

Healthcare Quarterly

# COVID-19 Supplement

Emergency department, ambulance,  
admitted patients and elective surgery

March 2020



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

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# Executive summary

The number of emergency department (ED) attendances in March 2020 was similar to the overall level of activity in March 2019 (down 0.5%).

However, in March 2020 there was a striking increase in triage category 5 (non-urgent) presentations, compared with March 2019 (up 89.5%). These additional triage 5 presentations were concentrated in metropolitan local health districts (LHDs) and specialty health networks, and they started in the weeks before dedicated COVID-19 clinics were established to process these cases.

The number of presentations in every category other than triage 5 was lower compared with the same month in 2019.

In March 2020, the number of ambulance responses was down 2.8% compared with March 2019.

The number of completed admitted patient episodes in March 2020 was down 9.3% compared with March 2019. The largest reductions were in metropolitan areas, but all LHDs and networks recorded a decrease.

In March 2020, the number of elective surgical procedures performed in NSW public hospitals was down 18.1% compared with March 2019.

From Thursday 26 March, the Commonwealth Government's National Cabinet suspended all non-urgent (category 3) elective surgery, with all urgent (category 1) and some exceptional semi-urgent (category 2) surgery continuing until further notice.

The number of semi-urgent (category 2) procedures was down 16.2% and the number of non-urgent (category 3) procedures was down 26.3% in March 2020, when compared with March 2019.

As at 31 March 2020, the number of patients on the elective surgery waiting list for non-urgent procedures was up 10.7% (to 76,086) compared with 31 March 2019. For semi-urgent procedures, the number on the waiting list was unchanged (at 12,734) from March 2019.


# Introduction

This report is a supplement to *Healthcare Quarterly*, which tracks public hospital and ambulance activity and performance in NSW for the entire January to March 2020 quarter.

This supplement provides additional information on levels of activity in emergency departments (EDs), ambulance services, hospital admissions and elective surgery during March 2020, when cases of COVID-19

peaked in NSW. It outlines the daily pattern of activity throughout the month, to provide greater insights into the impact of the pandemic on the NSW public health system. It is intended to provide context for the full January to March quarter results presented in the main *Healthcare Quarterly* reports, *Activity and performance*, and *Trend report*.

## COVID-19 in NSW in March 2020

-  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.

January to March 2020 was an unprecedented quarter for the people of NSW and their healthcare system as the month of March, in particular, saw far-reaching changes to people's lives and a large scale response to the COVID-19 pandemic by the health system.

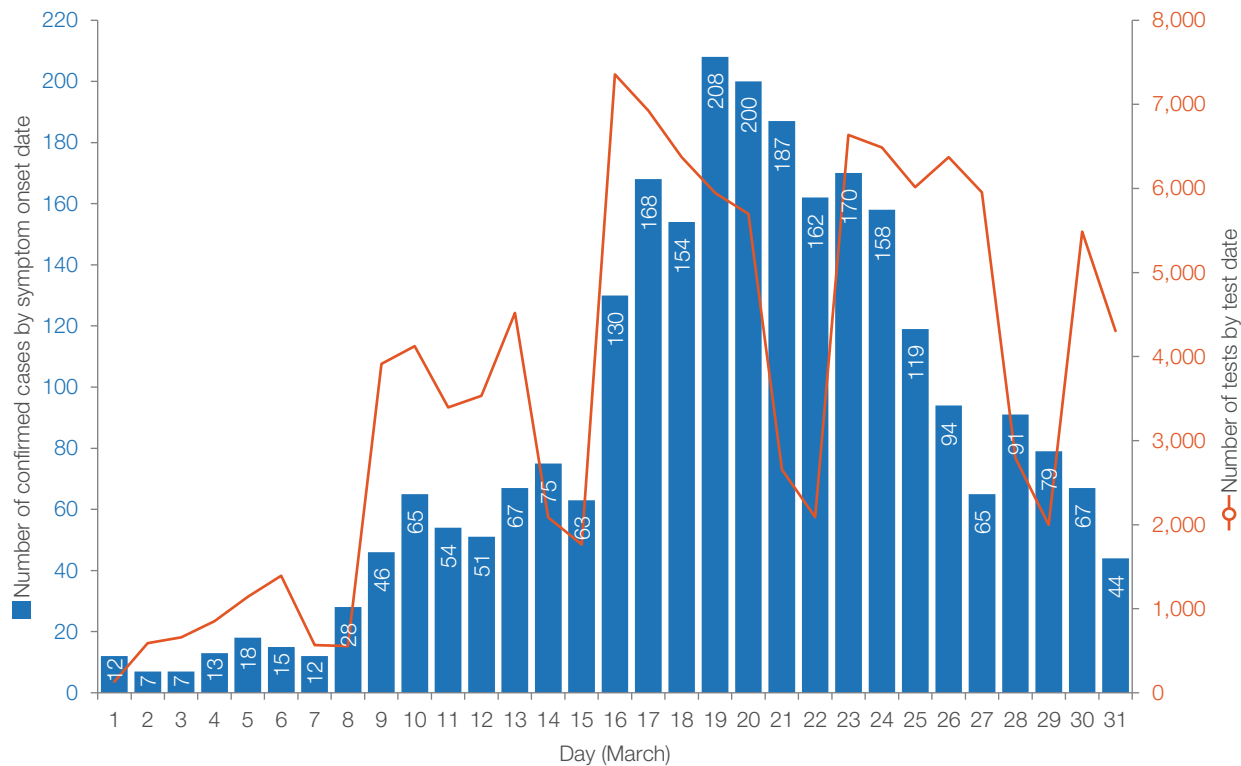
This involved significant changes in March in how services were delivered, including the establishment of dedicated COVID-19 testing clinics and an increased focus on telehealth. Hospitals acted to maintain sufficient capacity and personal protective equipment, and to protect the safety of staff and patients. Additionally, non-urgent elective surgery was

