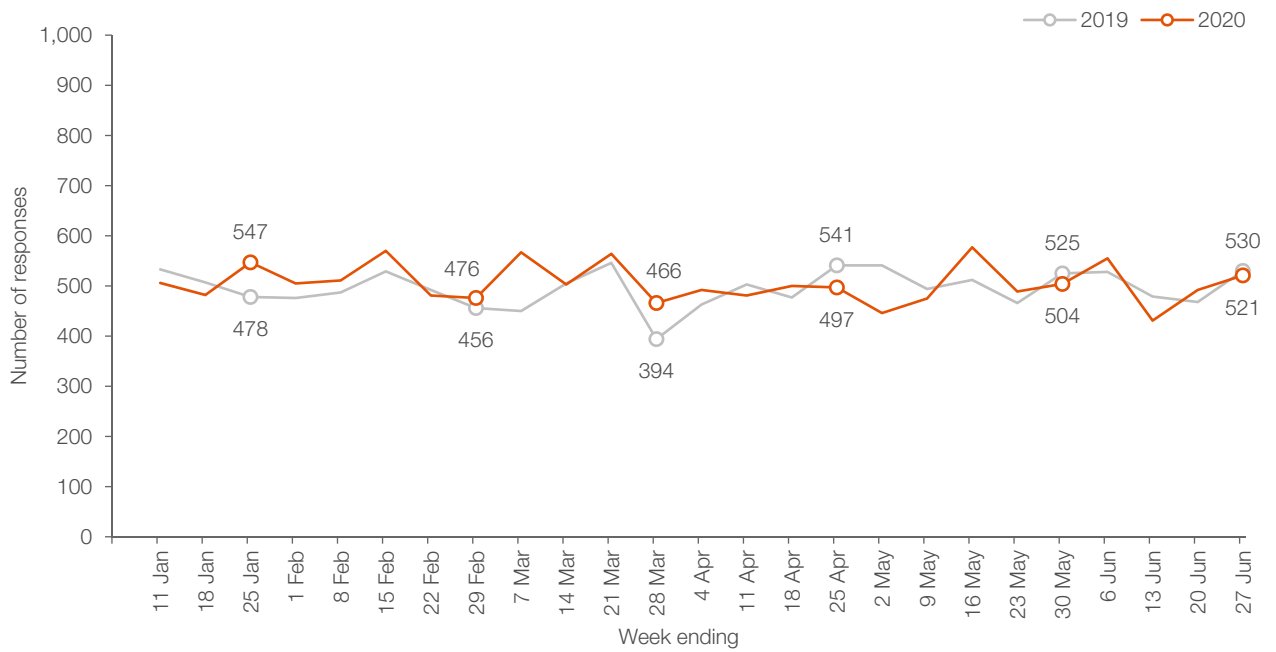


Figure 15 Ambulance responses, priority 1A (P1A: highest priority), January to June 2019 and 2020



Note: Weekly activity for 2020 is calculated by aggregating daily activities for a seven-day week from Sunday to Saturday, starting Sunday 5 January 2020 and ending Saturday 27 June 2020. Each day in 2019 is matched with the same day of the week in 2020, due to known variation in activity by day of the week.

Ambulance responses

Priority 1 (P1: emergency) and priority 2 (P2: urgent) responses decreased from late March 2020, followed by a steady increase from the middle of April.

The numbers of P1 and P2 responses were at their lowest in the week ending 11 April 2020 at 8,770 (down 19.4% compared with the same week in 2019) and 9,164 (down 21.1%), respectively (Figures 16, 17).

In the week ending 27 June 2020, weekly ambulance responses for P1 and P2 cases were 10,212 (down 11.3% compared with the same week in 2019) and 10,769 (down 10.0%), respectively (Figures 16, 17).

Figure 16 Ambulance responses, priority 1 (P1: emergency), January to June 2019 and 2020

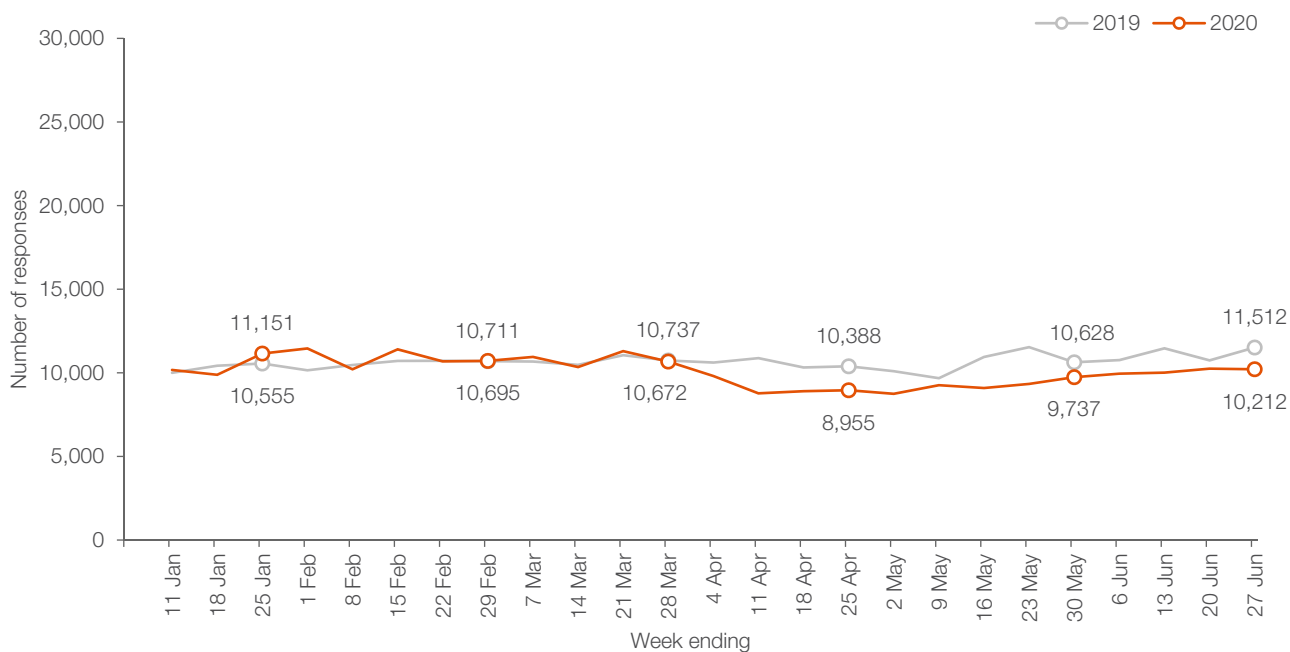
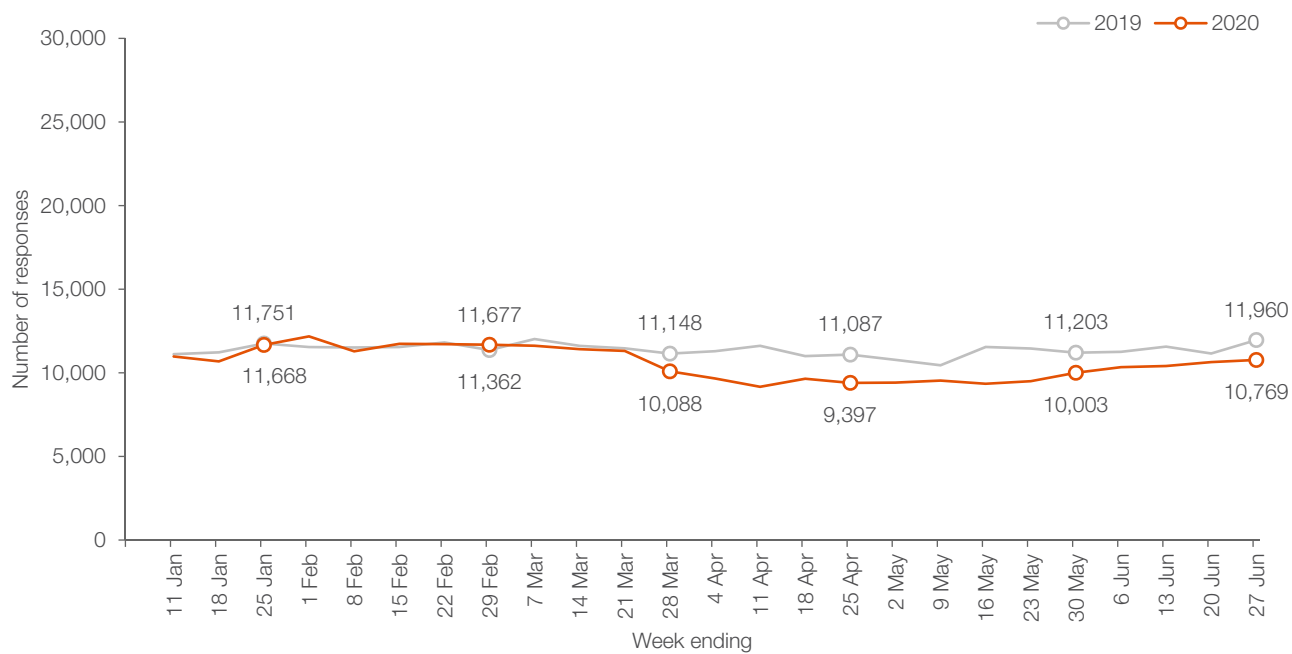


Figure 17 Ambulance responses, priority 2 (P2: urgent), January to June 2019 and 2020



Note: Weekly activity for 2020 is calculated by aggregating daily activities for a seven-day week from Sunday to Saturday, starting Sunday 5 January 2020 and ending Saturday 27 June 2020. Each day in 2019 is matched with the same day of the week in 2020, due to known variation in activity by day of the week.



