

Activity and performance

Emergency department, ambulance, admitted patients, seclusion and restraint, and elective surgery

October to December 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 2021

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) 210087
ISSN: 2207-9564 (online)

Suggested citation:

Bureau of Health Information. Healthcare Quarterly, Activity and performance, Emergency department, ambulance, admitted patients, seclusion and restraint, and elective surgery, October to December 2020. Sydney (NSW); BHI; 2021.

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 March 2021

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.

Full results for *Healthcare Quarterly* are available through BHI's interactive data portal, Healthcare Observer. Results are reported at a state, local health district, hospital peer group and hospital level for public hospitals and at a state level and by statistical area level 3 (SA3) for ambulance services.

Figures published in Healthcare Observer may differ from those in published reports and information products due to subsequent changes in data coverage and analytic methods, and updates to databases. At any time, the most up-to-date results are available in Healthcare Observer and supersede all previously published figures.

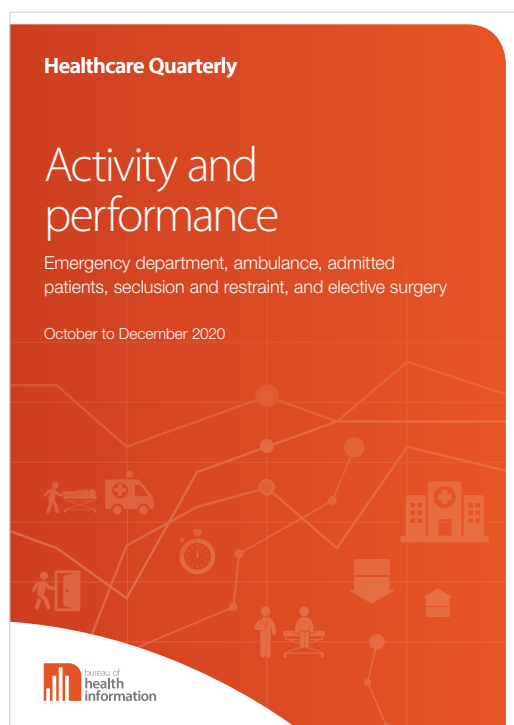
Please visit **bhi.nsw.gov.au/Healthcare_Observer**

Table of contents

10 key findings	2
Healthcare Quarterly – Activity	3
Healthcare Quarterly – Performance	4
In the July to September 2020 quarter...	5
About this report	7
Emergency department activity and performance	10
Emergency department activity	11
Time to treatment	13
Time spent in the emergency department	15
Transfer of care	17
COVID-19 tests and emergency department activity	18
Ambulance activity and performance	20
Ambulance activity and performance	21
Ambulance activity	23
Call to ambulance arrival times	25
Admitted patient activity	28
Admitted patients	29
Seclusion and restraint	32
Seclusion and restraint	33
Seclusion and restraint events and rate	35
Seclusion and restraint duration	37
Elective surgery activity and performance	40
Elective surgery activity	41
Elective surgery waiting time by urgency category	42
Percentage of elective surgery on time	43
Elective surgery waiting time by specialty and procedure	45
End of quarter elective surgery waiting list	47
Patients on elective surgery waiting list who had waited longer than clinically recommended time	51

A guide to Healthcare Quarterly

Healthcare Quarterly reports on activity and performance for public hospital and ambulance services across NSW.



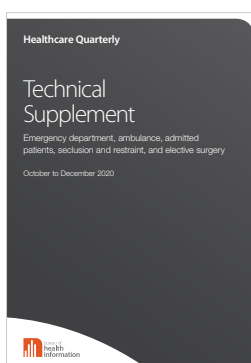
Healthcare Quarterly shows how public hospitals and ambulance services performed in the October to December 2020 quarter. The key measures focus on the timeliness of services delivered to people across NSW.



Full results are available from BHI's interactive data portal Healthcare Observer, at bhi.nsw.gov.au/healthcare_observer

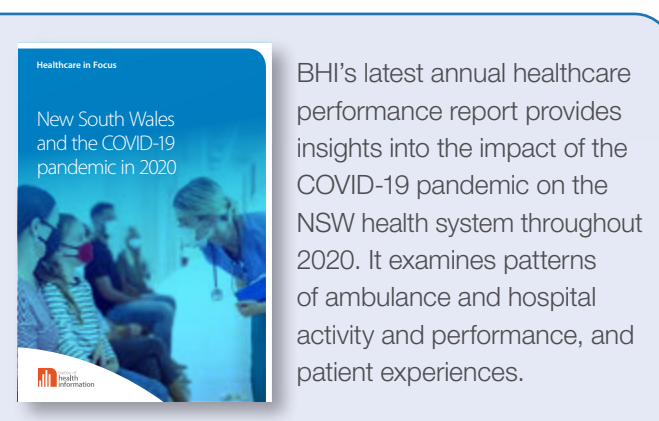


The *Trend report* provides five-year trends in activity and performance for emergency departments, ambulance services, admitted patients and elective surgical procedures.



The technical supplement describes the data, methods and technical terms used to calculate activity and performance measures.

All reports and profiles are available at bhi.nsw.gov.au



BHI's latest annual healthcare performance report provides insights into the impact of the COVID-19 pandemic on the NSW health system throughout 2020. It examines patterns of ambulance and hospital activity and performance, and patient experiences.

10 key findings

October to December 2020

- 1 There were 792,671 emergency department attendances in October to December 2020, up 2.1% (16,015) compared with the same quarter the previous year and the highest number of attendances for any quarter over the past five years.**
Triage categories 2 (emergency) and 5 (non-urgent) presentations were up by 3.2% (3,117) and 35.3% (24,594), respectively.
- 2 More than seven in 10 emergency department patients (74.1%) were treated within clinically recommended time frames.** This was 1.5 percentage points higher than the same quarter the previous year (72.6%).
- 3 Almost seven in 10 patients (69.8%) spent four hours or less in the emergency department, unchanged compared with the same quarter the previous year.**
The median time patients spent in the emergency department was 2 hours and 51 minutes, down 4 minutes.
- 4 The number of ambulance responses, where a vehicle was dispatched, was 319,505, up 0.7% (2,115) compared with the same quarter the previous year.** This was the highest number of ambulance responses for any October to December quarter over the past five years.
- 5 The percentage of life-threatening (priority 1A) responses within 10 minutes was 66.4%, down 3.2 percentage points.** This was the lowest percentage of P1A responses within 10 minutes for any quarter over the past five years. The number of P1A responses was 7,350, up 9.4% (633).
- 6 The total number of admitted patient episodes was 489,296, down 0.3% (1,464) compared with the same quarter the previous year.** The number of same-day acute patient episodes was 225,905, up 3.7% (8,027).
- 7 The number of elective surgical procedures performed was 62,151, up 7.6% (4,407) compared with the same quarter the previous year.** This was the highest number of procedures performed for any October to December quarter over the past five years.
- 8 The number of patients added to the elective surgery waiting list was relatively stable at 63,996, down 0.1% (89).** The number of patients added to the list was 13,586 (up 7.1%) for urgent procedures, 20,702 (up 5.4%) for semi-urgent procedures and 26,388 (down 5.7%) for non-urgent procedures.
- 9 The number of people on the waiting list at the end of the quarter was 90,177, up 2.4% (2,133).** There were 5,950 patients who had waited longer than the clinically recommended time frame at the end of the quarter, compared with 1,144 on the same day in 2019.
- 10 The median waiting times for elective surgical procedures performed were 12 days for urgent procedures (up one day), 51 days for semi-urgent procedures (up five days) and 320 days for non-urgent procedures (up 83 days).** More than eight in 10 procedures (82.4%) were performed within clinically recommended times frames, down 13.3 percentage points.

Healthcare Quarterly – Activity

Emergency department activity	October to December 2020	October to December 2019	Difference	% change
All arrivals at NSW EDs by ambulance	178,893	178,465	428	0.2%
ED attendances	792,671	776,656	16,015	2.1%
Emergency presentations	767,904	752,447	15,457	2.1%
Triage category				
T1: Resuscitation	5,462	5,467	-5	-0.1%
T2: Emergency	101,979	98,862	3,117	3.2%
T3: Urgent	266,314	269,641	-3,327	-1.2%
T4: Semi-urgent	299,819	308,741	-8,922	-2.9%
T5: Non-urgent	94,330	69,736	24,594	35.3%
Admissions to hospital from NSW EDs	186,479	197,835	-11,356	-5.7%

Ambulance activity	October to December 2020	October to December 2019	Difference	% change
Calls	334,015	328,228	5,787	1.8%
Responses	319,505	317,390	2,115	0.7%
Priority category				
P1: Emergency	142,627	143,844	-1,217	-0.8%
P1A: Highest priority	7,350	6,717	633	9.4%
P2: Urgent	154,522	149,617	4,905	3.3%
P3: Time critical	14,839	14,898	-59	-0.4%
P4–9: Non-emergency	7,517	9,031	-1,514	-16.8%
Incidents	250,921	249,255	1,666	0.7%
Patient transports	192,854	192,334	520	0.3%

Admitted patient activity	October to December 2020	October to December 2019	Difference	% change
All admitted patient episodes	489,296	490,760	-1,464	-0.3%
Acute episodes	461,618	461,563	55	0.0%
Overnight episodes	235,713	243,685	-7,972	-3.3%
Same-day episodes	225,905	217,878	8,027	3.7%
Non-acute episodes	16,694	17,670	-976	-5.5%
Mental health episodes	10,984	11,527	-543	-4.7%
All episodes	3.5	3.5	0.0	
Average length of stay (days)				
Acute episodes	2.8	2.8	0.0	
Non-acute episodes	12.5	12.6	-0.1	
Mental health episodes	18	17.2	0.8	
All bed days	1,693,993	1,718,890	-24,897	-1.4%
Hospital bed days				
Acute bed days	1,288,636	1,299,169	-10,533	-0.8%
Non-acute bed days	208,053	221,868	-13,815	-6.2%
Mental health bed days	197,304	197,853	-549	-0.3%
Babies born in NSW public hospitals	17,008	17,670	-662	-3.7%

Elective surgery activity	October to December 2020	October to December 2019	Difference	% change
Elective surgical procedures performed	62,151	57,744	4,407	7.6%
Urgency category				
Urgent surgery	14,150	13,190	960	7.3%
Semi-urgent surgery	19,806	18,444	1,362	7.4%
Non-urgent surgery	25,723	23,318	2,405	10.3%
Patients on waiting list ready for elective surgery at end of quarter	90,177	88,044	2,133	2.4%
Urgency category				
Urgent surgery	1,123	937	186	19.9%
Semi-urgent surgery	14,884	12,570	2,314	18.4%
Non-urgent surgery	74,170	74,537	-367	-0.5%

Note: Ambulance activity data do not include outage estimates. Data drawn on: 19 January 2021 (emergency department), 15 January 2021 (ambulance), 19 January 2021 (admitted patients), 19 January 2021 (elective surgery).

Healthcare Quarterly – Performance

Emergency department performance		October to December 2020	October to December 2019	Difference	
Percentage of patients transferred from ambulance to ED within 30 minutes		87.3%	87.9%	-0.6 percentage points	
Time to treatment by triage category	T2: Emergency	Median	9 mins	9 mins	0 mins
		90th percentile	26 mins	26 mins	0 mins
	T3: Urgent	Median	20 mins	21 mins	-1 mins
		90th percentile	71 mins	74 mins	-3 mins
	T4: Semi-urgent	Median	27 mins	27 mins	0 mins
		90th percentile	108 mins	108 mins	0 mins
	T5: Non-urgent	Median	14 mins	24 mins	-10 mins
		90th percentile	90 mins	108 mins	-18 mins
All patients		74.1%	72.6%	1.5 percentage points	
Percentage of patients whose treatment started on time	T2: Emergency (Recommended: 80% in 10 minutes)	63.1%	63.0%	0.1 percentage points	
	T3: Urgent (Recommended: 75% in 30 minutes)	69.3%	67.6%	1.7 percentage points	
	T4: Semi-urgent (Recommended: 70% in 60 minutes)	76.4%	76.2%	0.2 percentage points	
	T5: Non-urgent (Recommended: 70% in 120 minutes)	94.3%	92.3%	2.0 percentage points	
Median time spent in the ED		2 hr 51 min	2 hr 55 min	-4 mins	
90th percentile time spent in the ED		7 hr 42 min	7 hr 40 min	2 mins	
Percentage of patients who spent four hours or less in the ED		69.8%	69.8%	Unchanged	

Ambulance performance		October to December 2020	October to December 2019	Difference
Call to ambulance arrival time				
Percentage of P1 call to ambulance arrival within 15 minutes		54.0%	57.4%	-3.4 percentage points
Percentage of P1 call to ambulance arrival within 30 minutes		91.3%	92.3%	-1.0 percentage points
Percentage of P2 call to ambulance arrival within 30 minutes		62.1%	64.4%	-2.3 percentage points
Percentage of P2 call to ambulance arrival within 60 minutes		87.2%	88.7%	-1.5 percentage points
Response time				
Percentage of P1A responses within 10 minutes		66.4%	69.6%	-3.2 percentage points

Elective surgery performance		October to December 2020	October to December 2019	Difference
Median waiting time (days)	Urgent surgery	12 days	11 days	+1 days
	Semi-urgent surgery	51 days	46 days	+5 days
	Non-urgent surgery	320 days	237 days	+83 days
All surgical procedures		82.4%	95.7%	-13.3 percentage points
Elective surgical procedures performed on time	Urgent surgery (Recommended: 30 days)	99.8%	99.9%	-0.1 percentage points
	Semi-urgent surgery (Recommended: 90 days)	88.3%	96.0%	-7.7 percentage points
	Non-urgent surgery (Recommended: 365 days)	68.3%	93.1%	-24.8 percentage points

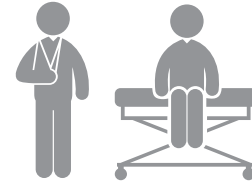
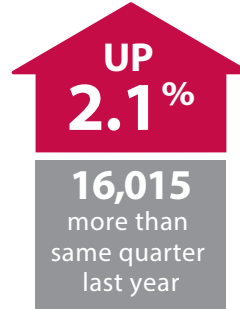
Notes: Data drawn on: 19 January 2021 (emergency department), 15 January 2021 (ambulance), 19 January 2021 (elective surgery).