suspended on 26 March. Of those confirmed cases of COVID-19 in NSW, the majority of people have remained outside of hospital settings to recover.

By the beginning of March, NSW had already diagnosed its first cases of COVID-19. The number of newly diagnosed people peaked during March and by 31 March 2020 there were 2,680 confirmed cases in NSW.

By the end of the month, 115,894 tests had been carried out. The number of tests per day peaked at 7,356 on Monday 16 March.

Figure 1 Confirmed COVID-19 cases by symptom onset date and COVID-19 tests performed by test date, NSW, March 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 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 26 May 2020. 'COVID-19 tests performed by test date' data drawn on 1 June 2020. These reports have been published since 1 May 2020 and are available at <https://www.health.nsw.gov.au/Infectious/covid-19/Pages/weekly-report.aspx>.

# Emergency department activity

In March 2020, there were 257,756 ED attendances in NSW which is similar to the overall level of activity in March 2019 (down 0.5%). The highest level of activity occurred on Monday 16 March (10,601), prior to a 45.1% drop through to the end of the month. On the last day of the month there were just 5,822 ED attendances. (Figure 2).

However, there was a striking 89.5% increase in non-urgent (triage category 5) presentations in March 2020, compared with March 2019, reaching 43,805 for the month. There were more triage 5 presentations on every day in March 2020 compared with 2019. They reached a peak on Monday 16 March with 2,571 presentations, more than three times as many as the comparable day in 2019. The number then declined again, with 942 triage 5 presentations on 31 March. (Figure 3).

These increases in triage 5 (non-urgent) presentations were concentrated in metropolitan local health districts (LHDs) and specialty health networks, with 10 hospitals seeing an increase of more than 1,000 triage 5 presentations compared with March 2019. These included: St Vincent's Hospital (up 2,746); Sutherland Hospital (up 2,137), Concord Repatriation General Hospital (up 1,921); Northern Beaches Hospital (up 1,732); Royal North Shore Hospital (up 1,701); Royal Prince Alfred Hospital (up 1,500); St George Hospital (up 1,475); Liverpool Hospital (up 1,233); Campbelltown (up 1,109); and Canterbury Hospital (up 1,068). Preliminary analysis indicates that the vast majority of these additional triage 5 (non-urgent) presentations were identified as presumed or

suspected COVID-19 (in the presenting problem and/or diagnostic code assigned) and started in the weeks before dedicated COVID-19 clinics were established to process these cases.

The number of presentations in other triage categories declined between the beginning and end of the month (Figure 3). From 1 March to 31 March 2020, daily emergency (triage 2) presentations were down 29.5%, urgent (triage 3) presentations were down 38.1% and semi-urgent (triage 4) presentations were down 51.6%.

The number of emergency presentations in March 2020 were lower than the same month in 2019 for triage 2 (down 10.5%), triage 3 (down 11.6%) and triage 4 (down 6.5%).

In relation to triage 2 presentations, the largest reductions for LHDs compared with March 2019 were in Mid North Coast (down 26.4%), Sydney (down 15.3%) and Hunter New England (down 14.2%). In contrast, Sydney Children's Hospital Network saw an increase in triage 2 presentations of 45.4%.

In relation to triage 3 presentations, the largest reductions for LHDs compared with March 2019 were in South Eastern Sydney (down 17.5%), Sydney (down 15%), Illawarra Shoalhaven (down 14.6%) and South Western Sydney (down 14.6%). All other LHDs and networks also saw reductions.