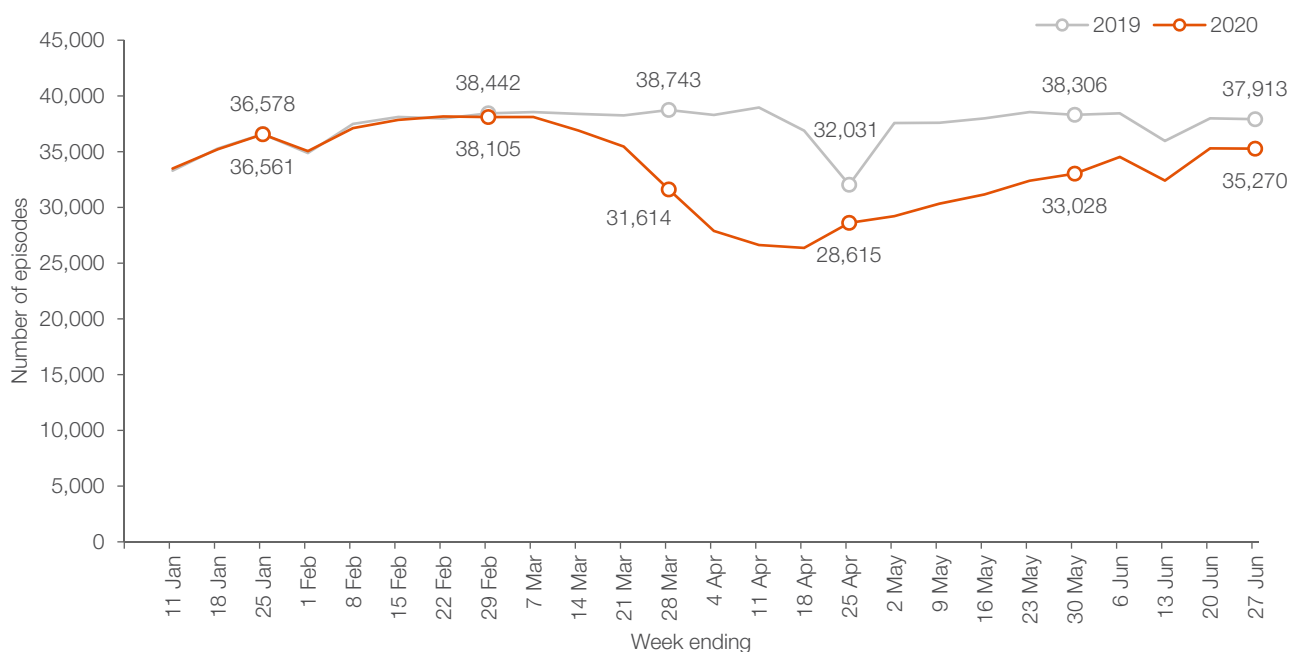
Admitted patient activity

Admitted patient episodes

Between the week ending 14 March and the week ending 18 April 2020, admitted patient episodes decreased 28.5% from 36,893 to 26,368 per week. Episodes then increased steadily, with 35,270 in the week ending 27 June, down 7.0% compared with the same week in 2019 (Figure 18).

This pattern of activity was evident across all public hospital peer groups, and in hospitals in both metropolitan and regional-rural areas. It was also observed in all LHDs, except Far West, where the number and trend in admitted patient episodes were similar to the same period in 2019 (data not shown).

Figure 18 Total admitted patient episodes, January to June 2019 and 2020



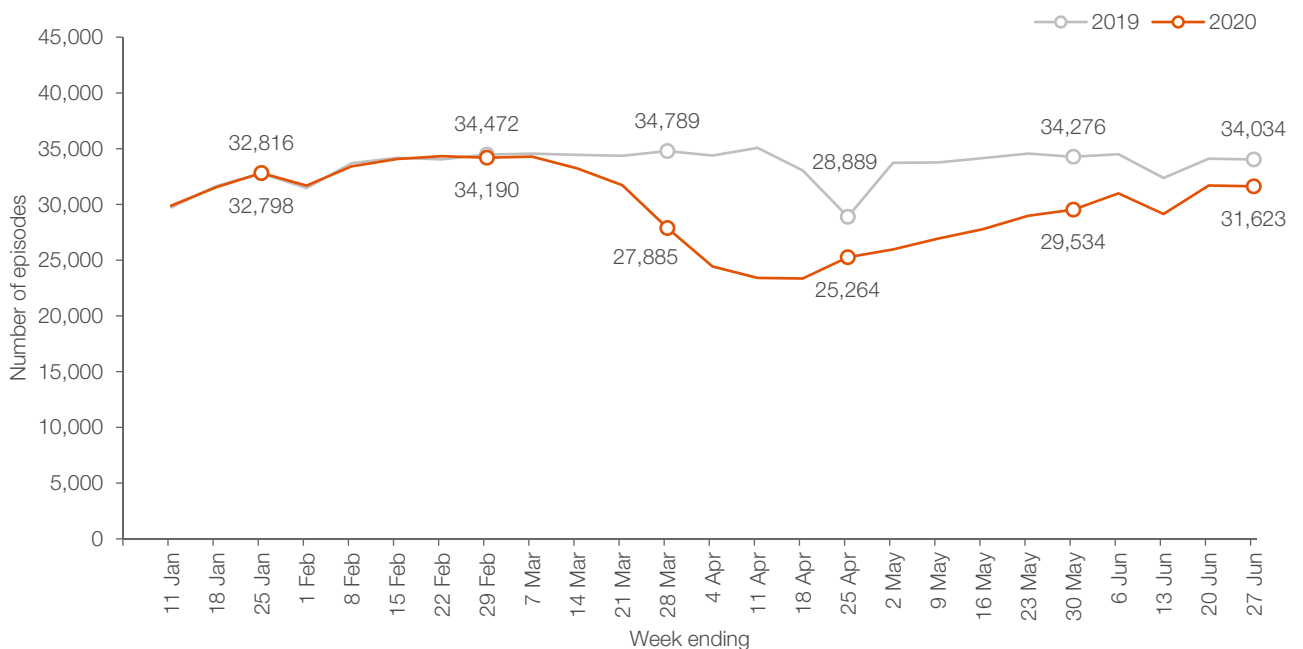
Notes: Results for all NSW public hospitals reported in *Healthcare Quarterly* are included. Weekly activity for 2020 is calculated by aggregating daily activities for a seven-day week from Sunday to Saturday, starting Sunday 5 January 2020 and ending Saturday 27 June 2020. Each day in 2019 is matched with the same day of the week in 2020, due to known variation in activity by day of the week.

Admitted patient episodes by care type

Admitted patient episodes can be broken down by different types of care, including acute, non-acute (e.g. rehabilitation, palliative and geriatric) and mental health. Acute care represented 93.9% of all admitted patient episodes in April to June 2020.

As the largest of these cohorts, acute care showed a similar pattern of activity to total admitted patient episodes. Acute care episodes decreased from the middle of March 2020, followed by a steady increase from the middle of April. They were at their lowest in the week ending 18 April 2020 at 23,354, down 29.3% compared with the same week in 2019 (Figure 19).

Figure 19 Number of completed admitted patient episodes, acute care, January to June 2019 and 2020



Notes: Results for all NSW public hospitals reported in *Healthcare Quarterly* are included. Weekly activity for 2020 is calculated by aggregating daily activities for a seven-day week from Sunday to Saturday, starting Sunday 5 January 2020 and ending Saturday 27 June 2020. Each day in 2019 is matched with the same day of the week in 2020, due to known variation in activity by day of the week.

Admitted patient episodes by care type

Analysis showed the decrease in the percentage of rehabilitation episodes from mid March was more marked than for other types of non-acute care.

By the week ending 18 April 2020, rehabilitation episodes of care were 49.4% lower than the same week in 2019. Between the week ending 18 April 2020 and the week ending 27 June 2020, episodes

of rehabilitation care increased slightly, but remained lower than in 2019 (down 29.5% for the week ending 27 June) (Figure 20).

In the week ending 27 June 2020, admitted patient episodes for mental health care were 811, down 8.4% compared with the same week in 2019 (Figure 21).

Figure 20 Number of completed admitted patient episodes, rehabilitation care, January to June 2019 and 2020