Triage 1 patients are the most urgent and are almost all treated within two minutes. Clinicians are focused on providing immediate and essential care, rather than recording times, therefore times to start treatment are generally not reported. Time frames to treat other triage categories are recommended by the Australasian College for Emergency Medicine.

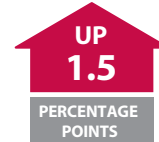
In the October to December 2020 quarter...

Emergency department

There were **792,671** emergency department attendances



74.1% of patients' treatment **started on time**

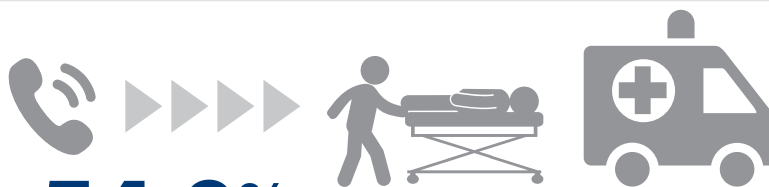
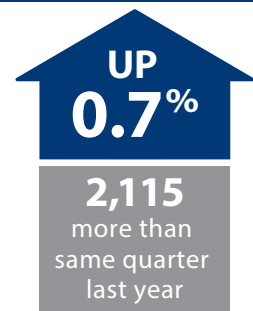


69.8% of patients spent **four hours or less** in the emergency department

UNCHANGED

Ambulance

There were **319,505** ambulance responses



54.0% of priority 1 cases had a call to ambulance arrival time of 15 minutes or less



Note: All comparisons are in reference to the same quarter the previous year.



Admitted patients

There were **489,296** admitted patient episodes of care

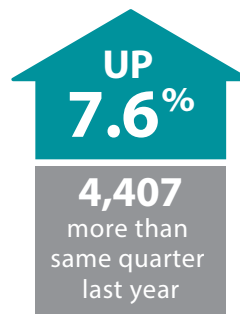


51.1% of acute admitted patient episodes were for overnight stays



Elective surgery

There were **62,151** elective surgical procedures performed



82.4% were performed within recommended time frames

Median waiting times were up by one day for urgent (12 days), by five days for semi-urgent (51 days) and by 83 days for non-urgent procedures (320 days)



Note: All comparisons are in reference to the same quarter the previous year.

About this report

The data

Healthcare Quarterly draws on five main data sources:

- **Emergency Department Data Collection (EDDC)** – data drawn from the Health Information Exchange (HIE) on 19 January 2021
- **NSW Ambulance Computer Aided Dispatch (CAD) system** – provided on 15 January 2021
- **Admitted Patient Data Collection (APDC)** – data drawn from the HIE on 19 January 2021
- **Seclusion and Restraint Data Collection** – data drawn from the HIE on 20 January 2021, and manually collected measures received from InforMH, System Information and Analytics Branch, NSW Ministry of Health on 4 February 2021
- **Waiting List Collection Online System (WLCOS)** – data drawn on 19 January 2021.

Hospital data are transmitted by the State's hospitals to centralised data warehouses administered by the NSW Ministry of Health and are extracted by BHI from the NSW HIE. Ambulance data are provided directly to BHI by NSW Ambulance and resultant information is calculated by BHI. Seclusion and restraint events, manually collected by InforMH, NSW Ministry of Health, are provided to BHI and resultant information is calculated by BHI.

The analyses and measures

For some hospital analyses, results are stratified by 'peer group' into principal referral hospitals (peer group A), major hospitals (peer group B) and district hospitals (peer group C). For ambulance analyses, results are reported by statistical area level 3 (SA3). SA3s are geographical areas created under the Australian Bureau of Statistics' geographical regional framework. For both the hospital-based and ambulance-based indicators, stratification by acuity or urgency are also used to report on performance.

For seclusion and restraint analysis, results are reported for 46 public hospitals that have one or more specialised acute mental health inpatient units. There are six Mental Health Intensive Care Units in these hospitals, providing treatment for patients with a higher level of severity and complexity. These six hospitals are grouped together for reporting. The Justice Health and Forensic Mental Health Network provides specialised mental health services for forensic patients.

Data analyses are conducted in SAS 9.4. Codes that form the basis of routine reporting are written by two data analysts independently and only accepted when matching results are achieved.

Healthcare Quarterly uses nine core measures of performance (Table 1). For timeliness indicators, two different measurement approaches are used.

The first approach is based on units of time such as minutes or days and generally reports median and 90th percentile times, where:

- The median is the middle value of all observations, once they have been ordered from the lowest to the highest value. For example, in measuring the time that patients waited for their treatment to start, the median time refers to the 'middle wait' – half of all patients waited a shorter time and the other half waited a longer time.
- The 90th percentile time gives an indication of the longest waiting times experienced by patients – most patients have a shorter wait than the 90th percentile time but one in 10 patients wait longer.

The second approach is based on achievement against a recommended or defined time. Here, results are reported in percentages, such as the percentage of patients who received elective surgery within clinically recommended time frames of 30, 90 and 365 days.

The large datasets used in *Healthcare Quarterly* mean that analyses have considerable statistical power to detect significant differences. However, not all of these differences are clinically or organisationally meaningful. Therefore, a more than five percentage point threshold is used to highlight hospitals with marked variation in results – either over time, or relative to the NSW result.

Reporting

Hospital results based on very few patients are not reported. If there are fewer than five patients in any group for admitted patient, emergency department (ED) and elective surgery data, patient numbers are displayed as <5. NSW and local health district (LHD) results include data from all public hospitals.

Ambulance activity and performance are reported at NSW level and by SA3. Results for two SA3s, Blue Mountains – South, and Illawarra Catchment Reserve, are suppressed because the estimated resident population is below 1,000. SA3s with fewer than 10 incidents in a quarter are also suppressed.

For seclusion and restraint reporting, episode numbers are displayed as <5 if there are fewer than five seclusion or physical restraint events. Due to the infrequent use of mechanical restraint, it is only reported at NSW level to respect patient privacy.

Healthcare Quarterly compares this quarter's results with the same quarter in previous years, to take into account seasonal effects on activity and performance.

Table 1 Description of main performance measures featured in *Healthcare Quarterly**

Emergency department	
Transfer of care time	For patients who are transported to the ED by ambulance, the time from arrival at hospital to when responsibility for their care is transferred from paramedics to ED staff in an ED treatment zone.
Time to start treatment	The time from patient arrival at the ED until the start of clinical treatment.
Time spent in the ED	The time from patient arrival at the ED until their departure.
Ambulance	
Call to ambulance arrival time	The time from when a call is first answered in the ambulance control centre (phone pick-up), to the time the first ambulance arrives at the scene of an incident.
Response time	The time from when a call for an ambulance is placed 'in queue' for vehicle dispatch by the ambulance control centre, to the time the first vehicle arrives at the scene.
Seclusion and restraint	
Rate of seclusion/physical restraint	Number of seclusion/physical restraint events per 1,000 bed days.
Frequency of seclusion/physical restraint	Percentage of acute mental health admitted episodes of care where at least one seclusion/physical restraint event occurs.
Average duration of seclusion/physical restraint	The average duration in hours of seclusion events/minutes of restraint events.
Elective surgery	
Elective surgery waiting time	The number of days from a patient's placement on the elective surgery waiting list until they undergo surgery.

* For some measures, other agencies report similar metrics, often with slightly different data definitions, so cross-publication comparisons should be made with care.



Emergency department activity and performance

Emergency department activity

NSW public hospital emergency departments (EDs) are open to everyone and provide specialised assessment and life-saving care for acutely unwell patients. EDs often act as an entry point to inpatient services.

There were 792,671 ED attendances in the October to December 2020 quarter across more than 170 public hospitals, up 2.1% (16,015) compared with the same quarter the previous year. The number of ambulance arrivals was 178,893, which was stable (up 0.2%) compared with the same quarter the previous year (Figure 1).

Most attendances (96.9%) were classified as emergency presentations. The remaining 3.1% (24,767) of attendances to EDs were for non-emergency reasons such as a planned return visit (Figure 1).

Triage category 2 (emergency) was up 3.2% (3,117) to 101,979 presentations. The numbers of presentations for triage categories 1, 3 and 4 were slightly lower, compared with the same quarter the previous year (Figure 1).

There were 94,330 triage 5 (non-urgent) presentations, up 35.3% (24,593) compared with the same quarter the previous year (Figure 1).

The higher numbers of triage 5 presentations were primarily due to COVID-19 testing provided in EDs. For more information on the impact of COVID-19 testing on ED activity and performance, please see page 18 of this report.

Figure 1 Emergency department activity and ambulance arrivals at NSW emergency departments, October to December 2020

	This quarter	Same quarter previous year	Change since one year ago
ED attendances	792,671	776,656	2.1%
Emergency presentations by triage category	767,904	752,447	2.1%
Triage 1: Resuscitation	5,462	5,467	-0.1%
Triage 2: Emergency	101,979	98,862	3.2%
Triage 3: Urgent	266,314	269,641	-1.2%
Triage 4: Semi-urgent	299,819	308,741	-2.9%
Triage 5: Non-urgent	94,330	69,736	35.3%
Ambulance arrivals	178,893	178,465	0.2%

Note: '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.

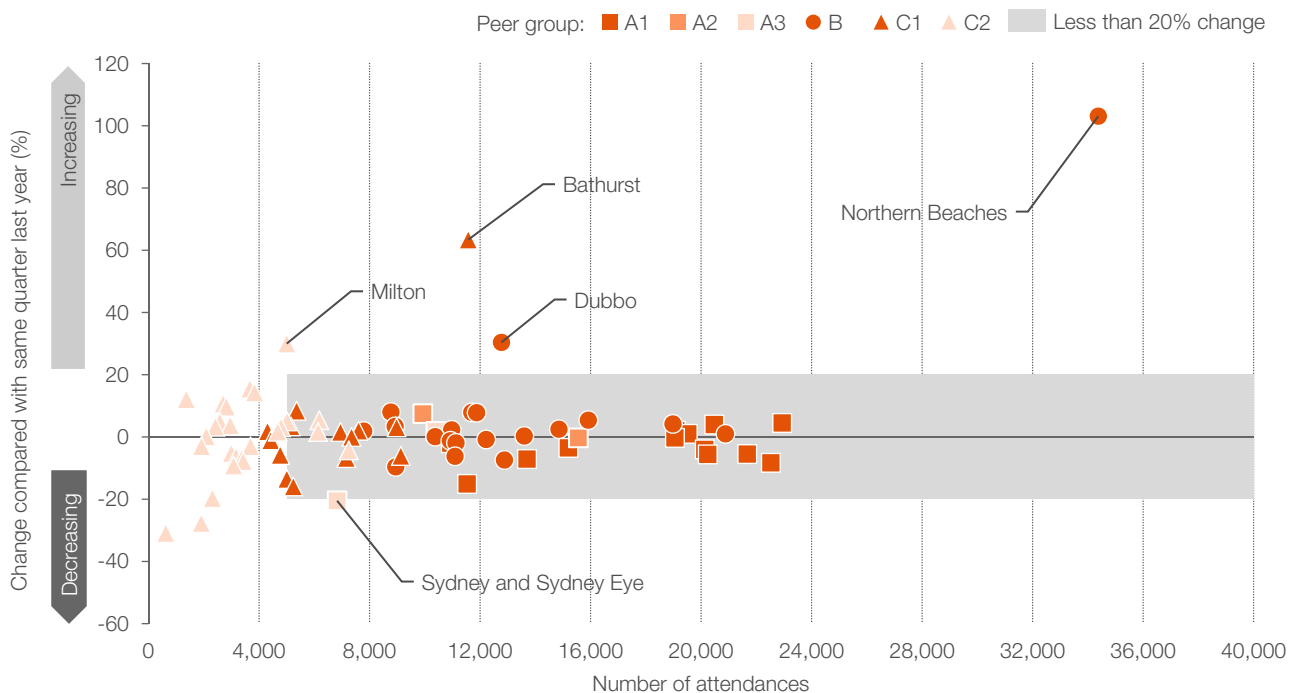
Compared with the same quarter the previous year, the number of ED attendances was higher in 42 out of the 77 large public hospital EDs reported individually in *Healthcare Quarterly*.

There were five hospitals with more than 5,000 ED attendances and a more than 20% change in the number of attendances compared with the same quarter the previous year. Sydney and Sydney Eye Hospital had 20.5% fewer ED attendances compared with the same quarter the previous year. The number of attendances was up more than 20% for four hospitals: Milton (30.0%), Dubbo (30.4%), Bathurst (63.4%) and Northern Beaches (103.1%) (Figure 2).

Hospitals with >20% change in the number of ED attendances, compared with same quarter the previous year

Hospital	Peer group	ED attendances	Change (%)
Northern Beaches	B	34377	103.1
Bathurst	C1	11572	63.4
Dubbo	B	12773	30.4
Milton	C2	5002	30.0
Sydney and Sydney Eye	A3	6825	-20.5

Figure 2 Change in number of emergency department attendances compared with the same quarter the previous year, hospitals by peer group, October to December 2020



Note: The higher numbers of ED attendances for Northern Beaches, Bathurst and Dubbo hospitals were primarily due to COVID-19 testing provided by these EDs. For more information, see the activity and performance profiles for these hospitals at bhi.nsw.gov.au

Time to treatment

On arrival at the ED, patients are allocated to one of five triage categories, based on urgency. Each category has a maximum recommended waiting time within which treatment should start, ranging from two minutes for triage category 1, to 120 minutes for triage category 5.

In October to December 2020, 74.1% of ED patients' treatment started within clinically recommended time frames, 1.5 percentage points higher than the same quarter the previous year. The percentage of patients starting treatment on time was higher across triage categories 2 to 5 (Figure 3).