Figure 2 ED attendances, March 2019 and 2020

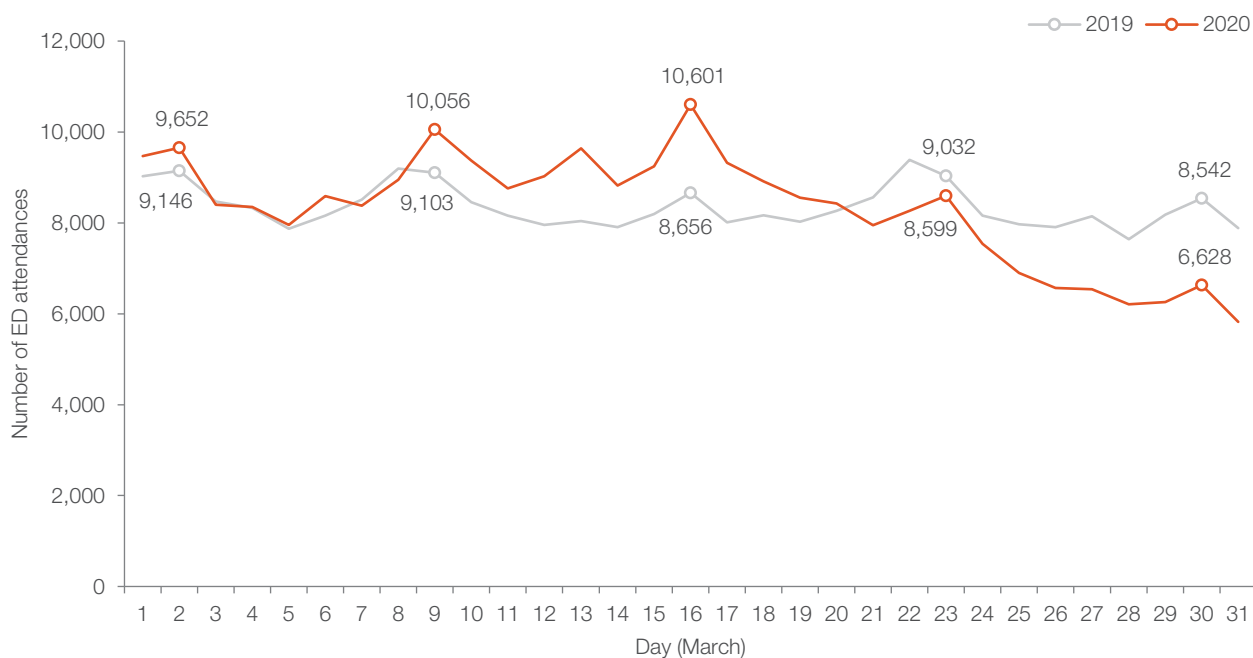
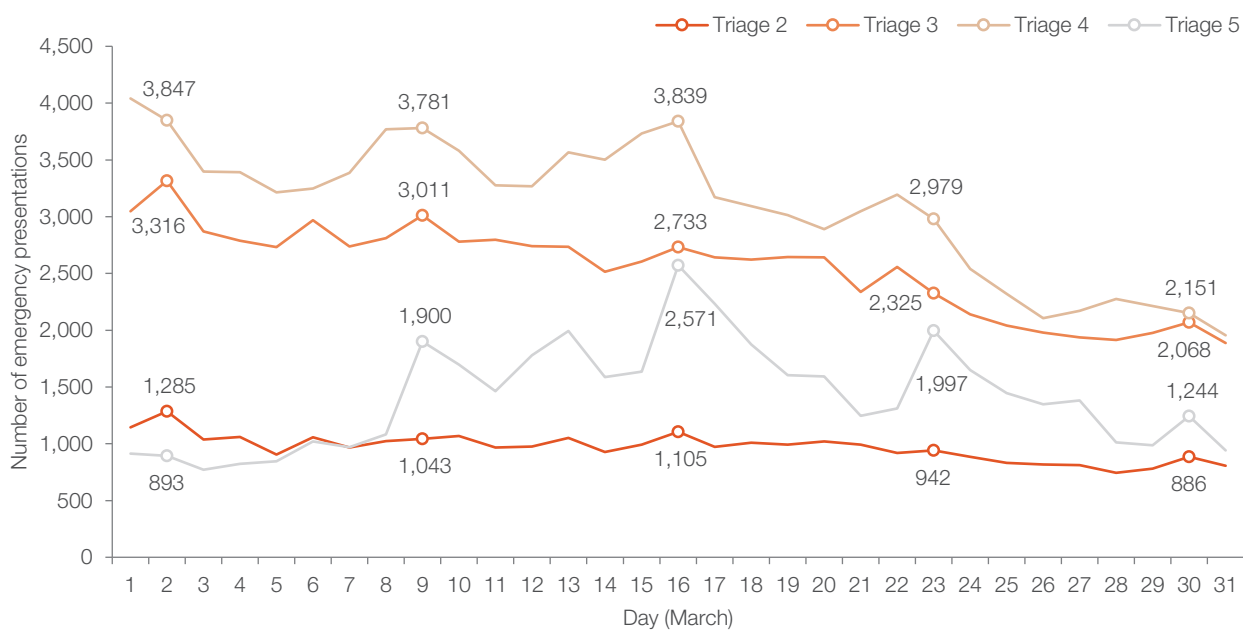


Figure 3 Emergency presentations, by triage category, March 2020



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.