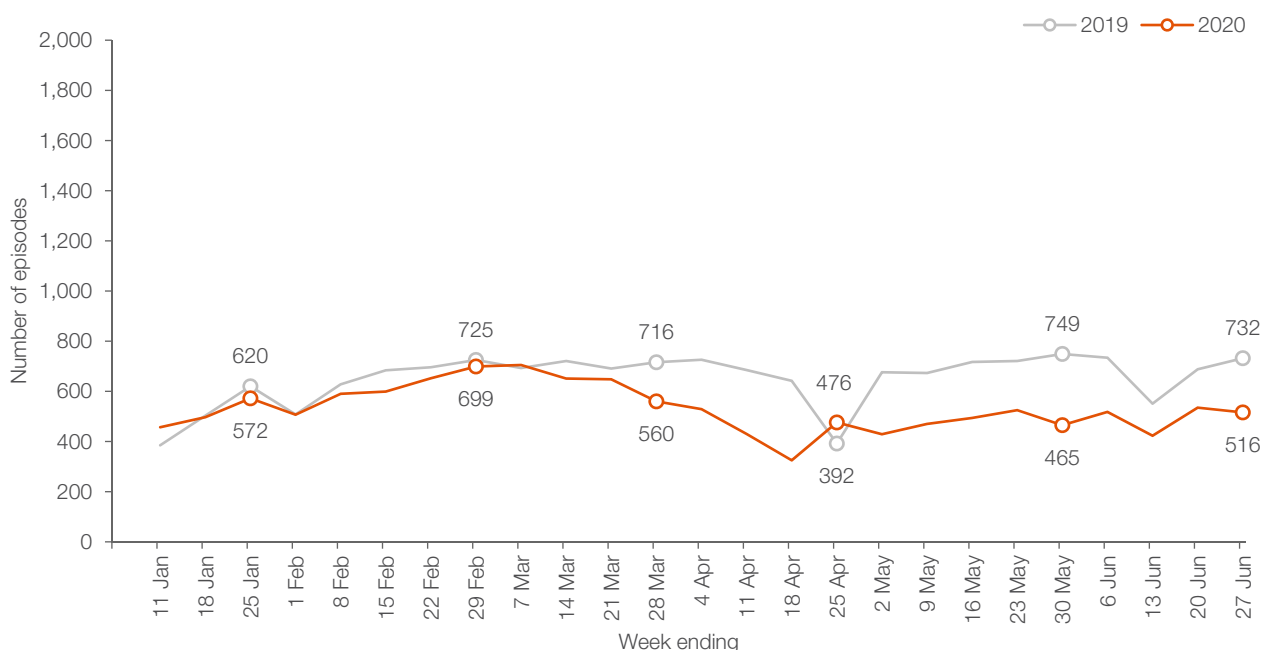
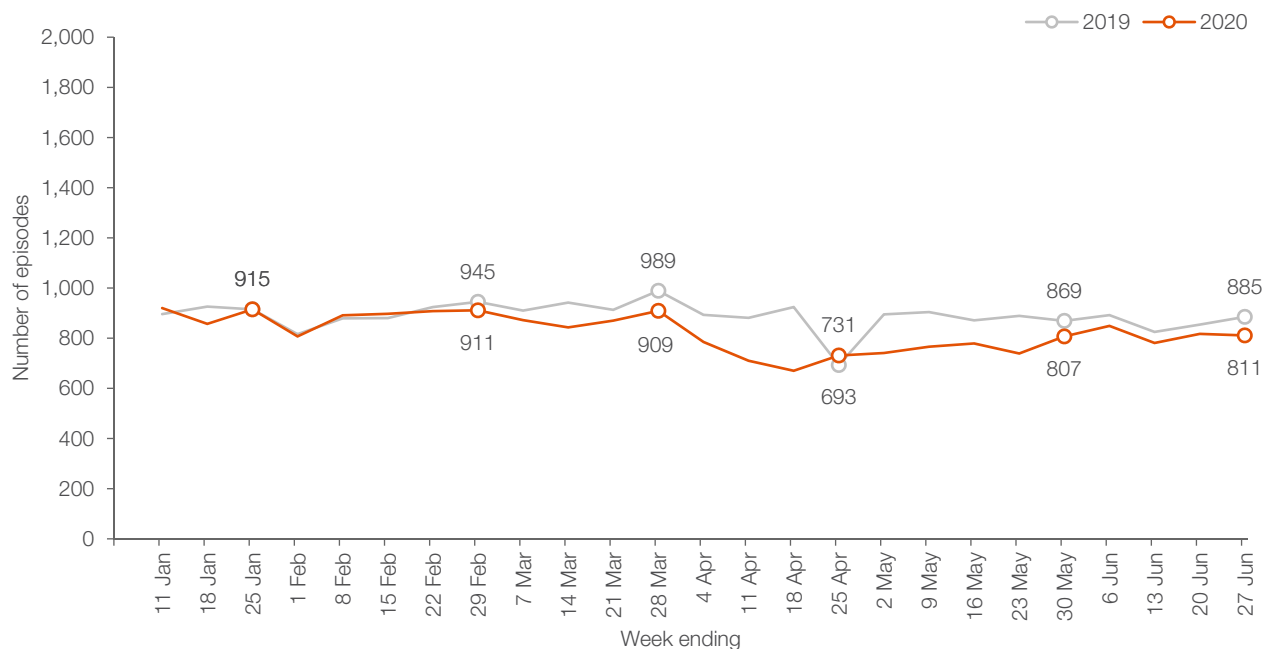


Figure 21 Number of completed admitted patient episodes, mental health care, January to June 2019 and 2020



Notes: Results for all NSW public hospitals reported in *Healthcare Quarterly* are included.
 Weekly activity for 2020 is calculated by aggregating daily activities for a seven-day week from Sunday to Saturday, starting Sunday 5 January 2020 and ending Saturday 27 June 2020. Each day in 2019 is matched with the same day of the week in 2020, due to known variation in activity by day of the week.

Admitted patient episodes by clinical cohort

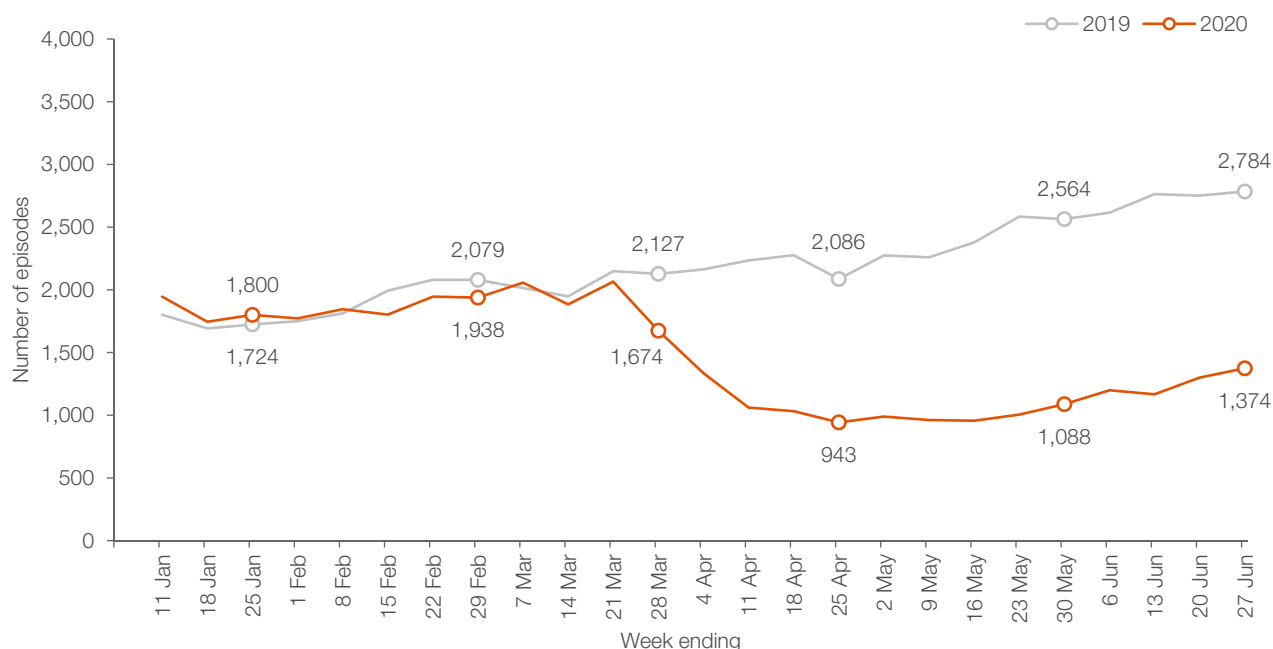
Principal diagnosis refers to the diagnosis, established at the completion of an episode of care, that is considered primarily responsible for the patient's admission. It is used here to enable reporting of five clinical cohorts, which account for 25.7% of all completed admitted patient episodes: respiratory system (4.4%), injury (9.1%), circulatory system (6.1%), mental health (3.8%) and nervous system (2.3%).

Admitted patient episodes for respiratory system conditions began a decline that commenced in the week ending 21 March 2020 and remained low throughout April to June 2020. In the week ending 27

June 2020, respiratory system episodes of care were 1,374, down 50.8% compared with the same week in 2019 (Figure 22).

This reduction in the number of respiratory system episodes was most pronounced among very young children (0–4 years), falling to approximately 100 each week in April/May 2020, compared with approximately 400 each week at the same time in 2019 (data not shown). By June, episodes of care for respiratory system conditions remained lower across all age groups in 2020, when compared with 2019 (Figure 23).

Figure 22 Number of completed admitted patient episodes, respiratory system, January to June 2019 and 2020










Notes: Results for all NSW public hospitals reported in *Healthcare Quarterly* are included.

The principle diagnoses which patients receive in hospital for both acute and non-acute care were aggregated to represent clinical cohorts using methodology developed and validated in Australia. See the technical supplement to *Healthcare Quarterly, April to June 2020* for further information.

Results for the week ending 27 June 2020 should be interpreted with caution, as the completion rate for diagnosis information for this week was lower than all other weeks. See the technical supplement for further information.

Weekly activity for 2020 is calculated by aggregating daily activities for a seven-day week from Sunday to Saturday, starting Sunday 5 January 2020 and ending Saturday 27 June 2020. Each day in 2019 is matched with the same day of the week in 2020, due to known variation in activity by day of the week.

Figure 23 Admitted patient episodes for respiratory system, by age group, June 2020 and 2019

	% of all respiratory system presentations	June 2020	June 2019	Change
All age groups		5,539	11,412	-51.5%
0–4 yrs	 13.3%	734	2,183	-66.4%
5–14 yrs	 9.8%	544	903	-39.8%
15–24 yrs	 5.5%	304	610	-50.2%
25–44 yrs	 8.6%	477	1,167	-59.1%
45–59yrs	 10.0%	554	1,086	-49.0%
60–75 yrs	 22.5%	1,247	2,171	-42.6%
75+ yrs	 30.3%	1,679	3,292	-49.0%

Admitted patient episodes by clinical cohort

For the injury and mental health clinical cohorts, admitted patient episodes decreased from the middle of March 2020, and increased from the middle of April (Figures 24, 25).

In the week ending 27 June 2020, admitted patient episodes for injury and mental health were 3,024 (down 8.3% compared with the same week in 2019) and 1,258 (down 7.0%), respectively (Figures 24, 25).