The median and 90th percentile time to treatment was shorter for triage categories 3 (by 3 minutes) and 5 (by 18 minutes) compared with the same quarter the previous year. The median and 90th percentile times to treatment for triage categories 2 and 4 were almost unchanged (Figure 3).

Figure 3 Percentage of patients whose treatment started on time and time to treatment, by triage category, October to December 2020

	This quarter	Same quarter previous year	Percentage point change since one year ago
Emergency presentations	74.1%	72.6%	1.5
Triage 2: Emergency	Recommended: 80% in 10 minutes 63.1%	63.0%	0.1
Triage 3: Urgent	Recommended: 75% in 30 minutes 69.3%	67.6%	1.7
Triage 4: Semi-urgent	Recommended: 70% in 60 minutes 76.4%	76.2%	0.2
Triage 5: Non-urgent	Recommended: 70% in 120 minutes 94.3%	92.3%	2.0

	This quarter	Same quarter previous year	Change since one year ago
Triage 2: Emergency (e.g. chest pain, severe burns)			
Median time to start treatment	9m	9m	0m
90th percentile time to start treatment	26m	26m	0m
Triage 3: Urgent (e.g. moderate blood loss, dehydration)			
Median time to start treatment	20m	21m	-1m
90th percentile time to start treatment	1h 11m	1h 14m	-3m
Triage 4: Semi-urgent (e.g. sprained ankle, earache)			
Median time to start treatment	27m	27m	0m
90th percentile time to start treatment	1h 48m	1h 48m	0m
Triage 5: Non-urgent (e.g. small cuts or abrasions)			
Median time to start treatment	14m	24m	-10m
90th percentile time to start treatment	1h 30m	1h 48m	-18m

Note: Triage 1 patients are the most urgent and are almost all treated within two minutes. Clinicians are focused on providing immediate and essential care, rather than recording times, therefore times to start treatment are generally not reported. Time frames to treat other triage categories are recommended by the Australasian College for Emergency Medicine.

Time spent in the emergency department

Following treatment in the ED, the majority of patients are either discharged home or admitted to hospital. Some patients choose not to wait for treatment and leave, and others are transferred to a different hospital. Collectively, these categories are referred to as the 'mode of separation' (Figure 5).

In October to December 2020, 69.8% of patients spent four hours or less in the ED, unchanged from the same quarter the previous year (Figure 6).

Patients who require admission to hospital from the ED or who are transferred to another hospital usually have more complex health needs than those who are

treated and discharged, and therefore often spend longer periods in the ED. Fewer than half of these patients left within four hours (Figure 6).

The percentage of patients spending four hours or less in the ED was 80.5% for patients who were treated and discharged, and 85.0% for patients who left without, or before completing, treatment. The percentage of patients spending four hours or less in the ED was 36.8% for patients who were admitted to hospital, and 43.0% for patients who were transferred to another hospital (Figure 6).

Figure 5 Percentage of patients who presented to the emergency department, by mode of separation, October to December 2020

		This quarter	Same quarter previous year	Change since one year ago
Treated and discharged	66.9%	530,180	497,122	6.6%
Treated and admitted to hospital	23.5%	186,479	197,835	-5.7%
Left without, or before completing, treatment	5.9%	46,980	51,553	-8.9%
Transferred to another hospital	2.2%	17,517	17,328	1.1%
Other	1.5%	11,515	12,818	-10.2%

Figure 6 Percentage of patients who spent four hours or less in the emergency department, by mode of separation, October to December 2020

	Number	This quarter	Same quarter previous year	Percentage point change since one year ago
ED attendances	553,100	69.8%	69.8%	0.0
Treated and discharged	426,650	80.5%	80.7%	-0.2
Treated and admitted	68,560	36.8%	39.5%	-2.7
Left without, or before completing, treatment	39,919	85.0%	84.5%	0.5
Transferred to another hospital	7,527	43.0%	43.1%	-0.1

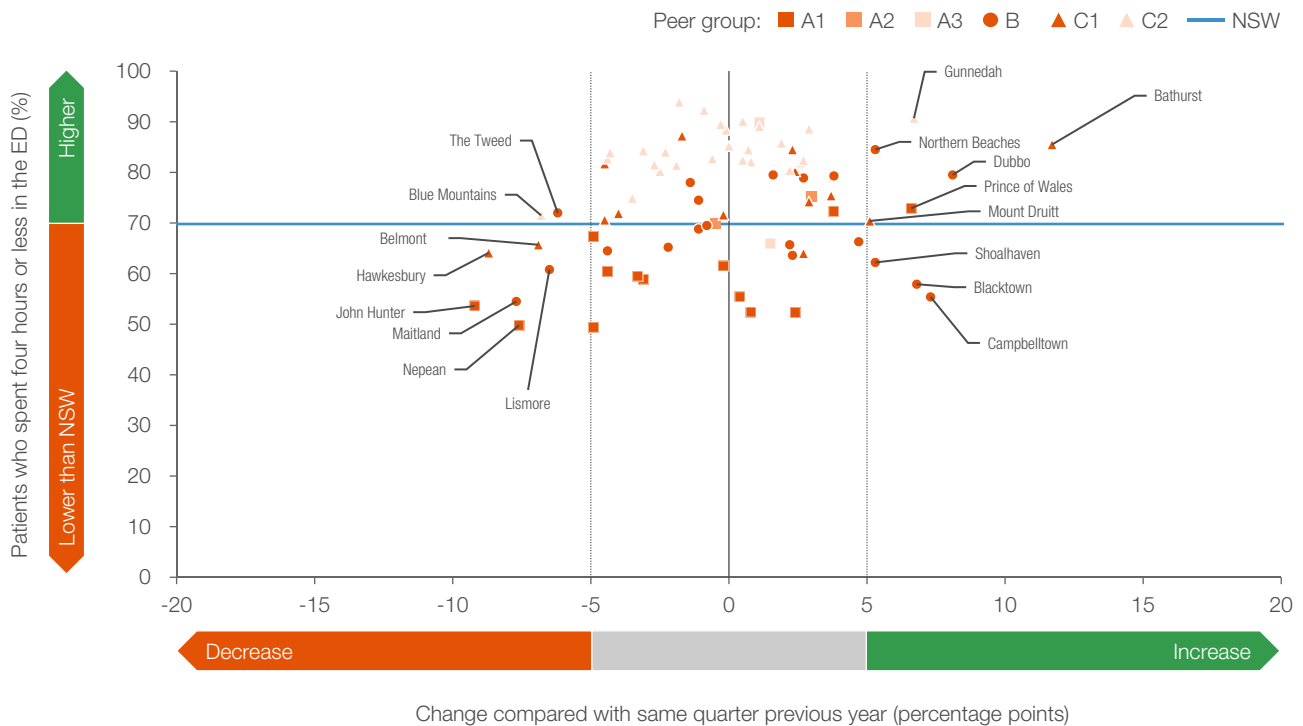
Compared with the same quarter the previous year, for the 77 large public hospital EDs reported individually in *Healthcare Quarterly*:

- In 37 hospitals, the percentage of patients who spent four hours or less in the ED was higher. At Bathurst, it was up more than 10 percentage points (Figure 7).
- In 39 hospitals, the percentage of patients who spent four hours or less in the ED was lower (Figure 7).

Hospitals with >10 percentage point change in the percentage of patients who spent four hours or less in the ED, compared with the same quarter the previous year

Hospital	Peer group	Left ED within four hours (%)	Percentage point change
Bathurst	C1	85.5	11.7

Figure 7 Percentage of patients who spent four hours or less in the emergency department, and percentage point change since the same quarter the previous year, hospitals by peer group, October to December 2020



Transfer of care

The target for transfer of care from NSW Ambulance paramedics to ED staff is within 30 minutes for at least 90% of patients. In October to December 2020, 87.3% of patients who arrived by ambulance had their care transferred within 30 minutes, relatively stable (down 0.6 percentage points) compared with the same quarter the previous year (Figure 8).

The median time for patient care to be transferred from paramedics to ED staff in October to December 2020 was 12 minutes, unchanged from the same quarter the previous year. The 90th percentile time for patient care to be transferred from paramedics to ED staff was 34 minutes, one minute longer than the same quarter the previous year (Figure 8).

The number of ambulance arrivals was up by more than 10% in nine hospitals: Narrabri (12.4%), South East Regional (12.4%), Lismore (13.1%), Muswellbrook (13.1%), Maclean (17.1%), Cooma (19.6%), Armidale (20.8%), Milton (20.9%) and Ballina (21.8%).

The number of ambulance arrivals was down by more than 10% in 11 hospitals: Deniliquin (10.1%), St Vincent's (10.2%), Gunnedah (11.2%), Ryde (11.4%), Auburn (12.1%), Cowra (12.3%), Mudgee (12.7%), Canterbury (13.4%), Mount Druitt (15.2%), Fairfield (15.8%) and Kurri Kurri (25.0%).

Figure 8 Emergency presentations, ambulance arrivals and transfer of care time, October to December 2020

	This quarter	Same quarter previous year	Change since one year ago
Emergency presentations	767,904	752,447	2.1%
ED transfer of care time			
Median time	12m	12m	0m
90th percentile time	34m	33m	1m
Percentage of patients transferred from ambulance to ED within 30 minutes	87.3%	87.9%	-0.6 percentage points

Note: Transfer of care time requires matched records between ambulance service and ED data. The number of ambulance arrivals used to calculate transfer of care time in October to December 2020 was 160,654 arrivals, up 0.7% compared with the same quarter the previous year.

COVID-19 tests and emergency department activity

Most COVID-19 testing takes place in dedicated clinics, which were established from late March. However, some EDs continued to provide COVID-19 tests, so a proportion of ED activity comprises patients visiting only for a test.

The provision of COVID-19 tests has required EDs to expand their services. This practice will vary across hospitals and local health districts (LHDs), and contribute to changes in ED case mix and performance.

In October to December 2020, there was a total of 792,671 ED attendances, with 3.6% (28,679) identified as patients likely to be visiting only for a COVID-19 test. Of 94,330 triage 5 emergency presentations, 24.9% (23,523) were likely to be only for a COVID-19 test (Table 2).

Patients presenting to an ED for a COVID-19 test tended to start treatment sooner and spend less time in the ED than patients presenting for care and treatment. There may be an impact on performance measures for those hospitals or LHDs where testing of these non-urgent, non-admitted patients was provided in high volume and represented a higher percentage of ED attendances.

If ED attendances identified as likely to be only for a COVID-19 test are excluded, the impact on statewide performance measures is limited. For example, there would be a lower percentage of:

- patients whose treatment started on time of up to 0.8 percentage points

- triage category 5 (non-urgent) patients whose treatment started on time of up to 2.0 percentage points
- patients who spent four hours or less in the ED of up to 1.1 percentage points (data not shown).

However, the level of ED activity relating only to COVID-19 testing, and therefore the effect on these measures of performance, will be more notable for hospitals and LHDs with a large percentage of triage 5 attendances identified as likely to be only for a COVID-19 test. In the hospital activity and performance profiles accompanying *Healthcare Quarterly, October to December 2020*, BHI has noted four hospitals where more than 30% of triage 5 attendances were identified as patients likely to be visiting an ED only for a COVID-19 test.

With the exception of this page, all activity and performance figures in *Healthcare Quarterly, October to December 2020* include attendances for COVID-19 tests.

Identifying patients who have visited the ED only for a COVID-19 test is not straightforward, due to the different ways individual hospitals record them in their information systems.

BHI identified ED attendances as likely to be only for a COVID-19 test where they were recorded in ED information systems: with COVID-19 included in the presenting problem or diagnosis fields; and as triage 5 (non-urgent) attendance; and as treated and discharged from the ED. For further information, see the technical supplement to *Healthcare Quarterly* at bhi.nsw.gov.au

Table 2 Emergency department activity, October to December 2020

	Total	Total (excl. COVID-19 tests)	Difference
ED attendances	792,671	763,992	28,679
Emergency presentations	767,904	744,381	23,523
Triage 5: Non-urgent	94,330	70,807	23,523



Ambulance activity and performance

Ambulance activity and performance

Activity

Ambulance activity can be quantified in terms of calls, incidents, responses and patient transports (Table 3).

In October to December 2020, there were 334,015 calls and 250,921 incidents, up 1.8% and 0.7% respectively, compared with the same quarter the previous year. There were 319,505 responses (up 0.7%) with most categorised as emergency – priority 1 (P1: 44.6%), and urgent – priority 2 (P2: 48.4%). Within the 142,627 P1 responses, there were 7,350 of the highest priority 1A (P1A) cases, up 9.4% compared with the same quarter the previous year (Figure 9).

Call to ambulance arrival time

Call to ambulance arrival time covers the period from when a Triple Zero (000) call is first answered in the ambulance control centre (phone pick-up), to the time the first ambulance arrives at the scene (Figure 10).

The percentage of P1 call to ambulance arrival times within 15 minutes was 54.0% in October to December 2020, down 3.4 percentage points compared with the same quarter the previous year. The percentage of P2 call to ambulance arrival times within 30 minutes was 62.1%, down 2.3 percentage points (Figure 10).






For more information on ambulance activity and performance, see *Healthcare in Focus – New South Wales and the COVID-19 pandemic in 2020* at bhi.nsw.gov.au

Table 3 Definition of calls, incidents, responses and patient transports

Calls	Calls received at the ambulance control centre, requesting an ambulance vehicle.
Incidents	Calls that result in the dispatch of one or more ambulance vehicles.
Responses	A response is the dispatch of an ambulance vehicle. There may be multiple responses to a single incident. Responses include vehicles cancelled prior to arrival at the incident scene. Responses are prioritised as priority 1 (emergency response under lights and siren, with category 1A as highest acuity); priority 2 (urgent – undelayed response required without lights and siren); priority 3 (time critical – undelayed response required); and priority 4–9 (non-emergency).
Patient transports	Number of patients transported by NSW Ambulance.