Each day in 2020 is matched to the same day of the week in 2019, rather than matching dates in 2020 with 2019, due to known variation in activity by day of the week.

# Ambulance activity

In March 2020, there were 103,158 ambulance responses, down 2.8% compared with March 2019.

Daily responses peaked for the month on Friday 20 March 2020 at 3,888 (Figure 4). The number of priority 1 (P1: emergency) responses was similar to the same month in 2019 (Figure 5), while the number of priority 1 (P1A) responses for life-threatening conditions increased by 9.9% (up 207). The number of priority 2 (P2: urgent) responses declined by 4.4% (down 2,250) compared with March 2019 (Figure 6).

The proportion of ambulance responses for patients with breathing problems (which may be a loose proxy for responses related to presumed or suspected COVID-19 and are typically categorised P1) started to increase by mid-March and remained relatively high throughout the remainder of the month compared with March 2019. This was most evident in metropolitan areas.

Figure 4 Ambulance responses, by priority, March 2020

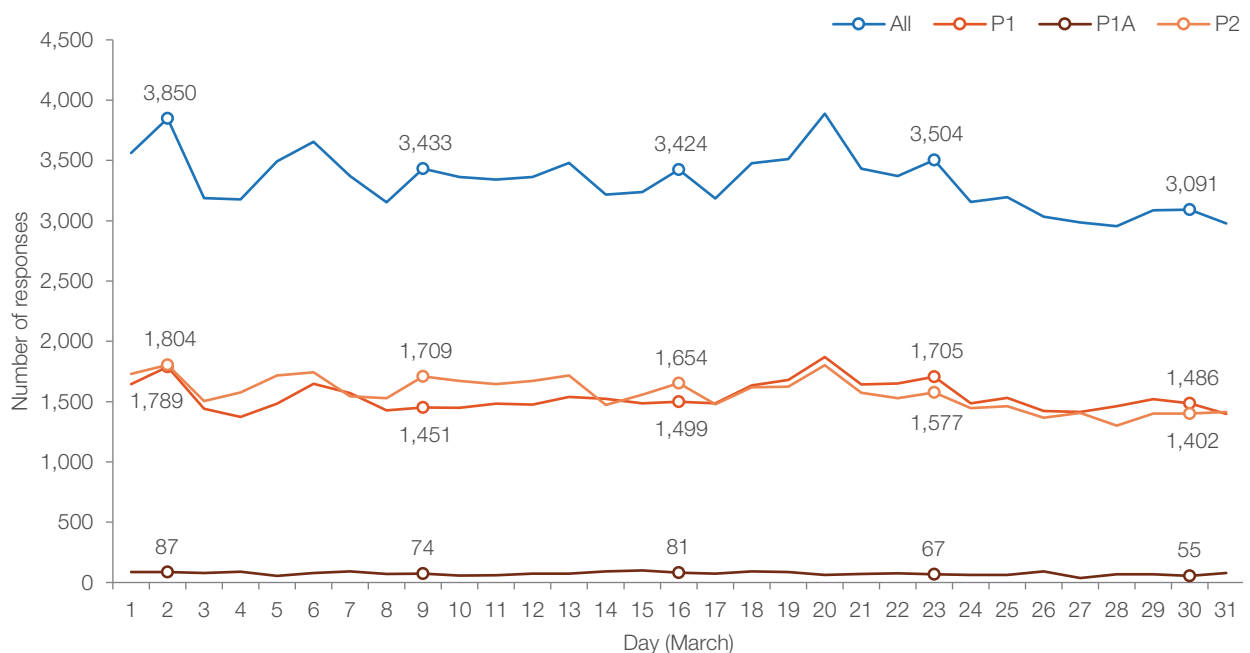




Figure 5 Ambulance responses, priority 1 (P1: emergency), March 2019 and 2020

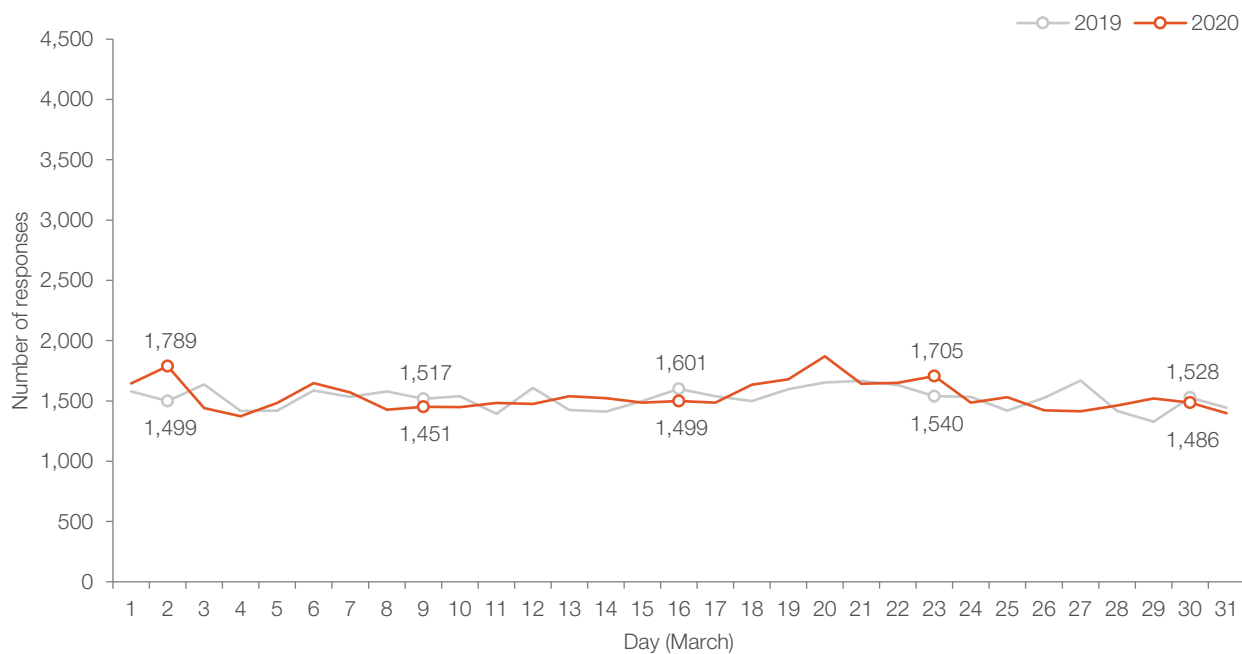
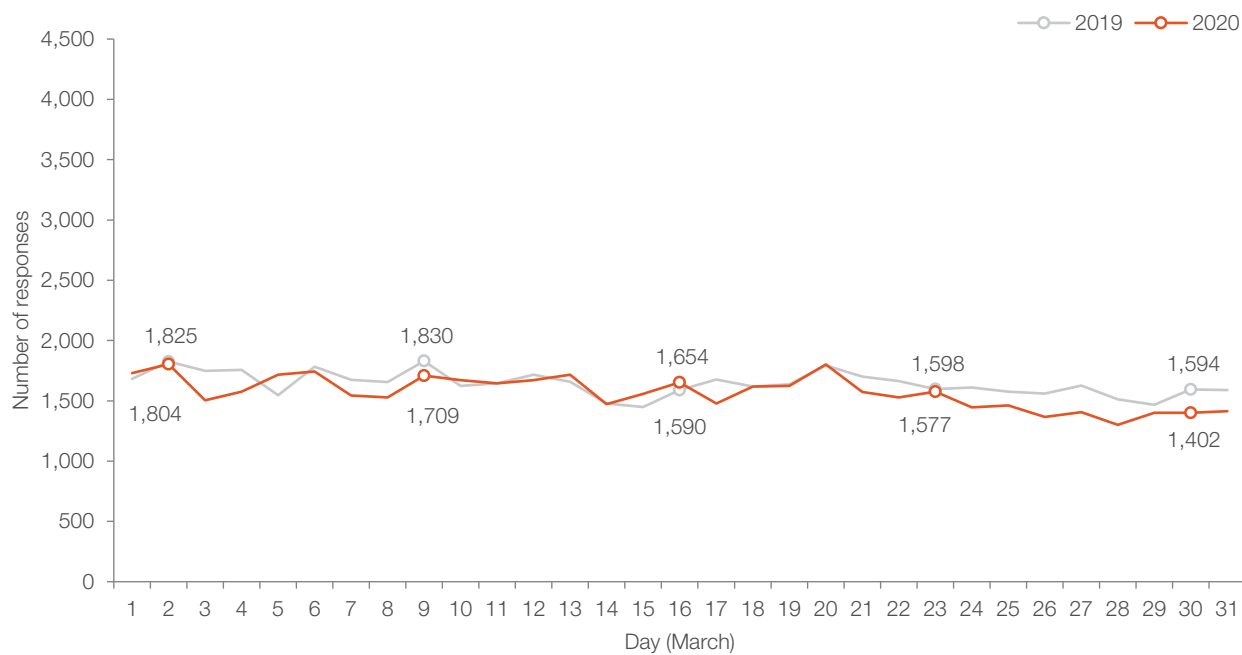


Figure 6 Ambulance responses, priority 2 (P2: urgent), March 2019 and 2020



Note: Each day in 2020 is matched to the same day of the week in 2019, rather than matching dates in 2020 with 2019, due to known variation in activity by day of the week.

# Admitted patient activity

In March 2020, there were 153,128 completed admitted patient episodes, down 9.3% compared with March 2019. In the first days of March 2020, the number of episodes was similar to the same period in March 2019, before progressively larger reductions were seen throughout the month. On the last day of the month there were 4,520 completed episodes of care, compared with 6,399 on the comparable day in 2019 (Figure 7).