Figure 24 Number of completed admitted patient episodes, injury, January to June 2019 and 2020

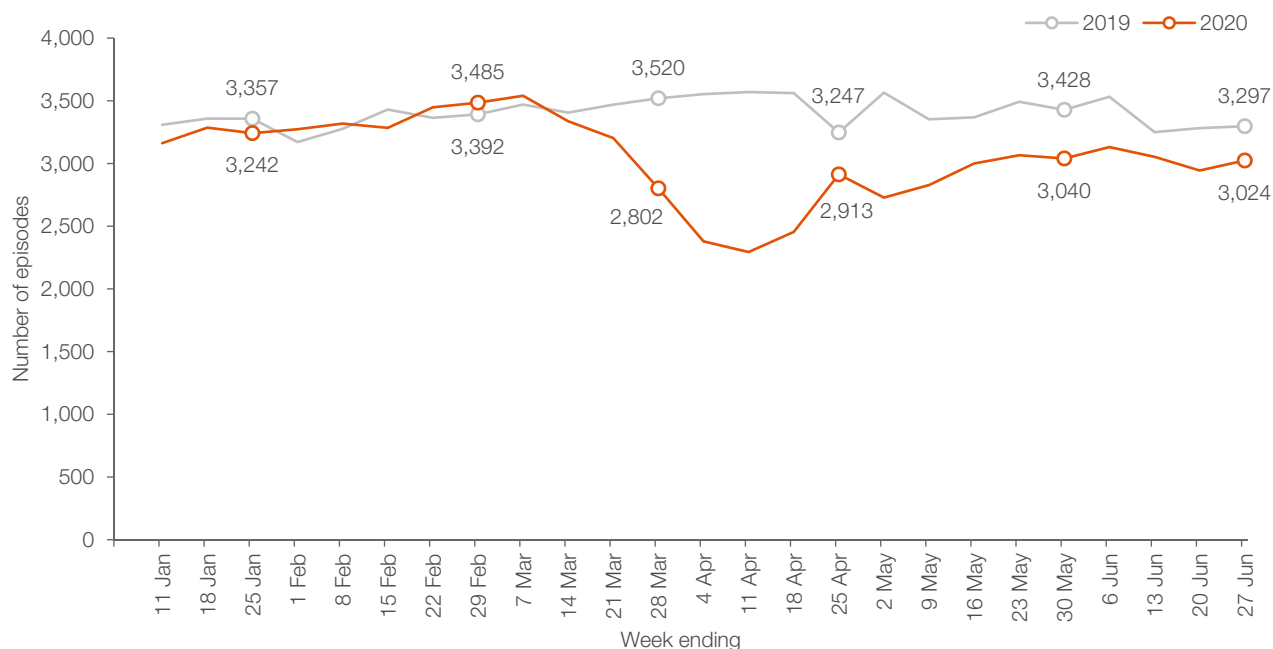
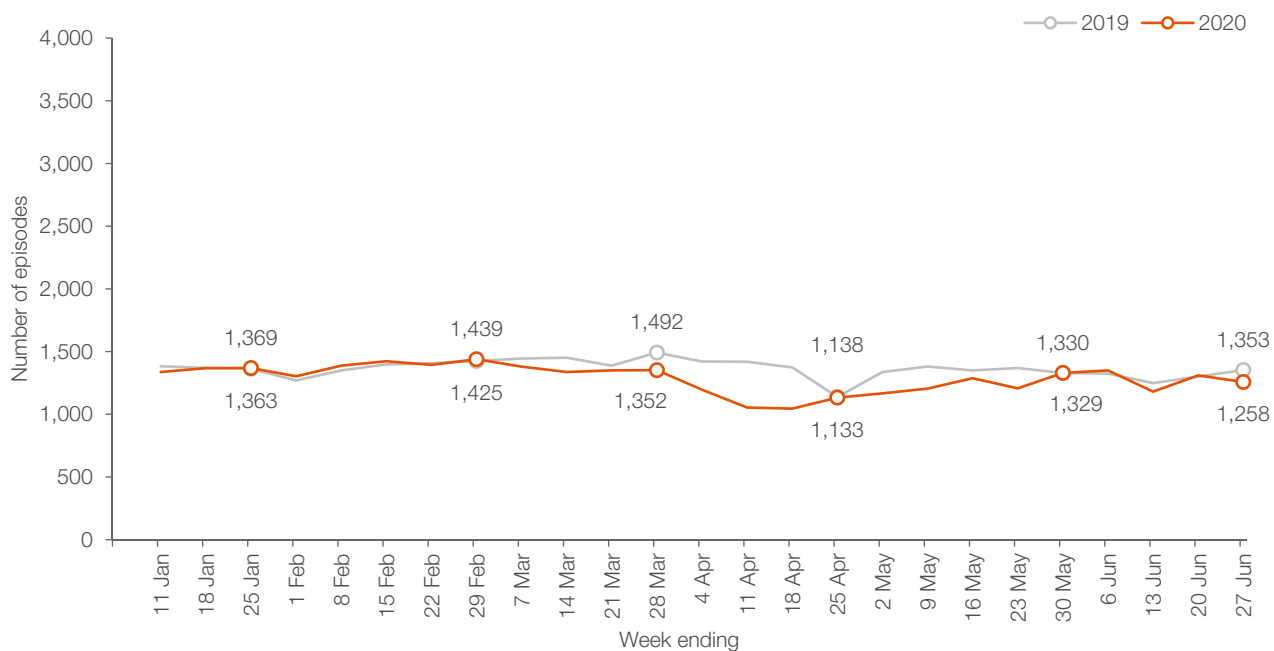


Figure 25 Number of completed admitted patient episodes, mental health diagnoses, January to June 2019 and 2020



Notes: Results for all NSW public hospitals reported in *Healthcare Quarterly* are included.
 The principle diagnoses which patients receive in hospital for both acute and non-acute care were aggregated to represent clinical cohorts using methodology developed and validated in Australia. See the technical supplement to *Healthcare Quarterly, April to June 2020* for further information.
 Results for the week ending 27 June 2020 should be interpreted with caution, as the completion rate for diagnosis information for this week was lower than all other weeks. See the technical supplement for further information.
 Weekly activity for 2020 is calculated by aggregating daily activities for a seven-day week from Sunday to Saturday, starting Sunday 5 January 2020 and ending Saturday 27 June 2020. Each day in 2019 is matched with the same day of the week in 2020, due to known variation in activity by day of the week.

Admitted patient episodes by clinical cohort

For the circulatory system and nervous system clinical cohorts, admitted patient episodes decreased from the middle of March, and increased from the middle of April 2020 (Figures 26, 27).

In the week ending 27 June 2020, admitted patient episodes for circulatory system and nervous system were 2,165 (down 10.7% compared with the same week in 2019) and 810 (down 14.6%), respectively (Figures 26, 27).

Admitted patient episodes for circulatory system and nervous system were lowest in the week ending 18 April 2020 at 1,477 (down 30.9% compared with the same week in 2019) and 515 (down 44.0%), respectively (Figures 26, 27).

Figure 26 Number of completed admitted patient episodes, circulatory system, January to June 2019 and 2020

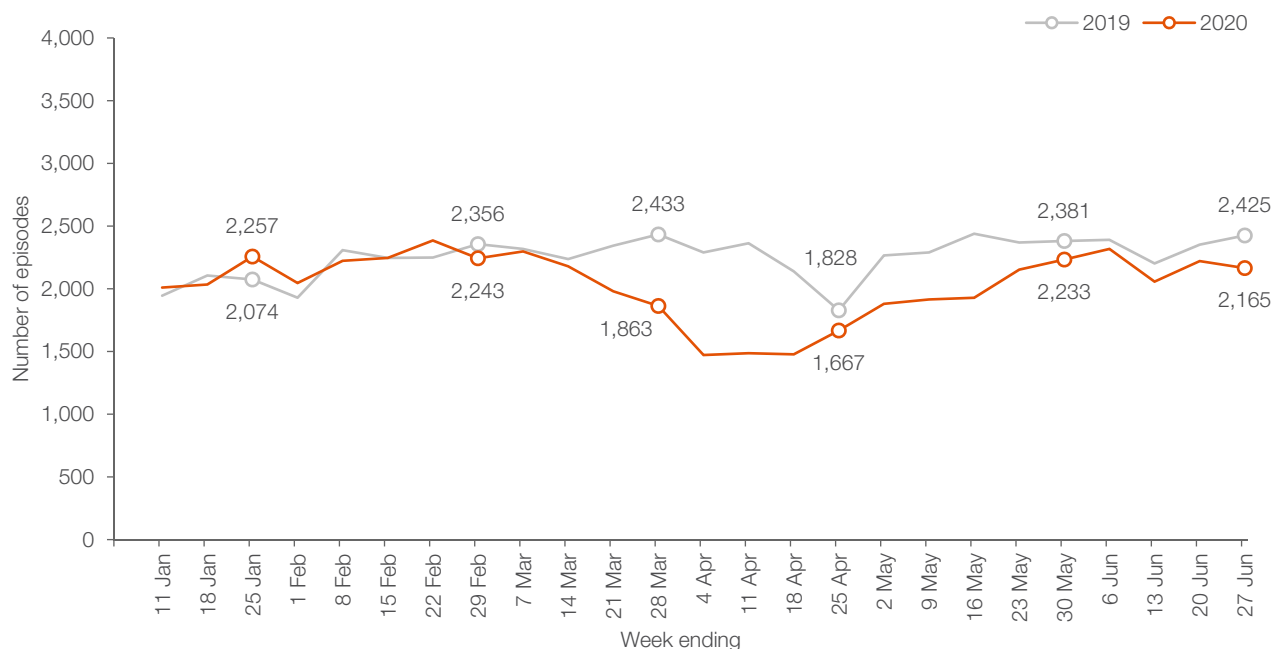
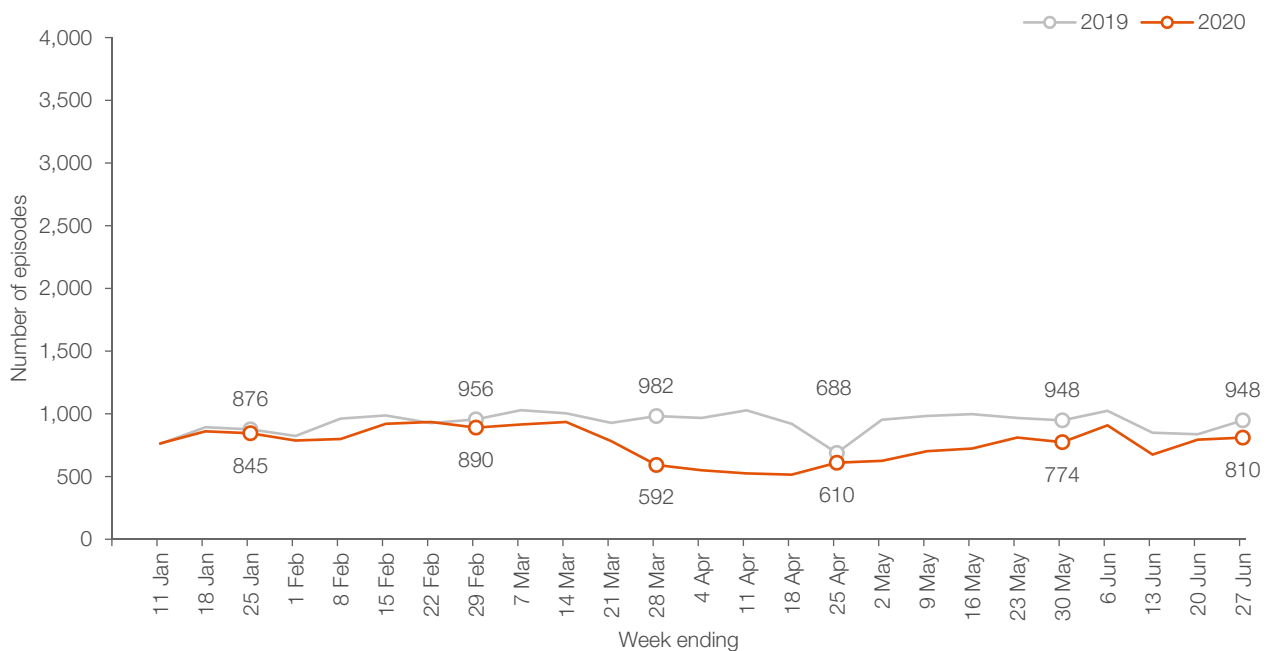