Note: Ambulance activity data do not include Computer-Aided Dispatch (CAD) outages and activity estimates. Patient Transport Service (formerly known as NEPT or Non-Emergency Patient Transport) activity is not included in ambulance activity data. For more information refer to this report's technical supplement.

Figure 9 Ambulance calls, incidents, responses and transports, NSW, October to December 2020

		This quarter	Same quarter previous year	Change since one year ago
Calls		334,015	328,228	1.8%
Incidents		250,921	249,255	0.7%
All responses		319,505	317,390	0.7%
P1: Emergency	 44.6%	142,627	143,844	-0.8%
P1A: Highest priority	 5.2%	7,350	6,717	9.4%
P2: Urgent	 48.4%	154,522	149,617	3.3%
P3: Time critical	 4.6%	14,839	14,898	-0.4%
P4–9: Non-emergency	 2.4%	7,517	9,031	-16.8%
Patient transports		192,854	192,334	0.3%

Note: All calls, incidents and responses that have been assigned a priority number are included in the total counts. Most priority numbers correspond to priority codes P1 to P9.

Response time

In NSW, ambulance response time refers to the period from the placement of a Triple Zero (000) call 'in queue' for an ambulance dispatch until the first vehicle arrives at the scene (Figure 11).

In October to December 2020, median response times for the high-volume response categories were 12.2 minutes for emergency – priority 1 (P1) cases, and 22.0 minutes for urgent – priority 2 (P2) cases. These were 0.5 minutes and 0.9 minutes longer than the same quarter the previous year, respectively (Figure 11).

In NSW, the benchmark for the median P1A response time is 10 minutes. The median response time for P1A cases was 8.2 minutes, 0.6 minutes longer than the same quarter the previous year (Figure 11).

The percentage of P1A responses within 10 minutes in October to December 2020 was 66.4%, down 3.2 percentage points compared with the same quarter the previous year (Figure 11).

Figure 10 Call to ambulance arrival time, by priority category, NSW, October to December 2020

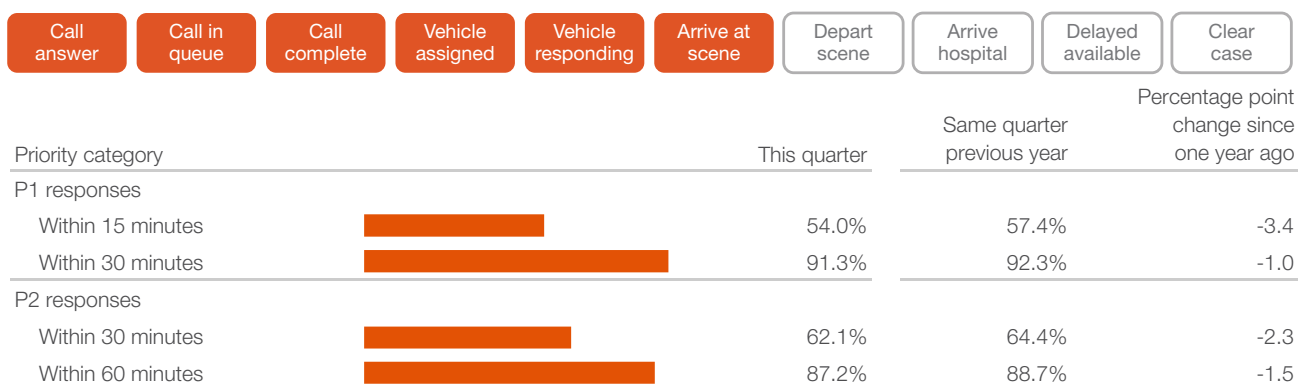
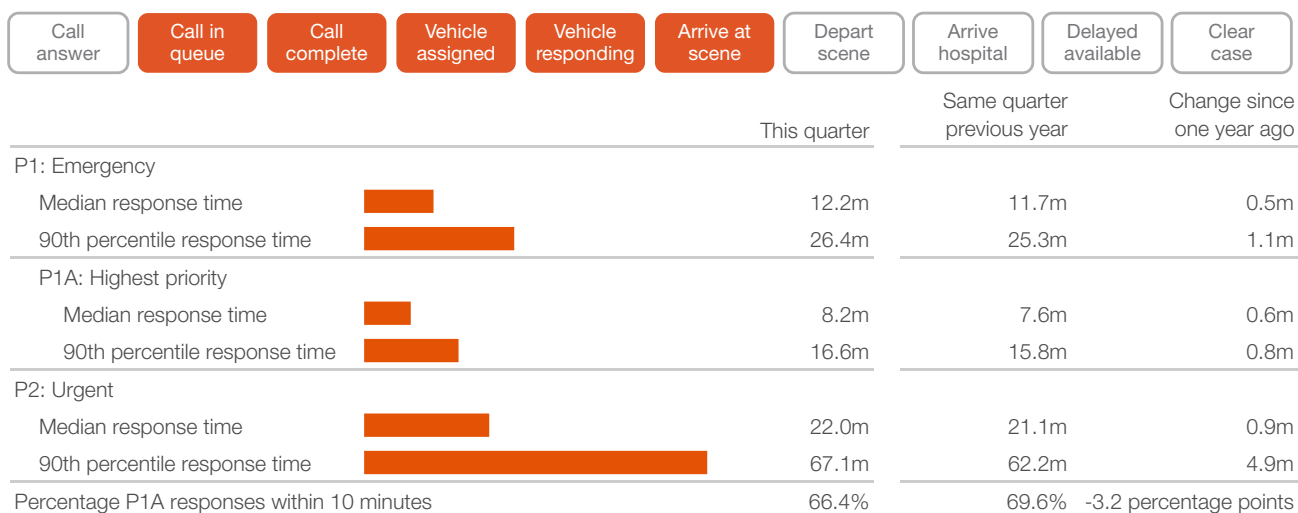


Figure 11 Ambulance response time, by priority category, NSW, October to December 2020



Ambulance activity

Regional, rural and remote NSW

The rate of incidents requiring an ambulance is the number of incidents for every 1,000 people living in an area. Any case requiring dispatch of one or more ambulance vehicles is defined as an incident.

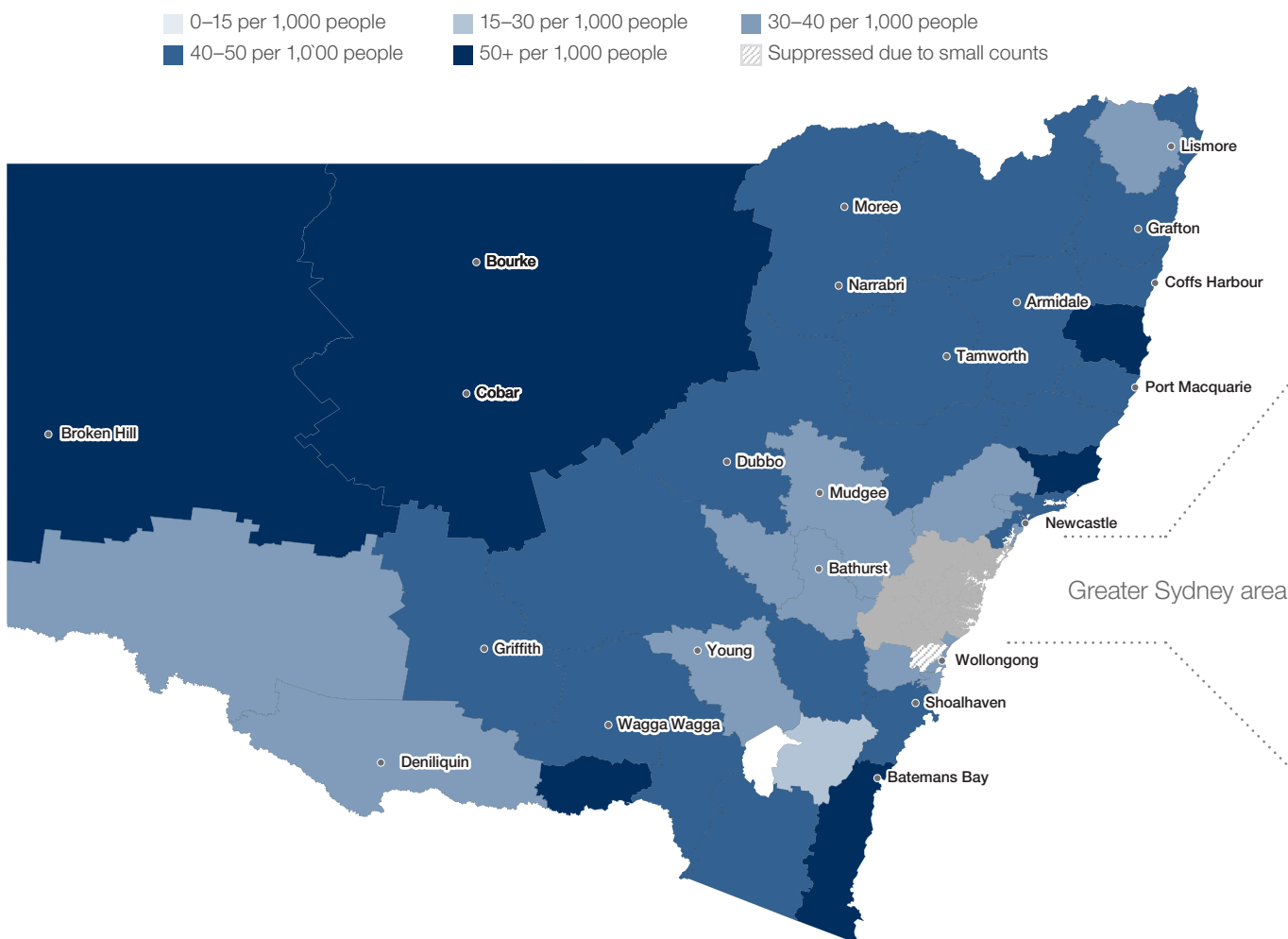
Across the 43 statistical areas level 3 (SA3s) in regional, rural and remote NSW, the incident rate ranged from 26.1 to 71.5 per 1,000 people during October to December 2020. Broken Hill and Far West had the highest rate (71.5) while Queanbeyan had the lowest (26.1) – the only regional, rural and remote SA3 with an incident rate below 30 (Figure 12).

A summary of results by SA3 is available online through BHI's ambulance performance tool:

bhi.nsw.gov.au/search-ambulance-performance

Full activity and performance results by SA3, including trends over time, are available on BHI's interactive data portal, **Healthcare Observer**.

Figure 12 Incident rate, by SA3, per 1,000 people, regional, rural and remote NSW, October to December 2020



Note: Statistical areas level 3 (SA3s) are geographical areas defined by the Australian Bureau of Statistics and used by BHI for reporting ambulance activity and performance. See the technical supplement to this report for more information.

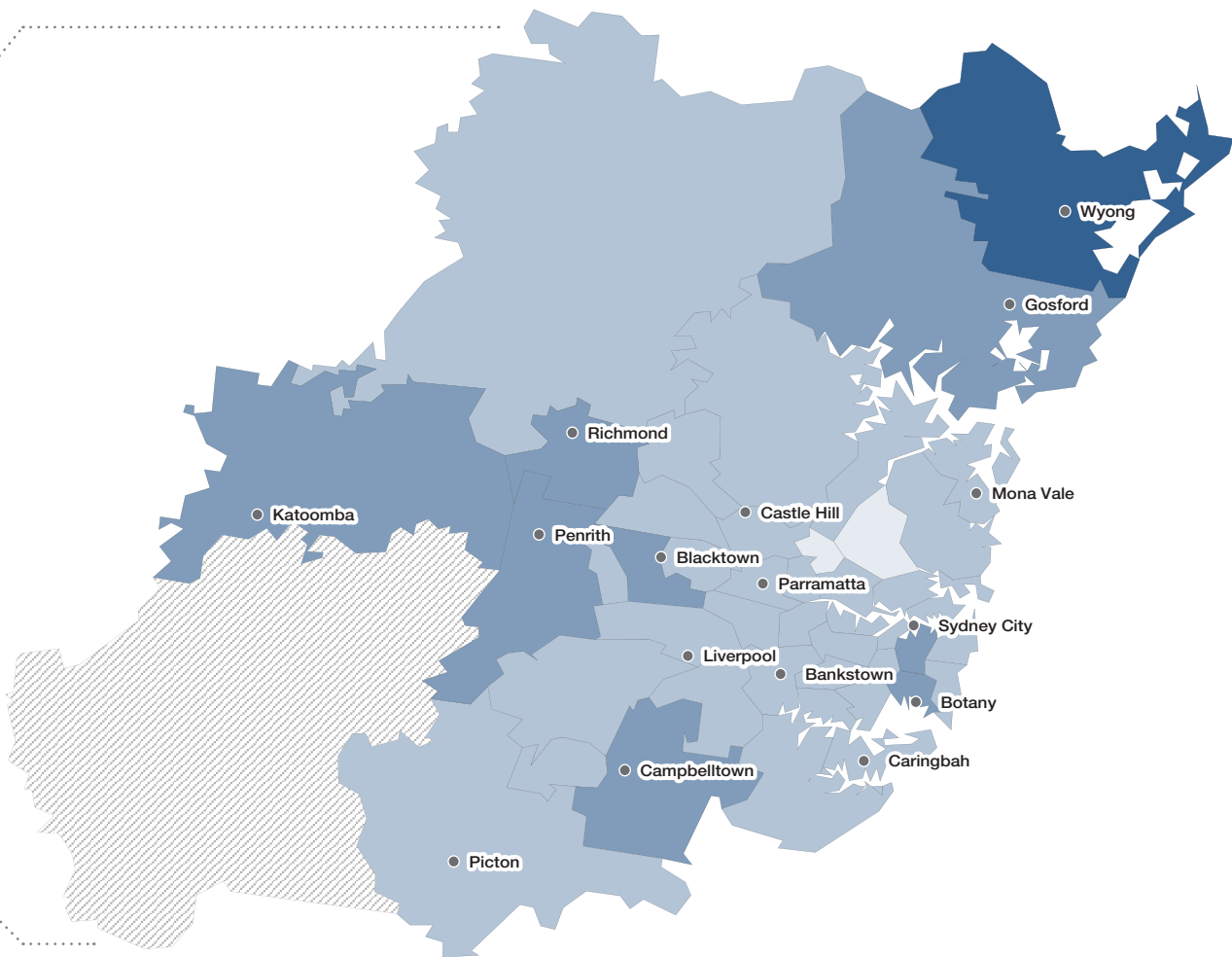
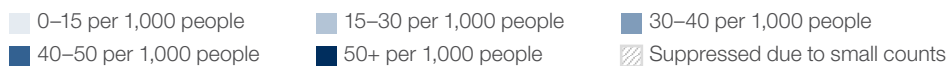
Greater Sydney area

Across the 46 SA3s in the Greater Sydney area, the incident rate for October to December 2020 ranged from 12.6 to 42.7 per 1,000 people.