Looking at different types of episodes, an 11.0% decline (down 9,274) in the number of acute overnight episodes contributed most to the overall reduction in admitted patient episodes when compared with March 2019. In addition, the number of same-day episodes declined 34.1% (down 200) in March 2020 for mental health and 15.9% (down 192) for non-acute when compared with March 2019.

Comparing March 2020 with March 2019, the largest reductions for LHDs in completed admitted patient episodes were in Northern Sydney (down 17.9%), Sydney (down 14.3%) and South Eastern Sydney (down 11.8%). All LHDs and networks recorded a decrease, with the smallest reduction in Central Coast.

Figure 7 Number of completed admitted patient episodes in NSW, by day, March 2019 and 2020



Notes: The number of completed episodes include those with a start and end date. Patients transferred from acute care to another type of hospital care (e.g. subacute, rehabilitation) are counted, therefore the number of completed episodes is not equal to the number of discharges.

Each day in 2020 is matched to the same day of the week in 2019, rather than matching dates in 2020 with 2019, due to known variation in activity by day of the week.

The majority of admitted patient activity occurs from Monday to Friday, which accounts for the drop in recorded episodes on weekends.

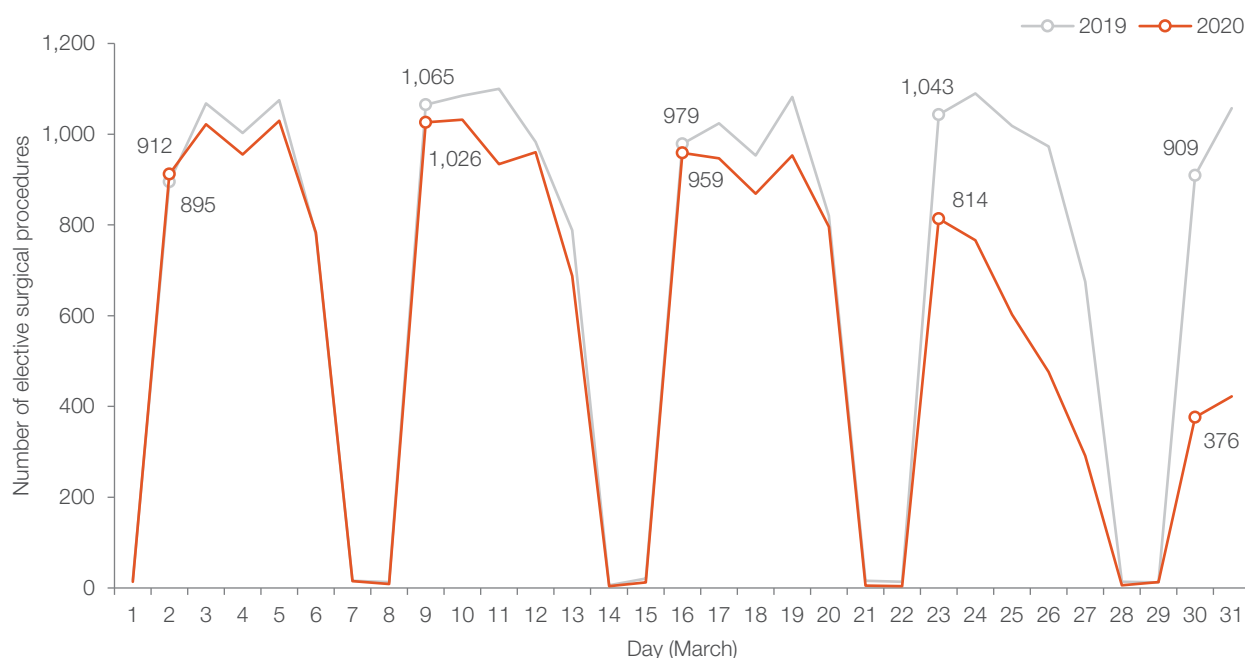
# Elective surgery activity

In March 2020, NSW public hospitals performed 17,696 elective surgical procedures, down 18.1% compared with March 2019 (Figure 8). In the first days of March 2020, the number of procedures was similar to the same period in March 2019, before progressively larger reductions were seen throughout the month. On Wednesday 25 March, the Commonwealth Government's National Cabinet suspended all non-urgent (category 3) elective surgery, with all urgent (category 1) and some exceptional semi-urgent (category 2) surgery continuing until further notice.

Waiting lists are dynamic and information about the number of patients waiting for surgery is a snapshot of the list on a single day. That snapshot will be a function of both people added to the waiting list and those removed, having had their surgery.

As at 31 March 2020, the number of patients on the elective surgery waiting list for non-urgent procedures was 76,086, up 10.7% compared with 31 March 2019. For semi-urgent procedures, there were 12,734 people on the waiting list (unchanged from March 2019). Overall, there were 1,408 patients still waiting after more than 12 months, up from 612 at the same time in 2019.