Figure 27 Number of completed admitted patient episodes, nervous system, January to June 2019 and 2020



Notes: Results for all NSW public hospitals reported in *Healthcare Quarterly* are included.
 The principle diagnoses which patients receive in hospital for both acute and non-acute care were aggregated to represent clinical cohorts using methodology developed and validated in Australia. See the technical supplement to *Healthcare Quarterly, April to June 2020* for further information.
 Results for the week ending 27 June 2020 should be interpreted with caution, as the completion rate for diagnosis information for this week was lower than all other weeks. See the technical supplement for further information.
 Weekly activity for 2020 is calculated by aggregating daily activities for a seven-day week from Sunday to Saturday, starting Sunday 5 January 2020 and ending Saturday 27 June 2020. Each day in 2019 is matched with the same day of the week in 2020, due to known variation in activity by day of the week.



Elective surgery activity

Elective surgical procedures

A progressive reduction in the number of elective surgical procedures – including public procedures contracted to private hospitals (see Figure 32) – was evident from early March, before declining sharply from 26 March when all non-urgent elective surgery was suspended. Between the week ending 21 March 2020 and the week ending 25 April, the total number of procedures performed decreased 58.7%, from 4,538 to 1,872 per week (Figure 28).

In the week ending 27 June 2020, 4,062 procedures were performed, down 15.8% compared with the same week in 2019 (Figure 28).

The number of urgent (category 1) procedures through January to June 2020 was comparable with 2019 for almost all weeks (Figure 29).

In response to the COVID-19 pandemic, from 26 March, National Cabinet suspended all non-urgent elective surgery. From 27 April, additional elective surgery up to 25% of normal levels was permitted, and from 15 May, three stages for reopening elective surgery were established, to be implemented at the discretion of each jurisdiction.

Figure 28 Elective surgical procedures performed, all urgency categories, January to June 2019 and 2020

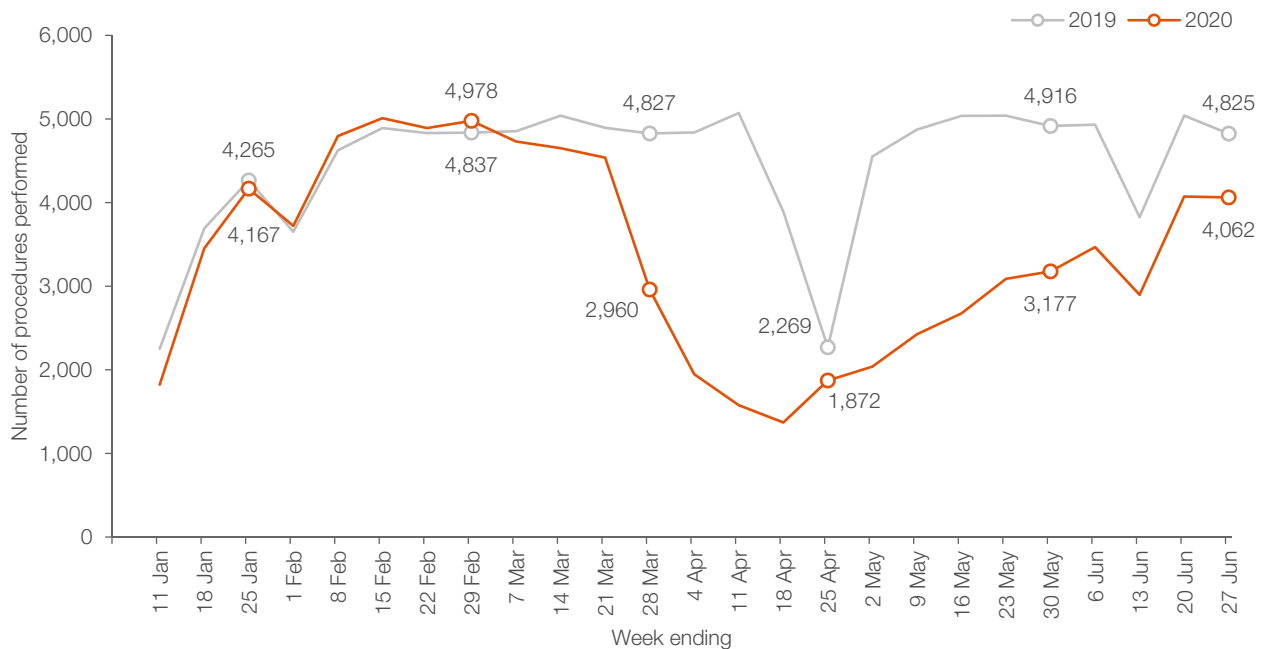
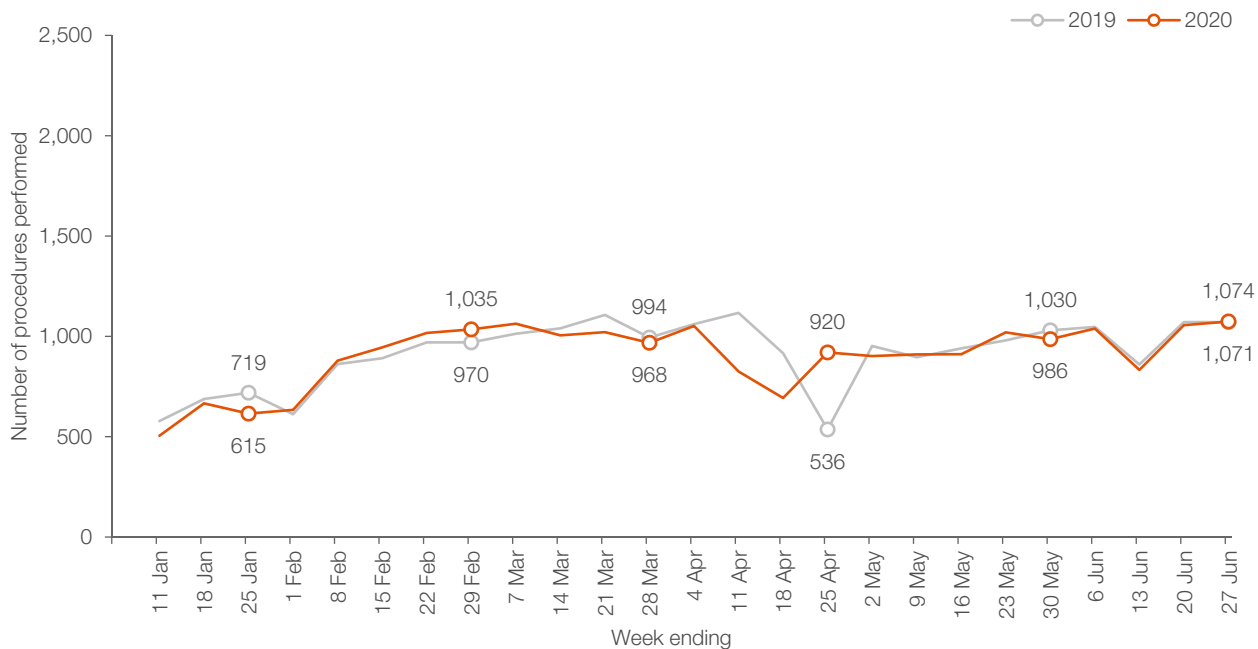


Figure 29 Elective surgical procedures performed, urgent (category 1), January to June 2019 and 2020



Notes: Results for all NSW public hospitals reported in *Healthcare Quarterly* are included.

The lower numbers of procedures performed in April and June 2019 were due to the respective long weekends.

Weekly activity for 2020 is calculated by aggregating daily activities for a seven-day week from Sunday to Saturday, starting Sunday 5 January 2020 and ending Saturday 27 June 2020. Each day in 2019 is matched with the same day of the week in 2020, due to known variation in activity by day of the week.

Elective surgical procedures

The biggest decreases in the numbers of elective surgical procedures performed were for semi-urgent and non-urgent procedures.

Between the week ending 21 March 2020 and the week ending 25 April, the number of semi-urgent procedures performed decreased 40.3%, from 1,341 to 800 per week. The number of non-urgent procedures performed dropped to 66 in the week ending 25 April (Figure 31).