Nine SA3s in Greater Sydney had incident rates above 30 per 1,000 people: Wyong (42.7), Gosford (38.0), Botany (37.6), Richmond – Windsor (37.5), Mount Druitt (32.7), Campbelltown (32.2), Sydney Inner City (31.9), Blue Mountains (31.0), and Penrith (30.5) (Figure 13).

There were 37 SA3s in Greater Sydney with incident rates below 30 per 1,000 people. Pennant Hills – Epping had the lowest rate in NSW at 12.6, the only SA3 with an incident rate below 15 per 1,000 people in the Greater Sydney area (Figure 13).

Figure 13 Incident rate, by SA3, per 1,000 people, Greater Sydney, October to December 2020



Call to ambulance arrival times

Emergency cases are classified as priority 1 (P1) by NSW Ambulance and require an immediate response under lights and siren. There were 142,627 P1 responses across NSW in October to December 2020.

Statewide, 54.0% of P1 call to ambulance arrival times were within 15 minutes, down 3.4 percentage points compared with the same quarter the previous year (Figure 10).

Regional, rural and remote NSW

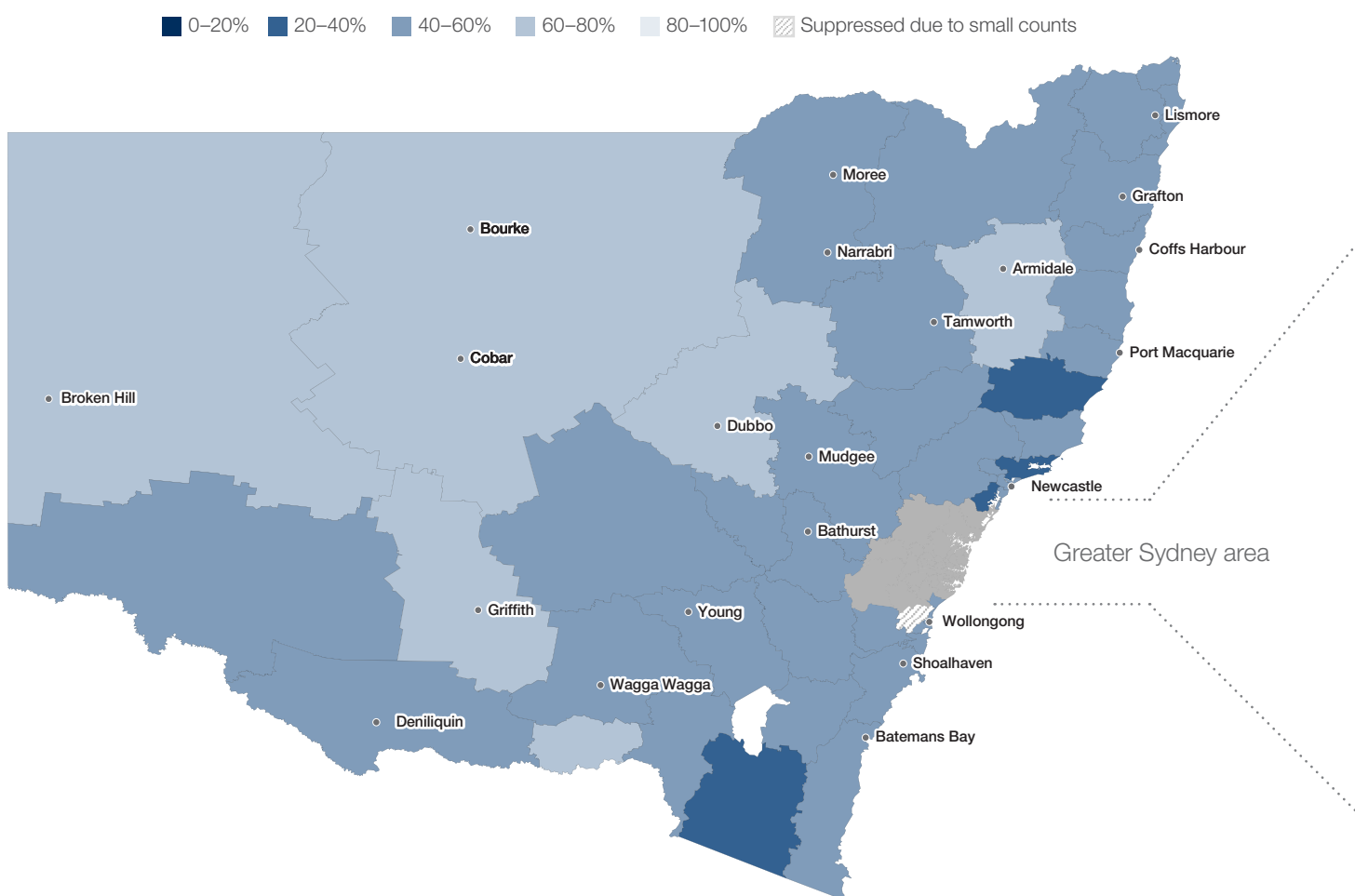
Regional, rural and remote NSW has a higher proportion of non-24-hour ambulance stations than metropolitan Sydney, and longer distances between incidents and major hospitals, which can affect the

time it takes for NSW Ambulance paramedics to reach patients.

In some of these areas, NSW Ambulance-trained first responders are also available, who can arrive on scene to deliver first aid and defibrillation before the first paramedic crew arrives, and transport patients if needed.

In October to December 2020, the percentage of P1 call to ambulance arrival times within 15 minutes ranged from 38.1% (Taree – Gloucester) to 68.0% (Armidale) in regional, rural and remote NSW (Figure 14).

Figure 14 Percentage of emergency (P1) call to ambulance arrival times under 15 minutes, by SA3, regional, rural and remote NSW, October to December 2020

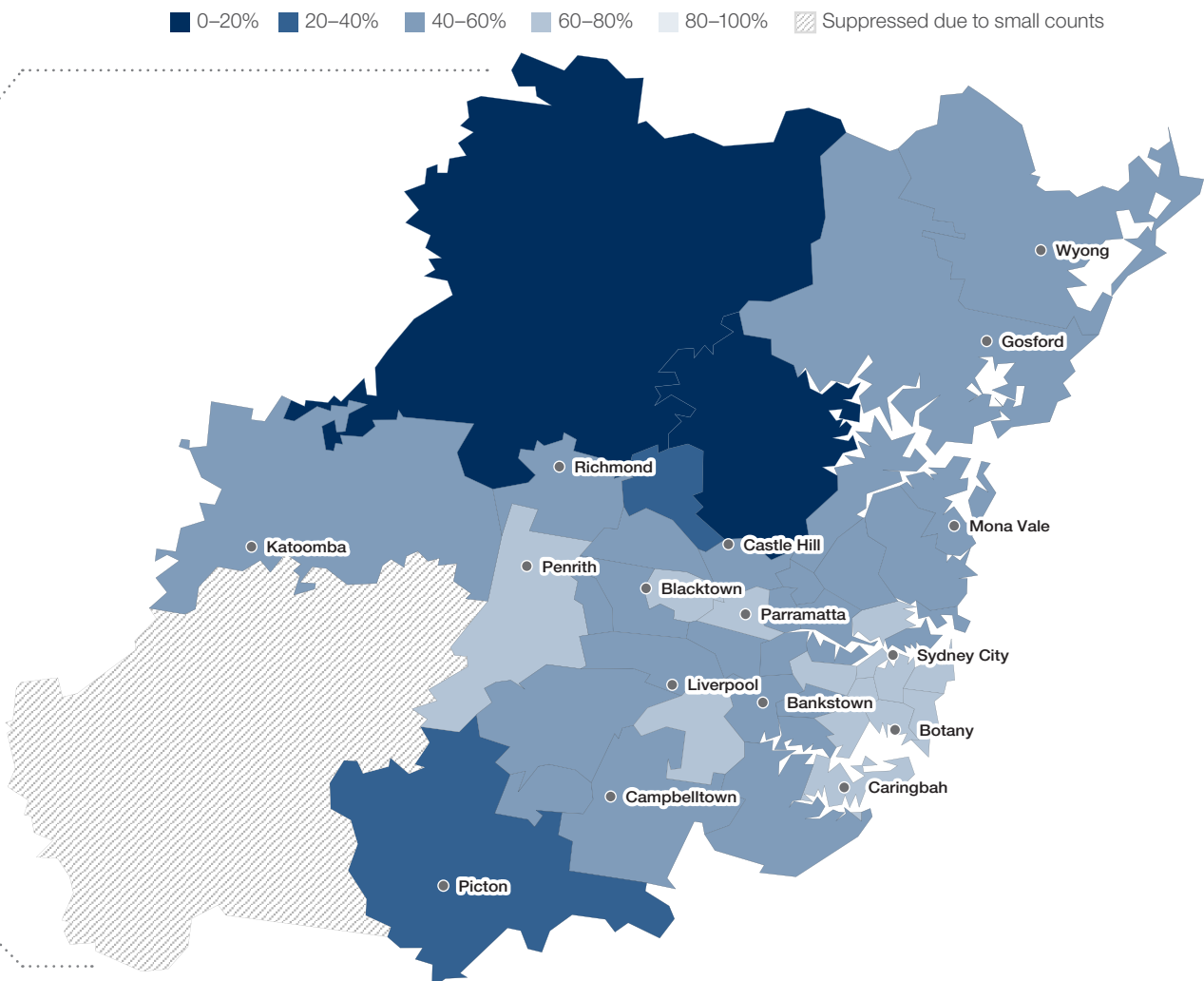


Greater Sydney area

For emergency – priority 1 (P1) responses, there were two SA3s out of 46 in Greater Sydney with more than 70% call to ambulance arrival times within 15 minutes: Sydney Inner City (75.0%), and Cronulla – Miranda – Caringbah (72.1%). Overall, results in Greater Sydney ranged from 12.7% (Hawkesbury) to 75.0% (Sydney Inner City) (Figure 15).

Three SA3s in Greater Sydney had less than 30% of P1 call to ambulance arrival times within 15 minutes: Hawkesbury (12.7%), Dural – Wisemans Ferry (13.2%), and Wollondilly (20.6) (Figure 15).

Figure 15 Percentage of emergency (P1) call to ambulance arrival times under 15 minutes, by SA3, Greater Sydney, October to December 2020





Admitted patient activity

Admitted patients

Admitted patient episodes can be acute (short-term admissions for immediate treatment) or non-acute (longer admissions for rehabilitation, palliative care or other reasons). Admissions that involve treatment for mental health can be acute or non-acute.

There were 489,296 admitted patient episodes in NSW public hospitals in October to December 2020, which was stable (down 0.3%) compared with the same quarter the previous year. Among those, 94.3% were acute admitted patient episodes, of which 51.1% were overnight episodes. Of the three stay types, the number of non-acute patient episodes saw the biggest percentage change in October to December 2020, down 5.5% compared with the same quarter the previous year (Figure 16).

There were 10,984 mental health episodes, down 4.7% compared with the same quarter the previous year. Overnight mental health episodes were up by 2.1%, while same-day mental health episodes were down by 45.1% (Figure 16).

The use of restrictive practices in acute mental health units is reported in the seclusion and restraint section of this report (pages 32–38).

For more information on admitted patient activity, see *Healthcare in Focus – New South Wales and the COVID-19 pandemic in 2020* at bhi.nsw.gov.au

Figure 16 Total number of admitted patient episodes, by stay type, October to December 2020




		This quarter	Same quarter previous year	Change since one year ago
All episodes*		489,296	490,760	-0.3%
Acute	94.3%	461,618	461,563	0.0%
Non-acute	3.4%	16,694	17,670	-5.5%
Mental health	2.2%	10,984	11,527	-4.7%
<hr/>				
		This quarter	Same quarter previous year	Change since one year ago
Acute				
Overnight	51.1%	235,713	243,685	-3.3%
Same-day	48.9%	225,905	217,878	3.7%
Non-acute				
Overnight	84.4%	14,092	14,817	-4.9%
Same-day	15.6%	2,602	2,853	-8.8%
Mental health				
Overnight	91.7%	10,076	9,873	2.1%
Same-day	8.3%	908	1,654	-45.1%

* Episodes of care include same-day and overnight completed episodes. Non-completed episodes are excluded.

Bed days are used to establish levels of inpatient occupancy and are calculated for all admitted patient episodes that ended during the period. Total bed days for all admitted patient episodes were 1,693,993 in October to December 2020, down 1.4% compared with the same quarter the previous year (Figure 17).

Total bed days were down for acute, non-acute and mental health admitted patient episodes, down 0.8%, 6.2% and 0.3%, respectively, compared with the same quarter the previous year (Figure 17).

Figure 17 Total number of hospital bed days, by episode type, October to December 2020

		This quarter	Same quarter previous year	Change since one year ago
Total bed days		1,693,993	1,718,890	-1.4%
Acute	 76.1%	1,288,636	1,299,169	-0.8%
Non-acute	 12.3%	208,053	221,868	-6.2%
Mental health	 11.6%	197,304	197,853	-0.3%



Seclusion and restraint

Seclusion and restraint

Seclusion and restraint involves the use of interventions to restrict the freedom of movement of a patient. These restrictive practices are not therapeutic but may be needed to support care.