Figure 8 Elective surgical procedures performed, all urgency categories, March 2019 and 2020



Notes: Each day in 2020 is matched to the same day of the week in 2019, rather than matching dates in 2020 with 2019, due to known variation in activity by day of the week.

The majority of elective surgical procedures are performed from Monday to Friday, which accounts for the drop in procedures on weekends.

# Elective surgery activity

For each urgency category there are clinically recommended timeframes within which elective surgical procedures should be performed: 30 days for urgent surgery, 90 days for semi-urgent surgery, and 365 days for non-urgent surgery.

The number of urgent (category 1) elective surgical procedures in March 2020 was similar to one year ago (down 2.4%) (Figure 9). When compared with March 2019, the number of semi-urgent (category 2) procedures was down 16.2% and the number of non-urgent (category 3) procedures was down 26.3%

in March 2020. This decline in semi-urgent and non-urgent procedures was most pronounced at the end of the month (Figures 10, 11).

The largest declines in the number of non-urgent elective surgical procedures in March 2020 compared with March 2019 were seen for St Vincent's Health Network (down 65.2%) and Far West LHD (down 39.0%). The largest declines in the number of semi-urgent elective surgical procedures in March 2020 compared with March 2019 were seen in Far West LHD (down 55.6%) and Sydney LHD (down 41.8%).

Figure 9 Elective surgical procedures performed, urgent (category 1), March 2019 and 2020

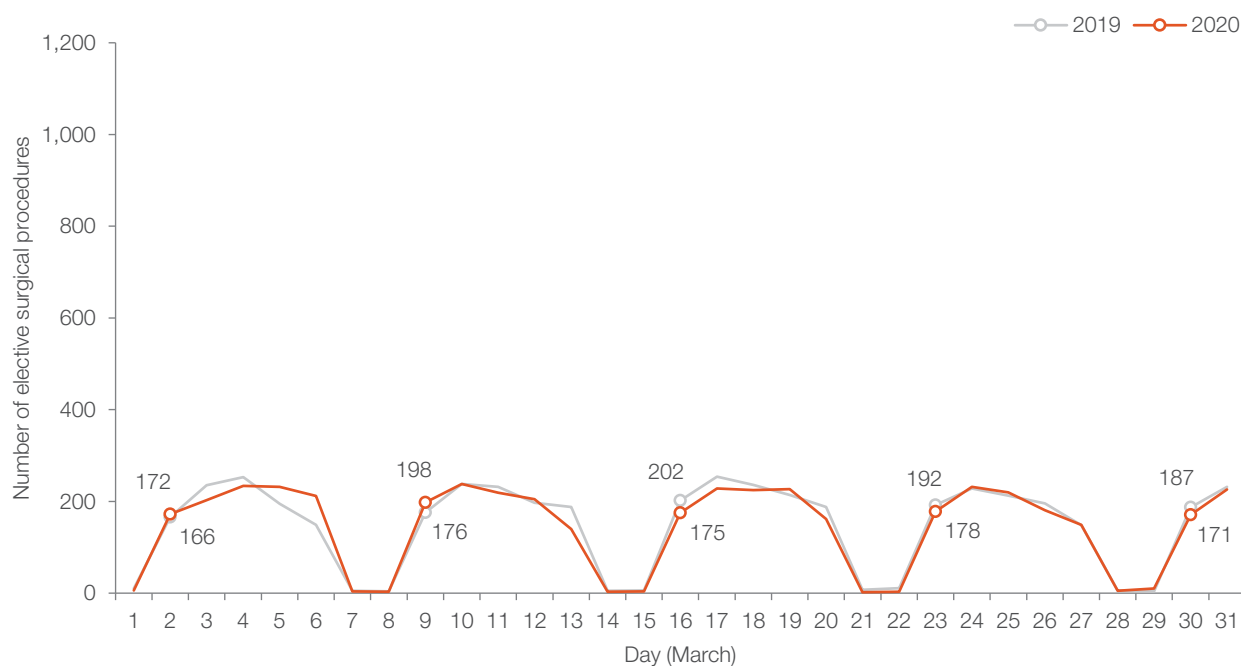


Figure 10 Elective surgical procedures performed, semi-urgent (category 2), March 2019 and 2020