From 27 April, the numbers of semi-urgent and non-urgent elective surgical procedures increased steadily. In the week ending 27 June 2020, the number of semi-urgent procedures performed was 1,399 (down 10.0% compared with the same week in 2019), and the number of non-urgent procedures performed was 1,394 (down 29.7%) (Figures 30, 31).

Figure 30 Elective surgical procedures performed, semi-urgent (category 2), January to June 2019 and 2020

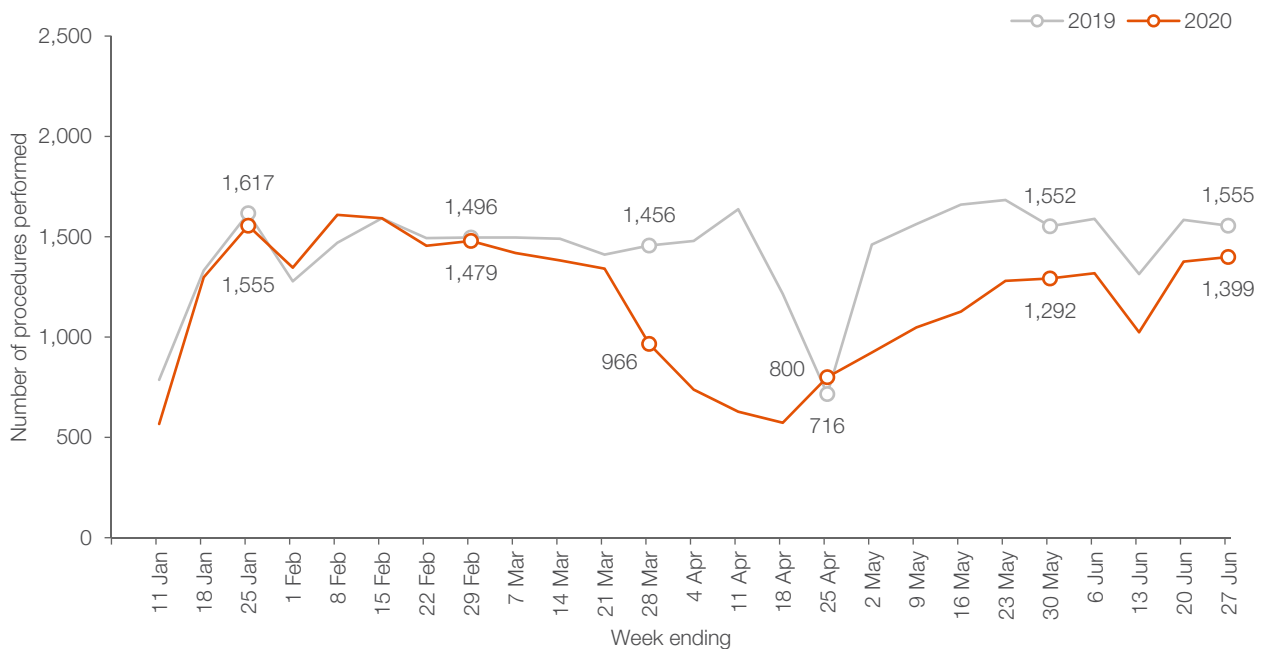
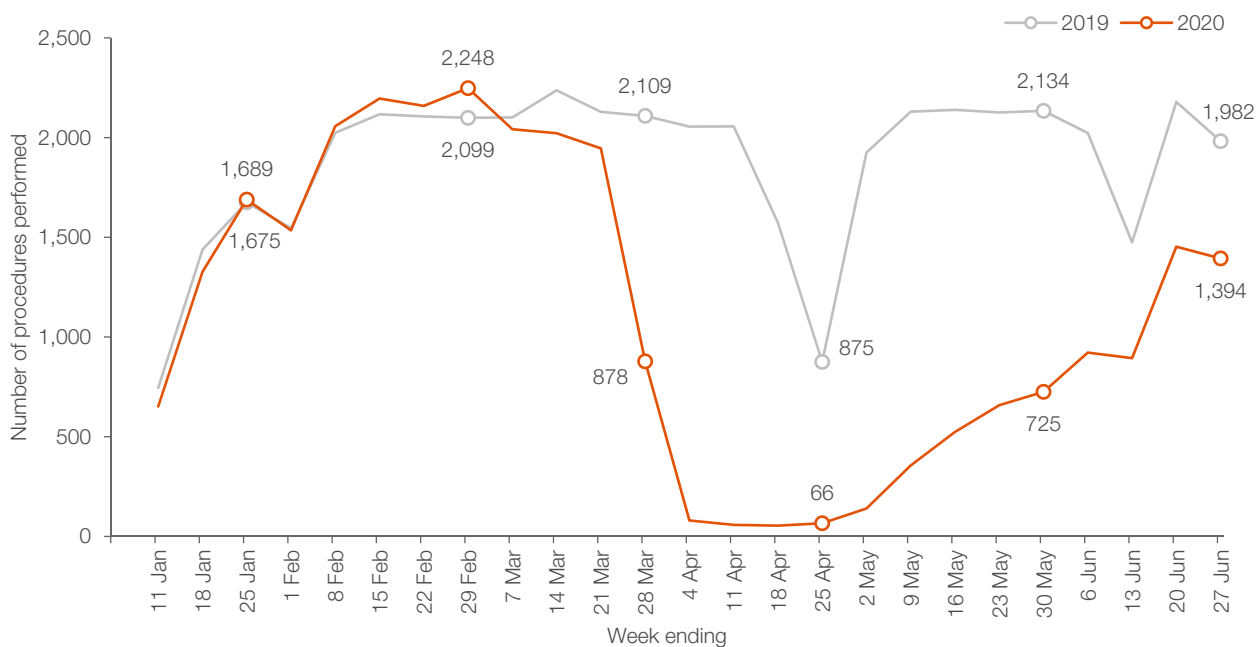


Figure 31 Elective surgical procedures performed, non-urgent category, January to June 2019 and 2020



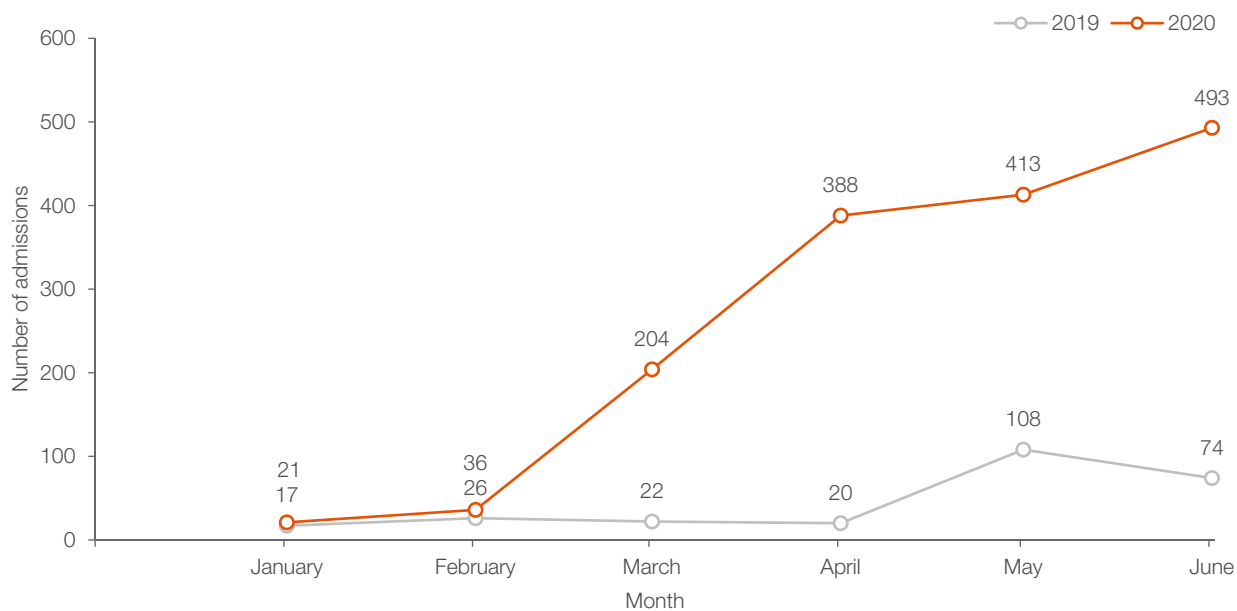
Notes: Results for all NSW public hospitals reported in *Healthcare Quarterly* are included.
 The lower numbers of procedures performed in April and June 2019 were due to the respective long weekends.
 Weekly activity for 2020 is calculated by aggregating daily activities for a seven-day week from Sunday to Saturday, starting Sunday 5 January 2020 and ending Saturday 27 June 2020. Each day in 2019 is matched with the same day of the week in 2020, due to known variation in activity by day of the week.

Elective surgery in private hospitals

In response to the COVID-19 pandemic, a partnership with the private hospital sector was established under the *National Partnership Agreement on Private Hospitals and COVID-19*. In June 2020, there were 493 elective surgical procedures performed in a NSW

private hospital under this agreement. The number of procedures contracted to private hospitals in April to June 2020 represented about 3% of all elective surgical procedures performed in NSW (Figure 32).