In NSW, there are 46 public hospitals, plus the forensic hospital, with specialised acute mental health units that treat patients with varying severities of mental illness. There are Mental Health Intensive Care Units (MHICUs) in six of these hospitals, providing treatment for patients with a higher level of clinical severity and complexity who may be more likely to experience seclusion and restraint.

The Justice Health and Forensic Mental Health Network (JHFMHN) provides specialised mental health services for forensic patients. JHFMHN is reported separately and not included in NSW totals to acknowledge the differences in model of care and the patient cohort.

BHI does not report on seclusion and restraint events in non-acute specialised mental health inpatient units or in emergency departments.

Most episodes of care in acute mental health units did not have a seclusion or restraint event in October to December 2020 (Figure 18).

The NSW Ministry of Health introduced a new key performance indicator (KPI) related to the use of seclusion in the 2020–21 Service Performance Agreements. The KPI target for the percentage of acute

mental health episodes of care with at least one seclusion event in 2020–21 is less than 4.1% for each hospital.

The percentage of acute mental health episodes of care with at least one seclusion event was 3.6%, up 0.3 percentage points compared with the same quarter the previous year (Figure 18). The percentage was 4.1 or above in 11 hospitals: Concord (9.4), Cumberland (9.1), Maitland (7.1), Bankstown–Lidcombe (6.9), Broken Hill (6.6), Wyong (5.4), Gosford (4.8), Liverpool (4.8), Nepean (4.7), Sutherland (4.5) and Hunter New England Mater Mental Health Centre (4.5) (Table 4).

The percentage of acute mental health episodes of care with at least one physical restraint event was 4.4%, down 0.1 percentage points compared with the same quarter the previous year (Figure 18, Table 4).

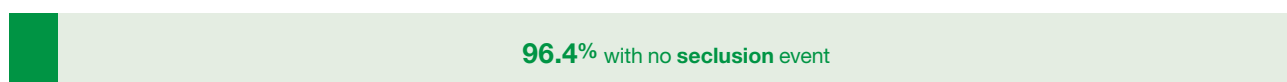
There is variation across public hospitals in the use of these interventions (Table 4).

A **seclusion event** occurs when a patient is placed alone in a room or an area at any time of day or night, with no freedom of exit. The duration of the event, or the size and type of area in which a patient is confined is not relevant in determining what is or is not seclusion.

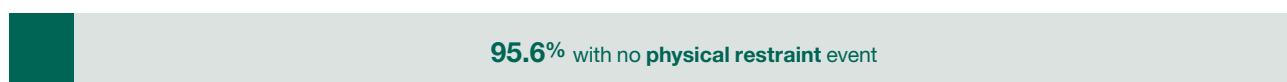
A **restraint event** occurs when the patient's freedom of movement is restricted by physical means (i.e. hands-on immobilisation by healthcare staff), or mechanical means (i.e. application of devices).

Figure 18 Percentage of acute mental health episodes of care occurring in specialised acute mental health inpatient units with at least one seclusion or physical restraint event, October to December 2020*

3.6% with ≥ 1 **seclusion event**



4.4% with ≥ 1 **physical restraint event**



* BHI does not report on seclusion and restraint events in non-acute specialised mental health inpatient units or in emergency departments.

Table 4 Percentage of acute mental health episodes of care occurring in specialised acute mental health inpatient units with at least one seclusion or physical restraint event, by public hospital, October to December 2020*

Hospital	Number of acute mental health episodes of care	Seclusion		Physical restraint		
		% of episodes with at least one event	Percentage point change since one year ago	% of episodes with at least one event	Percentage point change since one year ago	
NSW†	12,461	3.6	0.3	4.4	-0.1	
No mental health intensive care unit	Armidale	80	0.0	0.0	0.0	0.0
	Bankstown–Lidcombe	259	6.9	3.1	9.3	5.1
	Bathurst	13	0.0	0.0	0.0	0.0
	Blacktown	443	2.7	0.8	2.5	0.9
	Blue Mountains	90	1.1	1.1	5.6	4.5
	Braeside	45	0.0	0.0	6.7	-4.7
	Broken Hill	61	6.6	2.8	1.6	-2.2
	Campbelltown	568	1.9	-2.1	3.3	-2.6
	Coffs Harbour	239	3.3	0.0	4.6	0.5
	Dubbo	88	0.0	0.0	0.0	0.0
	Gosford	188	4.8	4.2	7.4	3.8
	Goulburn	230	0.9	-3.0	5.7	-1.0
	Greenwich	68	0.0	0.0	4.4	4.4
	John Hunter	90	2.2	2.2	2.2	-6.1
	Kempsey	75	0.0	0.0	0.0	0.0
	Lismore	261	1.9	-0.3	2.3	-1.3
	Liverpool	517	4.8	0.6	4.1	0.9
	Macquarie	68	0.0	0.0	4.4	1.5
	Maitland	196	7.1	2.1	4.6	-1.3
	Manning	134	3.0	0.2	2.2	-1.5
	Morrisset	15	0.0	0.0	0.0	-13.3
	Nepean	640	4.7	0.5	3.9	-0.5
	Port Macquarie	95	1.1	-1.8	3.2	3.2
	Royal North Shore	372	1.1	0.2	2.2	0.1
	Royal Prince Alfred	796	2.4	-0.5	2.5	-1.9
	Shellharbour	349	3.2	-3.0	3.2	-1.7
	South East Regional	96	1.0	0.0	3.1	-0.9
	St George	331	0.9	0.9	4.8	0.9
	St Joseph's	12	0.0	0.0	8.3	8.3
	St Vincent's	353	1.7	-0.1	4.2	-0.6
	Sutherland	201	4.5	2.8	9.0	6.2
	Sydney Children's, Randwick	198	1.0	-2.0	2.5	-0.5
	Tamworth	238	2.5	-0.7	2.9	-1.1
Tweed	203	1.5	-1.3	6.4	3.6	
Wagga Wagga	327	1.8	0.0	5.5	1.3	
Westmead	148	0.0	0.0	6.1	1.8	
Children's at Westmead	44	0.0	-1.8	9.1	0.0	
Wollongong	305	2.3	-3.0	1.3	-3.7	
Wyong	312	5.4	2.8	5.8	4.2	
MHICU	Concord	916	9.4	1.1	6.7	0.0
	Cumberland	733	9.1	4.1	4.5	-1.1
	Hornsby	307	3.6	2.0	5.9	0.1
	Hunter New England Mater MH	799	4.5	1.1	6.4	0.6
	Orange	422	1.7	0.2	1.2	-1.8
	Prince of Wales	536	0.4	-0.8	5.8	0.0
JH	The Forensic Hospital†	55	16.4	-0.6	30.9	10.1

* Episodes of care include same-day, overnight, completed and non-completed episodes excluding episodes at the Forensic Hospital. Episodes of care for the Forensic Hospital include same-day, overnight, completed and non-completed episodes.

† Justice Health (JH) is not included in NSW totals because of the differences in model of care and the patient cohort. For more information, see *Measurement Matters – Reporting on seclusion and restraint in NSW public hospitals*.

Notes: MHICU = Mental Health Intensive Care Unit. JHFMHN = Justice Health and Forensic Mental Health Network.

Results for Northern Beaches Hospital are not included. See the technical supplement to this issue of Healthcare Quarterly for further information.

Seclusion and restraint events and rate

Seclusion and restraint interventions are not therapeutic and should only be used as a last resort when other options have been unsuccessful in maintaining safety for the patient, staff or others.

Use of seclusion and restraint in hospitals can be affected by a range of factors including the mix of patients, local models of care, staffing levels and training, and the physical environment of the unit.

Across NSW, there were 774 seclusion events in October to December 2020, up 85 events compared with the same quarter the previous year. There were 999 physical restraint events, up 78 (Table 5).

The number of seclusion and restraint events varied across public hospitals. The highest numbers of seclusion and restraint events mostly occurred in hospitals with a MHICU and at the Forensic Hospital (Table 5).

The NSW Health KPI target for rate of seclusion in 2020–21 is less than 5.1 per 1,000 bed days for each hospital. In October to December 2020, the NSW rate of seclusion was 6.0, up 0.7 compared with the same quarter the previous year (Table 5).

The rate of seclusion was below 5.1 per 1,000 bed days in 30 hospitals. The rate was 5.1 or above in 15 hospitals: John Hunter (15.3), Concord (15.1), Sydney Children's, Randwick (13.8), Liverpool (10.4), Cumberland (10.2), Hunter New England Mater Mental Health Centre (10.1), Maitland (10.0), Sutherland (9.9), Broken Hill (9.6), Bankstown–Lidcombe (9.2), Gosford (8.5), Hornsby (7.6), Nepean (7.1), Royal Prince Alfred (6.1) and Wyong (6.0) (Table 5).

The rate of physical restraint was 7.7 per 1,000 bed days, up 0.6 compared with the same quarter the previous year (Table 5).

There were 52 mechanical restraint events in NSW public hospitals with specialised acute mental health units (excluding the Forensic Hospital). This was up by 25 events compared with the same quarter the previous year (data not shown by hospital due to small numbers). At the Forensic Hospital, there were 125 mechanical restraint events, down by 5 events compared with the same quarter the previous year.

For more information on analyses of seclusion and restraint, see *Measurement Matters: Reporting on seclusion and restraint in NSW public hospitals*. bhi.nsw.gov.au/BHI_reports/measurement_matters

Table 5 Number of seclusion and physical restraint events occurring in specialised acute mental health inpatient units, by public hospital, October to December 2020

Hospital	Seclusion			Physical restraint			
	Total number of seclusion events	Change in events since one year ago	Rate per 1,000 bed days	Total number of physical restraint events	Change in events since one year ago	Rate per 1,000 bed days	
NSW*	774	85	6.0	999	78	7.7	
No mental health intensive care unit	Armidale	0	0	0.0	0	0.0	
	Bankstown–Lidcombe	24	2	9.2	34	13	13.1
	Bathurst	0	0	0.0	0	0	0.0
	Blacktown	12	0	3.9	11	0	3.5
	Blue Mountains	<5	2	1.6	9	8	7.1
	Braeside	0	0	0.0	13	-7	9.1
	Broken Hill	<5	1	9.6	<5	0	4.8
	Campbelltown	18	-18	3.3	33	-16	6.1
	Coffs Harbour	11	3	3.6	15	-1	5.0
	Dubbo	0	0	0.0	0	0	0.0
	Gosford	20	-3	8.5	25	9	10.6
	Goulburn	<5	-17	1.0	16	-21	8.2
	Greenwich	0	0	0.0	6	6	3.5
	John Hunter	9	9	15.3	13	1	22.1
	Kempsey	0	0	0.0	0	0	0.0
	Lismore	7	0	1.8	6	-7	1.5
	Liverpool	52	5	10.4	28	4	5.6
	Macquarie	0	0	0.0	<5	2	3.5
	Maitland	19	6	10.0	9	-5	4.7
	Manning	6	2	4.9	<5	-1	3.3
	Morisset	0	0	0.0	0	-2	0.0
	Nepean	40	7	7.1	36	5	6.4
	Port Macquarie	<5	-2	0.9	6	6	5.3
	Royal North Shore	<5	1	1.3	14	2	4.7
	Royal Prince Alfred	39	19	6.1	33	-2	5.2
	Shellharbour	17	-33	4.6	17	-11	4.6
	South East Regional	<5	0	1.0	5	0	4.9
	St George	7	7	2.7	19	-7	7.2
	St Joseph's	0	0	0.0	<5	1	3.7
	St Vincent's	8	0	2.9	18	-7	6.5
	Sutherland	22	11	9.9	33	9	14.8
	Sydney Children's, Randwick	9	4	13.8	18	11	27.6
	Tamworth	7	-5	3.5	9	-5	4.4
Tweed	5	-6	2.2	21	12	9.1	
Wagga Wagga	9	1	3.1	27	6	9.2	
Westmead	0	0	0.0	23	13	9.4	
Children's at Westmead	0	-1	0.0	13	-6	20.8	
Wollongong	9	-24	3.2	5	-29	1.8	
Wyong	24	0	6.0	23	11	5.7	
MHICU	Concord	170	16	15.1	143	41	12.7
	Cumberland	87	29	10.2	47	-22	5.5
	Hornsby	37	27	7.6	53	19	10.9
	Hunter New England Mater MH	83	45	10.1	131	29	15.9
	Orange	7	2	1.8	6	-7	1.5
Prince of Wales	<5	-5	0.3	70	26	12.2	
JH	The Forensic Hospital*	112	-104	27.7	173	-33	42.9

* Justice Health (JH) is not included in NSW totals because of the differences in model of care and the patient cohort. For more information, see *Measurement Matters: Reporting on seclusion and restraint in NSW public hospitals*.

Notes: MHICU = Mental Health Intensive Care Unit. JHFMHN = Justice Health and Forensic Mental Health Network.

Results for Northern Beaches Hospital are not included. See the technical supplement to this issue of Healthcare Quarterly for further information.

Seclusion and restraint duration

While seclusion and restraint is used to maintain safety for a patient, staff or others, the length of time that an individual is exposed to these restrictive interventions should be as short as possible.

When examining average duration of seclusion and restraint events, it should be noted that variation can be affected by a single event lasting considerably longer than others.

The NSW Health KPI target for seclusion duration in 2020–21 is less than four hours for each hospital. Statewide, the average duration of a seclusion event was 7 hours and 10 minutes in October to December 2020, up 50 minutes compared with the same quarter the previous year (Table 6).

The average duration of seclusion events was less than four hours in 30 hospitals. The average duration was longer than four hours in eight hospitals: Cumberland (15h 4m), Concord (12h 32m), Coffs Harbour (12h 1m), Hunter New England Mater Mental Health Centre (8h 6m), Blacktown (7h 17m), Liverpool (6h 23m), Bankstown–Lidcombe (5h 19m) and St George (4h 39m) (Table 6).