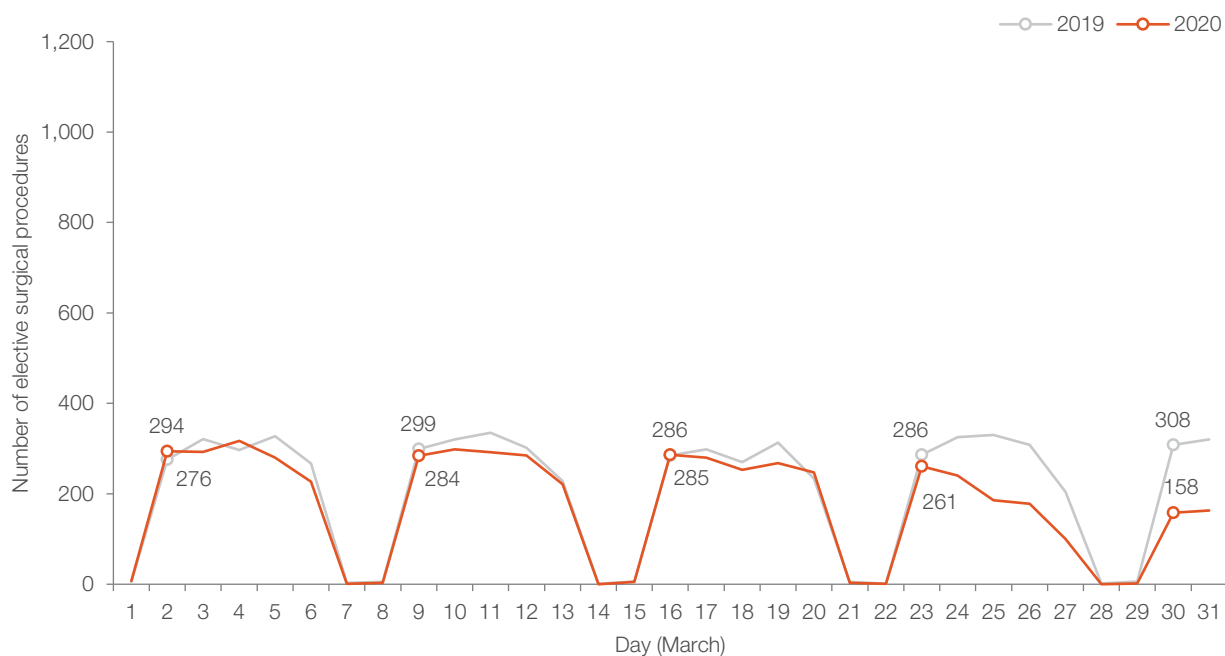
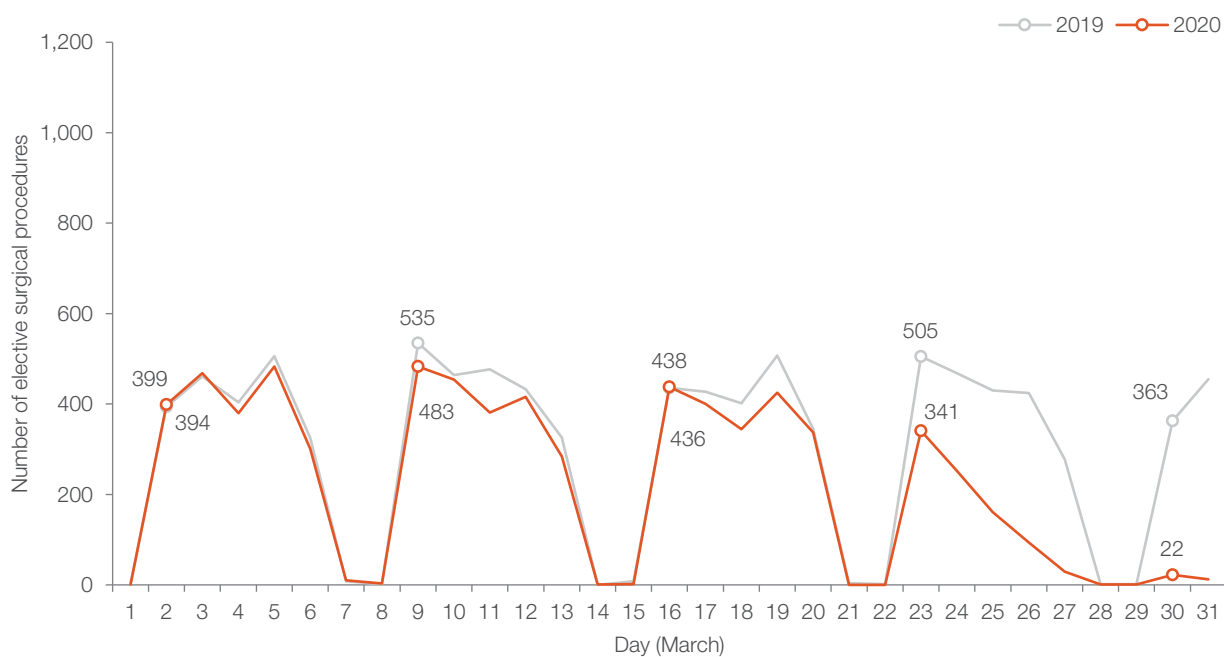


Figure 11 Elective surgical procedures performed, non-urgent (category 3), March 2019 and 2020



Notes: Each day in 2020 is matched to the same day of the week in 2019, rather than matching dates in 2020 with 2019, due to known variation in activity by day of the week.

The majority of elective surgical procedures are performed from Monday to Friday, which accounts for the drop in procedures on weekends.

## 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.

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