Figure 32 Elective surgical procedures contracted to private hospitals, January to June 2019 and 2020



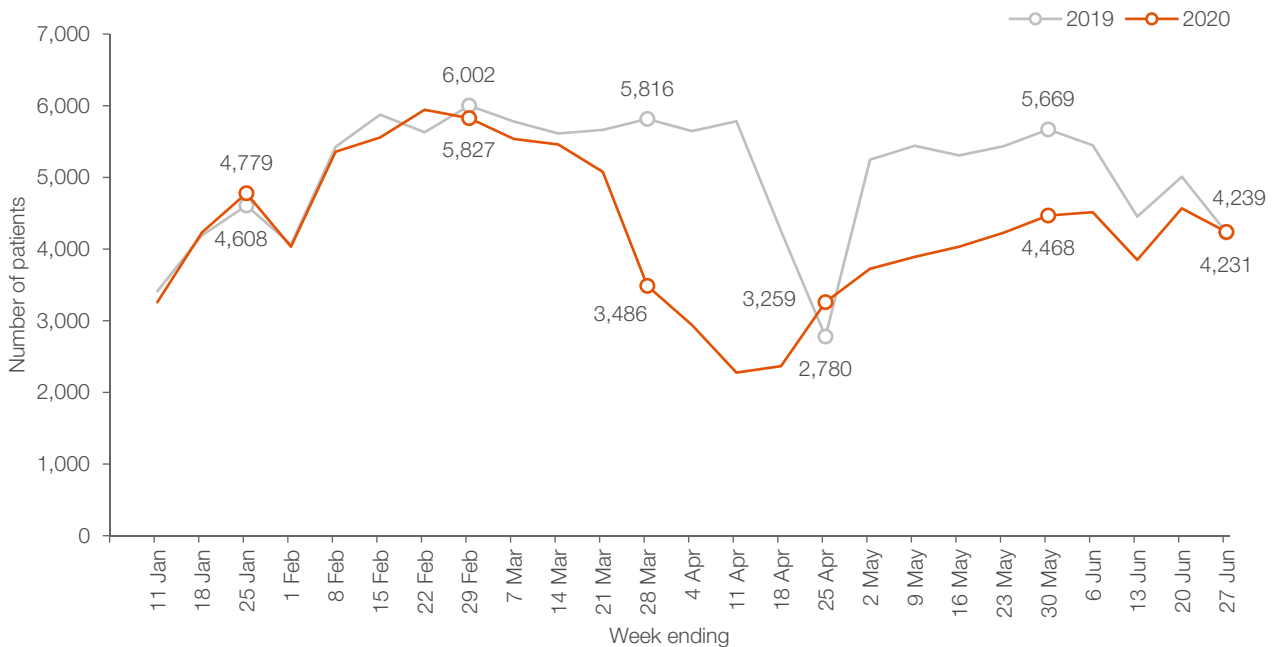
Elective surgery waiting list

The elective surgery waiting list is dynamic, driven by the number of patients added to the list and the number of patients who receive their surgery or otherwise leave the list. Information about the number of patients waiting for surgery is a snapshot of the list on a single day.

Between the week ending 21 March 2020 and the week ending 25 April, the number of patients added to the waiting list decreased 35.8% from 5,078 to 3,259 per week (Figure 33).

By the week ending 27 June, the total number of patients added to the waiting list for any procedure was 4,239 (Figure 33).

Figure 33 Number of patients added to elective surgery waiting list, all urgency category, January to June 2019 and 2020



Notes: Results for all NSW public hospitals reported in *Healthcare Quarterly* are included.
 The lower numbers of patients added to the waiting list in April and June 2019 were due to the respective long weekends.
 Weekly activity for 2020 is calculated by aggregating daily activities for a seven-day week from Sunday to Saturday, starting Sunday 5 January 2020 and ending Saturday 27 June 2020. Each day in 2019 is matched with the same day of the week in 2020, due to known variation in activity by day of the week.
 Results for the last week in June should be interpreted with caution. Data completeness for this week was lower than all other weeks due to the lag in including new patients in the Waiting List Collection Online System (WLCOS).

Elective surgery waiting list

The number of patients added to the waiting list for urgent elective surgery increased rapidly in the week ending 25 April 2020 to match 2019 levels (Figure 34).

The number of patients who were added to the waiting list for semi-urgent and non-urgent elective surgery began to increase in April, but remained lower than for the same weeks in 2019 (Figures 35, 36).

In the week ending 27 June, 1,409 patients were added to the waiting list for a semi-urgent procedure and 1,530 were added for non-urgent elective surgery (Figures 35, 36).

Figure 34 Number of patients added to elective surgery waiting list, urgent category, January to June 2019 and 2020

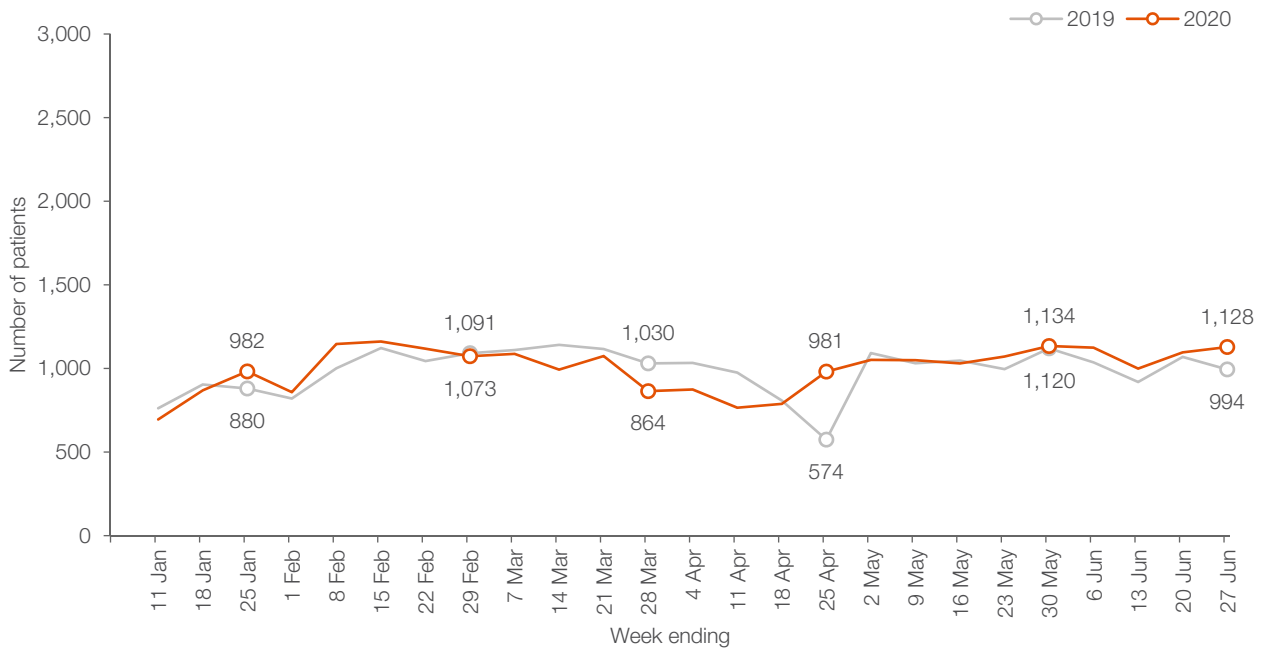


Figure 35 Number of patients added to elective surgery waiting list, semi-urgent category, January to June 2019 and 2020

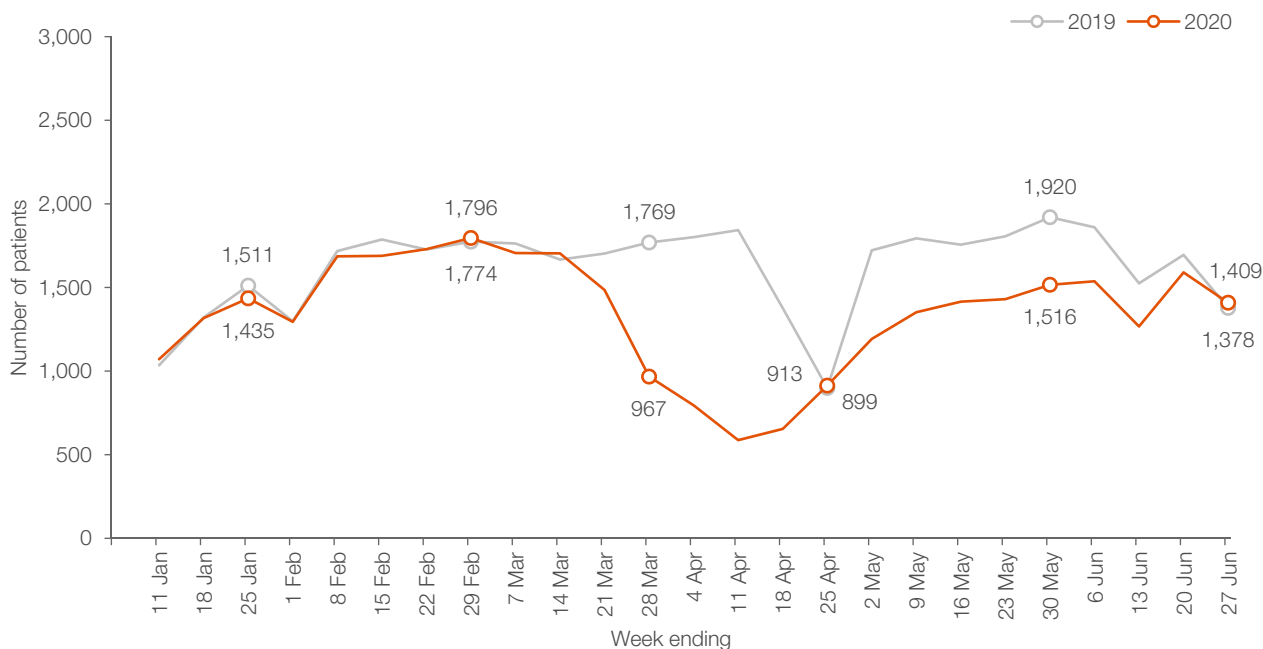
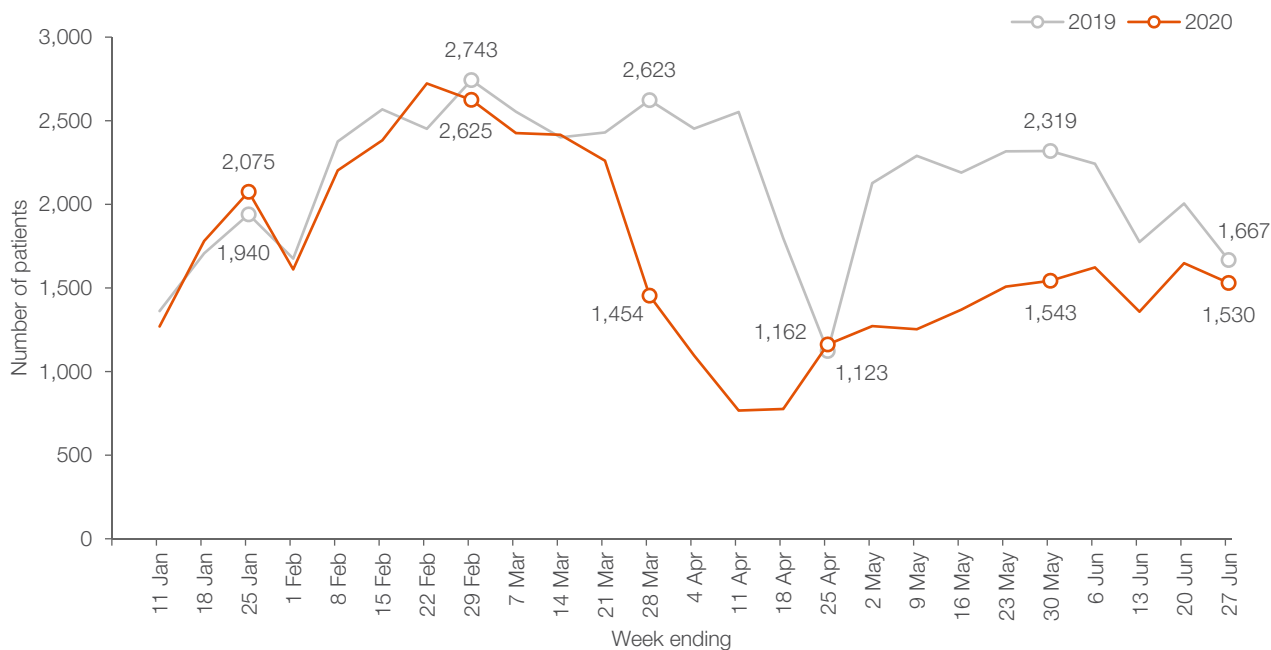