In October to December 2020, the average duration of a physical restraint event was five minutes, unchanged compared with the same quarter the previous year (Table 6).

The average duration of a mechanical restraint event in NSW public hospitals (excluding the Forensic Hospital) was 1 hour 31 minutes. This was up 19 minutes compared with the same quarter the previous year (data not shown by hospital due to small numbers). At the Forensic Hospital, the average duration of a mechanical restraint event was 39 minutes, up 10 minutes compared with the same quarter the previous year.

For more information on analyses of seclusion and restraint, see *Measurement Matters: Reporting on seclusion and restraint in NSW public hospitals*.
bhi.nsw.gov.au/BHI_reports/measurement_matters

Table 6 Average duration of seclusion and physical restraint events occurring in specialised acute mental health inpatient units, by public hospital, October to December 2020

		Seclusion		Physical restraint	
Hospital		Average duration	Change since one year ago	Average duration	Change since one year ago
NSW*		7h 10m	50m	5m	0m
No mental health intensive care unit	Armidale	0m	0m	0m	0m
	Bankstown–Lidcombe	5h 19m	3h 49m	1m	0m
	Bathurst	0m	0m	0m	0m
	Blacktown	7h 17m	-1h 11m	1m	-1m
	Blue Mountains	†	‡	2m	‡
	Braeside	0m	0m	6m	5m
	Broken Hill	†	‡	†	‡
	Campbelltown	1h 23m	1m	2m	0m
	Coffs Harbour	12h 1m	-12h 4m	4m	0m
	Dubbo	0m	0m	0m	0m
	Gosford	33m	-2h 4m	6m	3m
	Goulburn	†	‡	2m	-1m
	Greenwich	0m	0m	1m	1m
	John Hunter	3h 6m	3h 6m	3m	-1m
	Kempsey	0m	0m	0m	0m
	Lismore	2h 41m	-5h 19m	8m	4m
	Liverpool	6h 23m	-3h 30m	1m	-1m
	Macquarie	0m	0m	†	‡
	Maitland	2h 29m	32m	7m	1m
	Manning	46m	‡	†	‡
	Morisset	0m	0m	0m	‡
	Nepean	3h 51m	-59m	2m	0m
	Port Macquarie	†	‡	1m	1m
	Royal North Shore	†	‡	1m	-1m
	Royal Prince Alfred	2h 59m	-48m	6m	-9m
	Shellharbour	3h 4m	-9m	2m	-1m
	South East Regional	†	‡	5m	0m
	St George	4h 39m	4h 39m	2m	1m
	St Joseph's	0m	0m	†	‡
	St Vincent's	54m	12m	3m	-6m
	Sutherland	1h 34m	-33m	3m	1m
	Sydney Children's, Randwick	12m	-3h 19m	6m	2m
Tamworth	1h 46m	-5m	29m	26m	
Tweed	3h 37m	-5h 40m	4m	3m	
Wagga Wagga	51m	-49m	3m	1m	
Westmead	0m	0m	5m	4m	
Children's at Westmead	0m	‡	5m	1m	
Wollongong	2h 47m	9m	5m	1m	
Wyong	2h 18m	-5m	5m	1m	
MHICU	Concord	12h 32m	1h 27m	9m	4m
	Cumberland	15h 4m	4h 32m	3m	0m
	Hornsby	1h 21m	-12m	10m	2m
	Hunter New England Mater MH	8h 6m	3h 57m	7m	-1m
	Orange	44m	-1h 52m	2m	-1m
Prince of Wales	†	‡	3m	0m	
JH	The Forensic Hospital†	10h 21m	-10h 1m	8m	4m

* Justice Health (JH) is not included in NSW totals because of the differences in model of care and the patient cohort. For more information, see *Measurement Matters: Reporting on seclusion and restraint in NSW public hospitals*.

† Suppressed due to small number of seclusion/physical restraint events in the reporting period, to protect patient privacy.

‡ Suppressed due to small number of seclusion/physical restraint events in the reporting period or in the same quarter the previous year, to protect patient privacy.

Notes: MHICU = Mental Health Intensive Care Unit. JHFMHN = Justice Health and Forensic Mental Health Network.

Results for Northern Beaches Hospital are not included. See the technical supplement to this issue of Healthcare Quarterly for further information.



Elective surgery activity and performance

Elective surgery activity

There are three main categories for elective surgery: urgent, semi-urgent and non-urgent. The urgency category is determined by the surgeon and is based on clinical criteria.

In October to December 2020, there were 62,151 elective surgical procedures performed in NSW public hospitals. The numbers of urgent, semi-urgent and non-urgent procedures performed were up by 7.3%, 7.4% and 10.3% respectively, compared with the same quarter the previous year (Figure 19).


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. A total of 4,551 elective surgical procedures contracted to NSW private hospitals was performed in October to December 2020. This represented 7.3% of all elective surgical procedures performed (Figure 19).

Following NSW Health advice for resuming non-urgent procedures in public hospitals, elective surgery activity has been restored incrementally in three stages since late April.

Patients who began to receive their surgery had waited longer due to the suspension, which may have contributed to the lower percentage of procedures performed within recommended time frames and the higher median and 90th percentile waiting times (Figure 20).

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 19 Elective surgical procedures performed, by urgency category, October to December 2020

		This quarter	Same quarter previous year	Change since one year ago
Total number of elective surgical procedures performed in public hospitals				
Urgent	 22.8%	14,150	13,190	7.3%
Semi-urgent	 31.9%	19,806	18,444	7.4%
Non-urgent	 41.4%	25,723	23,318	10.3%
Staged*	 4.0%	2,472	2,792	-11.5%
Total number of elective surgery procedures performed in private hospitals				
		4,551	74	6050.0%

* Staged surgery, for medical reasons, cannot take place before a certain amount of time has elapsed (includes all non-urgent cystoscopy patients).

Note: 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.

Elective surgery waiting time by urgency category

Timeliness of elective surgery is measured by median and 90th percentile waiting times, and the percentage of procedures performed within clinically recommended time frames.

The recommended waiting times for elective surgery are up to: 30 days for urgent, 90 days for semi-urgent, and 365 days for non-urgent procedures. At 82.4%, the percentage of procedures performed within recommended time frames was down 13.3 percentage points compared with the same quarter the previous year. The non-urgent category saw the biggest decrease (24.8 percentage points) in the percentage of procedures performed on time (Figure 20).

Compared with the same quarter the previous year, median waiting times in October to December 2020 were 12 days for urgent (up one day), 51 days for semi-urgent (up five days) and 320 days for non-urgent procedures (up 83 days) (Figure 20).

For more information on elective surgery activity and performance, see *Healthcare in Focus – New South Wales and the COVID-19 pandemic in 2020* at bhi.nsw.gov.au

Figure 20 Percentage of elective surgical procedures performed on time and waiting times, by urgency category, October to December 2020

	This quarter	Same quarter previous year	Percentage point change since one year ago
All procedures	82.4%	95.7%	-13.3
Urgent	99.8%	99.9%	-0.1
Semi-urgent	88.3%	96.0%	-7.7
Non-urgent	68.3%	93.1%	-24.8

	This quarter	Same quarter previous year	Change since one year ago
Urgent: 14,150 patients			
Median time to receive surgery	12 days	11 days	1 day
90th percentile time to receive surgery	26 days	26 days	0 days
Semi-urgent: 19,806 patients			
Median time to receive surgery	51 days	46 days	5 days
90th percentile time to receive surgery	95 days	84 days	11 days
Non-urgent: 25,723 patients			
Median time to receive surgery	320 days	237 days	83 days
90th percentile time to receive surgery	435 days	361 days	74 days

Note: 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.

Percentage of elective surgery on time

The hospital-level results for this quarter are presented on two axes: the percentage of elective surgical procedures performed on time (y-axis) and the percentage point change since the same quarter the previous year (x-axis). For hospitals shown above the blue NSW line, a higher percentage of procedures were performed on time this quarter compared with the overall NSW result. Hospitals are named if they had a more than 20 percentage point change in performance (Figure 21).

The pattern in Figure 21 reflects the effect of the suspension of non-urgent surgery on the variation between hospitals in the percentage of procedures performed on time.

Compared with the same quarter the previous year, the percentage of procedures performed on time

was lower this quarter in 63 out of the 77 large public hospitals reported on individually in *Healthcare Quarterly* (Figure 21).

In October to December 2020, the percentage of elective surgical procedures performed on time for different specialities ranged from 66.6% for ear, nose and throat surgery to 97.3% for cardiothoracic surgery (Figure 22).

The percentage of elective surgical procedures performed on time for common procedures ranged from 48.8% for septoplasty to 97.0% for coronary artery bypass graft. The percentage of procedures performed on time was down for 16 of the 17 common procedures, with a more than 10 percentage point decrease in 12 common procedures, compared with the same quarter the previous year (Figure 23).

Figure 21 Percentage of elective surgical procedures performed on time and percentage point change since the same quarter the previous year, hospitals by peer group, October to December 2020

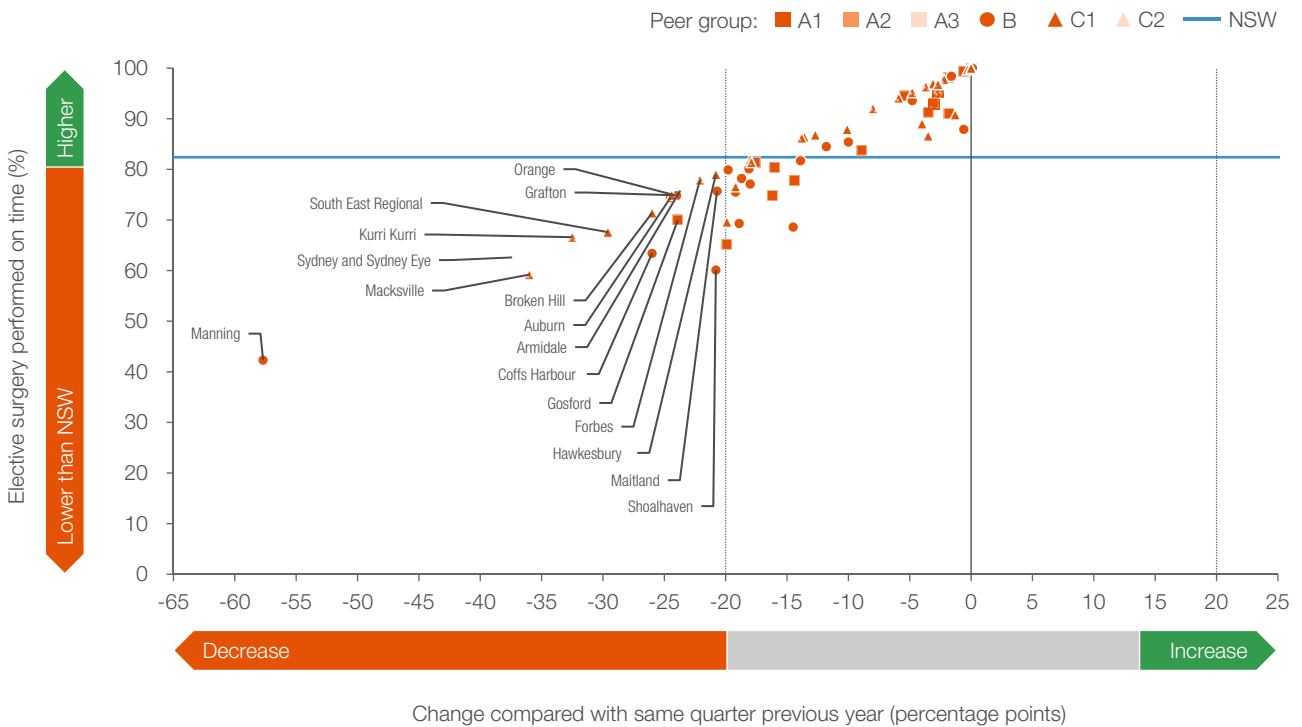


Figure 22 Percentage of elective surgical procedures performed on time, by specialty, October to December 2020

	Number of procedures	Percentage on time	Same quarter previous year	Percentage point change since one year ago
Cardiothoracic surgery	925	97.3%	97.1%	0.2
Medical	464	95.1%	98.5%	-3.4
Vascular surgery	1,759	93.2%	98.4%	-5.2
Plastic surgery	2,595	91.1%	95.6%	-4.5
Urology	8,412	89.6%	97.0%	-7.4
Gynaecology	8,091	89.0%	97.5%	-8.5
General surgery	14,122	87.7%	96.6%	-8.9
Neurosurgery	1,199	86.7%	97.1%	-10.4
Orthopaedic surgery	9,785	74.0%	93.9%	-19.9
Ophthalmology	10,073	73.6%	96.0%	-22.4
Ear, nose and throat surgery	4,726	66.6%	89.2%	-22.6

Note: 'Medical' refers to surgery performed by a non-specialist medical practitioner.

Figure 23 Percentage of elective surgical procedures performed on time, by common procedure, October to December 2020

	Number of procedures	Percentage on time	Same quarter previous year	Percentage point change since one year ago
Coronary artery bypass graft	209	97.0%	96.1%	0.9
Hysteroscopy	2,928	92.4%	97.8%	-5.4
Other – General	1,641	92.3%	97.3%	-5.0
Cystoscopy	3,403	92.0%	96.9%	-4.9
Cholecystectomy	1,662	86.1%	94.7%	-8.6
Varicose veins stripping and ligation	331	82.1%	96.5%	-14.4
Haemorrhoidectomy	317	80.7%	95.7%	-15.0
Inguinal herniorrhaphy	1,519	80.7%	94.9%	-14.2
Abdominal hysterectomy	706	79.4%	94.3%	-14.9
Myringotomy	31	77.4%	98.2%	-20.8
Prostatectomy	618	76.2%	93.8%	-17.6
Cataract extraction	8,287	71.0%	95.7%	-24.7
Total hip replacement	1,211	65.6%	89.3%	-23.7
Tonsillectomy	1,442	57.7%	88.6%	-30.9
Myringoplasty/Tympanoplasty	143	56.3%	69.4%	-13.1
Total knee replacement	2,022	55.3%	88.8%	-33.5
Septoplasty	565	48.8%	81.3%	-32.5

Note: 'Other – General' refers to general surgery procedures recorded as 'Other' in the Waiting List Collection Online System (WLCOS).