Figure 36 Number of patients added to elective surgery waiting list, non-urgent category, January to June 2019 and 2020



Notes: Results for all NSW public hospitals reported in *Healthcare Quarterly* are included.

The lower numbers of patients added to the waiting list in April and June 2019 were due to the respective long weekends.

Weekly activity for 2020 is calculated by aggregating daily activities for a seven-day week from Sunday to Saturday, starting Sunday 5 January 2020 and ending Saturday 27 June 2020. Each day in 2019 is matched with the same day of the week in 2020, due to known variation in activity by day of the week.

Results for the last week in June should be interpreted with caution. Data completeness for this week was lower than all other weeks due to the lag in including new patients in the Waiting List Collection Online System (WLCOS).

Elective surgery waiting list

Patients are removed from the waiting list when their elective surgical procedures are performed, but in some cases they may also leave the list on the advice of a doctor or their own preference. In some cases, they will be transferred for emergency surgery. During January to June 2020, the number of patients removed from the waiting list for emergency surgery each month was similar to 2019 (approximately 1% each month). Between April and June 2020, people were slightly more likely to be removed from the waiting list on clinical advice or personal preference, compared with the same period in 2019 (data not shown).

As at 30 June 2020, there were 101,026 patients on the waiting list, up 20.1% compared with the same day in 2019 (Figure 37). Of these, 10,563 patients had waited longer than the clinically recommended timeframe, compared with 541 on the same day in 2019 (Figure 38).

More information about patients on the waiting list in terms of urgency category and type of procedure, as at 30 June, is available in *Healthcare Quarterly, Activity and Performance* for April to June 2020.

Figure 37 Patients on the waiting list at end of month, January to June 2020 and 2019

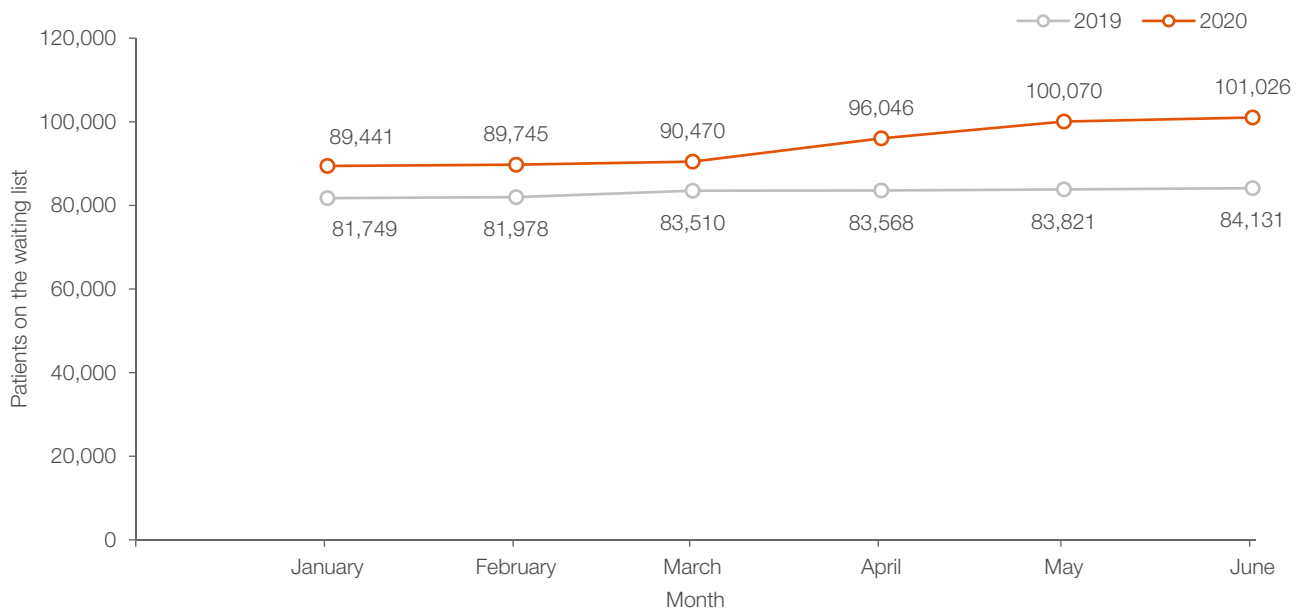
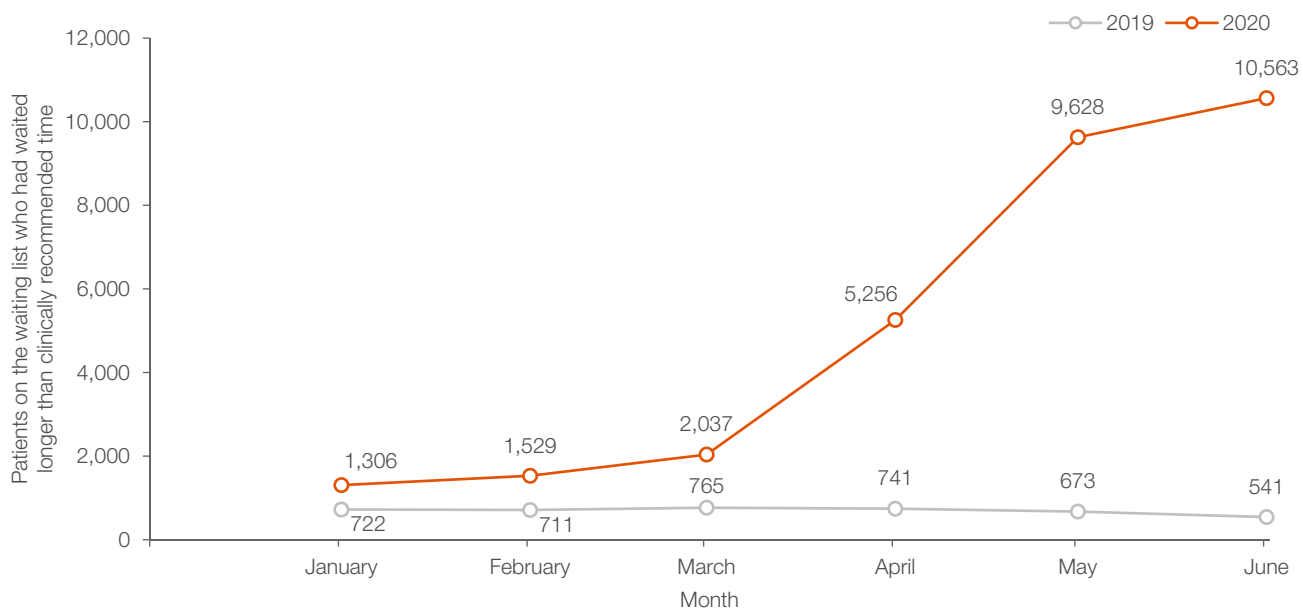


Figure 38 Patients on the waiting list at end of month, who had waited longer than clinically recommended timeframe, January to June 2020 and 2019



Note: Results for all NSW public hospitals reported in *Healthcare Quarterly* are included.

About the Bureau of Health Information

The Bureau of Health Information (BHI) is a board-governed organisation that provides independent information about the performance of the NSW healthcare system.

BHI was established in 2009 and supports the accountability of the healthcare system by providing regular and detailed information to the community, government and healthcare professionals. This in turn supports quality improvement by highlighting how well the healthcare system is functioning and where there are opportunities to improve.

BHI manages the NSW Patient Survey Program, gathering information from patients about their experiences and outcomes of care in public hospitals and other healthcare facilities.

BHI publishes a range of reports and information products, including interactive tools, that provide objective, accurate and meaningful information about how the health system is performing.

BHI's work relies on the efforts of a wide range of healthcare, data and policy experts. All of our assessment efforts leverage the work of hospital coders, analysts, technicians and healthcare providers who gather, codify and supply data. Our public reporting of performance information is enabled and enhanced by the infrastructure, expertise and stewardship provided by colleagues from NSW Health and its pillar organisations.

bhi.nsw.gov.au