Elective surgery waiting time by specialty and procedure

The median waiting time refers to the number of days it took for half of all patients to be admitted to hospital and undergo surgery. The other half waited the same amount of time or longer.

Following the suspension of all non-urgent elective surgery in response to the COVID-19 pandemic, and its subsequent resumption, median waiting times for many specialties and procedures were longer in October to December 2020, compared with the same quarter the previous year (Figures 24, 25).

In October to December 2020, the median waiting time was up for eight specialties, by between two and 106 days, compared with the same quarter the previous year. This was most notable for ear, nose and throat surgery, up 106 days (Figure 24).

The median waiting time for common procedures ranged from 24 days for coronary artery bypass graft to 366 days for septoplasty. Out of 17 common procedures, the median waiting time was up for 15 procedures, and down for one (Figure 25).

The median waiting time was up by more than 50 days for four procedures: varicose veins stripping and ligation (up 108 days), total hip replacement (up 94 days), tonsillectomy (up 73 days), and total knee replacement (up 70 days) (Figure 25).

Figure 24 Median waiting time for patients who received elective surgery, by specialty, October to December 2020

	Number of procedures	This quarter	Same quarter previous year	Change since one year ago
Ophthalmology	10,073	289 days	236 days	53 days
Ear, nose and throat surgery	4,726	287 days	181 days	106 days
Orthopaedic surgery	9,785	168 days	98 days	70 days
Gynaecology	8,091	46 days	42 days	4 days
General surgery	14,122	44 days	41 days	3 days
Neurosurgery	1,199	41 days	39 days	2 days
Urology	8,412	34 days	32 days	2 days
Plastic surgery	2,595	26 days	28 days	-2 days
Cardiothoracic surgery	925	20 days	20 days	unchanged
Vascular surgery	1,759	20 days	20 days	unchanged
Medical	464	17 days	14 days	3 days

Note: 'Medical' refers to surgery performed by a non-specialist medical practitioner.

Figure 25 Median waiting time for patients who received elective surgery, by common procedure, October to December 2020

	Number of procedures	This quarter	Same quarter previous year	Change since one year ago
Septoplasty	565	366 days	326 days	40 days
Myringoplasty/Tympanoplasty	143	352 days	331 days	21 days
Total knee replacement	2,022	351 days	281 days	70 days
Tonsillectomy	1,442	347 days	274 days	73 days
Cataract extraction	8,287	307 days	272 days	35 days
Total hip replacement	1,211	287 days	193 days	94 days
Varicose veins stripping and ligation	331	277 days	169 days	108 days
Inguinal herniorrhaphy	1,519	90 days	77 days	13 days
Abdominal hysterectomy	706	77 days	71 days	6 days
Haemorrhoidectomy	317	75 days	71 days	4 days
Prostatectomy	618	74 days	65 days	9 days
Myringotomy	31	68 days	81 days	-13 days
Cholecystectomy	1,662	60 days	56 days	4 days
Hysteroscopy	2,928	41 days	41 days	unchanged
Cystoscopy	3,403	29 days	28 days	1 day
Other – General	1,641	27 days	24 days	3 days
Coronary artery bypass graft	209	24 days	23 days	1 day

Note: 'Other – General' refers to general surgery procedures recorded as 'Other' in WLCOS.

End of quarter elective surgery waiting list

Understanding access to, and the provision of, elective surgery can be aided by measuring shifts over time in the size of the waiting list and composition of patients on it.





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. In this case, it is the number of patients who were ready for surgery on the last day of the quarter.

In October to December 2020, 63,996 patients were added to the elective surgery waiting list, which was stable (down 0.1%) compared with the same quarter the previous year. The number of patients added to the waiting list for non-urgent procedures was down by 5.7% (1,590) (Figure 26).

At the end of the October to December quarter, there were 90,177 patients on the elective surgery waiting list, up 2.4% (2,133) compared with the same time in 2019. The number of patients on the waiting list was up for urgent and semi-urgent procedures by 19.9% (186) and 18.4% (2,314) respectively, compared with the same quarter the previous year. The number of patients on the waiting list for non-urgent procedures was down by 0.5% (367) (Figure 27).

Among those patients waiting for semi-urgent elective surgery, the specialties with most patients waiting were general surgery (4,531) and urology (3,378), up 28.1% and 20.6% respectively, compared with the same time the previous year (Figure 28). Most of those patients waiting for general surgery and urology were waiting for cholecystectomy (888) and cystoscopy procedures (1,373). There were also 1,082 women waiting for a hysteroscopy procedure (Figure 29).




Figure 26 Patients added to the elective surgery waiting list, by urgency category, October to December 2020

		This quarter	Same quarter previous year	Change since one year ago
Patients added to the elective surgery waiting list		63,996	64,085	-0.1%
Urgent	 21.2%	13,586	12,684	7.1%
Semi-urgent	 32.3%	20,702	19,639	5.4%
Non-urgent	 41.2%	26,386	27,976	-5.7%
Staged*	 5.2%	3,322	3,786	-12.3%

* Staged surgery, for medical reasons, cannot take place before a certain amount of time has elapsed (includes all non-urgent cystoscopy patients).

Note: 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 27 Patients on the elective surgery waiting list, by urgency category, as at 31 December 2020

		This quarter	Same quarter previous year	Change since one year ago
Patients ready for surgery on waiting list as at 31 December 2020		90,177	88,044	2.4%
Urgent	 1.2%	1,123	937	19.9%
Semi-urgent	 16.5%	14,884	12,570	18.4%
Non-urgent	 82.2%	74,170	74,537	-0.5%
Patients not ready for surgery on waiting list at the end of quarter		17,599	16,581	6.1%

Note: 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

Patients on elective surgery waiting list for **semi-urgent surgery** at end of quarter, by specialty, as at 31 December 2020

	Patients on waiting list at end of quarter		
	This quarter	Same quarter previous year	Change since one year ago
All specialties	14,884	12,570	18.4%
General surgery	4,531	3,538	28.1%
Urology	3,378	2,802	20.6%
Gynaecology	2,457	1,928	27.4%
Orthopaedic surgery	1,264	1,041	21.4%
Ophthalmology	906	1,011	-10.4%
Ear, nose and throat surgery	725	688	5.4%
Plastic surgery	637	581	9.6%
Vascular surgery	358	308	16.2%
Neurosurgery	312	277	12.6%
Cardiothoracic surgery	216	305	-29.2%
Medical	100	91	9.9%

Note: 'Medical' refers to surgery performed by a non-specialist medical practitioner.

Figure 29

Patients on elective surgery waiting list for **semi-urgent surgery** at end of quarter, by common procedure, as at 31 December 2020

Procedure	Patients on waiting list at end of quarter		
	This quarter	Same quarter previous year	Change since one year ago
Cystoscopy	1,373	1,189	15.5%
Hysteroscopy	1,082	823	31.5%
Cholecystectomy	888	622	42.8%
Cataract extraction	550	633	-13.1%
Inguinal herniorrhaphy	493	363	35.8%
Other – General	397	363	9.4%
Prostatectomy	395	293	34.8%
Abdominal hysterectomy	193	142	35.9%
Total hip replacement	185	109	69.7%
Haemorrhoidectomy	175	134	30.6%
Tonsillectomy	146	134	9.0%
Total knee replacement	126	105	20.0%
Coronary artery bypass graft	51	86	-40.7%
Varicose veins stripping and ligation	28	18	55.6%
Septoplasty	25	18	38.9%
Myringoplasty/Tympanoplasty	13	16	-18.8%
Myringotomy	11	11	0.0%

Note: 'Other – General' refers to general surgery procedures recorded as 'Other' in WLCOS.

End of quarter elective surgery waiting list

The majority of patients (82.2%) on the elective surgery waiting list were waiting for non-urgent surgery. At the end of the October to December 2020 quarter, there were 74,170 patients on the waiting list waiting for non-urgent elective surgery.

Among those patients waiting for non-urgent elective surgery, the specialties with most patients waiting were orthopaedic surgery (21,801) and ophthalmology (19,694). The number of patients waiting for orthopaedic surgery was up 9.3%, compared with the same time in 2019. The number of patients waiting for ophthalmology was down 8.4% (Figure 30).

Most of those patients waiting for orthopaedic surgery and ophthalmology were waiting for total knee replacement (7,091), total hip replacement (3,132) and cataract extraction (17,742) procedures (Figure 31).

The largest proportionate growth in the waiting list for non-urgent surgery among specialties was for vascular surgery, up 10.8% compared with the same time the previous year. Among those waiting for vascular surgery, most were waiting for a varicose veins stripping and ligation procedure (778), up 17.0% (Figure 31).

Figure 30 Patients on elective surgery waiting list for **non-urgent surgery** at end of quarter, by specialty, as at 31 December 2020

	Patients on waiting list at end of quarter		
	This quarter	Same quarter previous year	Change since one year ago
All specialties	74,170	74,537	-0.5%
Orthopaedic surgery	21,801	19,948	9.3%
Ophthalmology	19,694	21,497	-8.4%
General surgery	11,093	10,970	1.1%
Ear, nose and throat surgery	9,685	10,576	-8.4%
Gynaecology	5,937	5,594	6.1%
Urology	1,858	1,902	-2.3%
Plastic surgery	1,727	1,698	1.7%
Neurosurgery	1,355	1,337	1.3%
Vascular surgery	880	794	10.8%
Medical	74	120	-38.3%
Cardiothoracic surgery	66	101	-34.7%

Note: 'Medical' refers to surgery performed by a non-specialist medical practitioner.

Figure 31 Patients on elective surgery waiting list for **non-urgent surgery** at end of quarter, by common procedure, as at 31 December 2020

Procedure	Patients on waiting list at end of quarter		
	This quarter	Same quarter previous year	Change since one year ago
Cataract extraction	17,742	19,104	-7.1%
Total knee replacement	7,091	6,526	8.7%
Tonsillectomy	3,585	4,093	-12.4%
Total hip replacement	3,132	2,879	8.8%
Inguinal herniorrhaphy	2,221	2,245	-1.1%
Septoplasty	1,771	1,612	9.9%
Hysteroscopy	1,172	1,145	2.4%
Cholecystectomy	1,171	1,115	5.0%
Abdominal hysterectomy	993	874	13.6%
Other – General	927	965	-3.9%
Varicose veins stripping and ligation	778	665	17.0%
Prostatectomy	462	535	-13.6%
Myringoplasty/Tympanoplasty	374	397	-5.8%
Haemorrhoidectomy	323	376	-14.1%
Myringotomy	46	64	-28.1%
Coronary artery bypass graft	13	22	-40.9%

Note: 'Other – General' refers to general surgery procedures recorded as 'Other' in WLCOS. Non-urgent cystoscopy is reported in staged procedures.

Patients on elective surgery waiting list who had waited longer than clinically recommended time

For patients categorised as semi-urgent, the clinically recommended maximum waiting time is 90 days. For patients categorised as non-urgent, the clinically recommended maximum waiting time is 365 days.

At the end of October to December 2020, there were 5,950 patients on the waiting list who had waited longer than the clinically recommended time, up from 1,144 at the same time in 2019. Of those, 1,372 were waiting for semi-urgent and 4,576 were waiting for non-urgent procedures (Figure 32).

Among those patients waiting for semi-urgent elective surgery, and who had waited longer than 90 days, the specialties with most patients waiting were general surgery (518) and urology (332) (Figure 33).

Most of those patients waiting for general surgery and urology, and who had waited longer than 90 days, were waiting for cholecystectomy (151) and cystoscopy (117) procedures (Figure 34).

Figure 32 Patients on elective surgery waiting list who had waited longer than clinically recommended time, by urgency category, as at 31 December 2020

	This quarter	Same quarter previous year	Change since one year ago
Patients on waiting list who had waited longer than clinically recommended time	5,950	1,144	4,806
Urgent	<5	<5	*
Semi-urgent	1,372	368	1,004
Non-urgent	4,576	773	3,803

Note: * Values suppressed due to small numbers, to protect patient privacy. 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 33

Patients on elective surgery waiting list for **semi-urgent surgery** at end of quarter, who had waited longer than clinically recommended time, by speciality, as at 31 December 2020

	Patients on waiting list who had waited longer than clinically recommended time		
	This quarter	Same quarter previous year	Change since one year ago
All specialities	1,372	368	1,004
General surgery	518	75	443
Urology	332	131	201
Gynaecology	190	51	139
Orthopaedic surgery	119	23	96
Plastic surgery	78	22	56
Ear, nose and throat surgery	54	16	38
Vascular surgery	44	5	39
Neurosurgery	20	5	15
Ophthalmology	10	<5	*
Cardiothoracic surgery	6	33	-27
Medical	<5	<5	*

* Values suppressed due to small numbers, to protect patient privacy.

Note: 'Medical' refers to surgery performed by a non-specialist medical practitioner.

Figure 34

Patients on elective surgery waiting list for **semi-urgent surgery** at end of quarter, who had waited longer than clinically recommended time, by common procedure, as at 31 December 2020

Procedure	Patients on waiting list who had waited longer than clinically recommended time		
	This quarter	Same quarter previous year	Change since one year ago
Cholecystectomy	151	16	135
Cystoscopy	117	67	50
Prostatectomy	76	11	65
Inguinal herniorrhaphy	56	<5	*
Hysteroscopy	54	17	37
Abdominal hysterectomy	36	9	27
Total hip replacement	26	<5	*
Haemorrhoidectomy	25	<5	*
Other – General	23	8	15
Total knee replacement	16	<5	*
Tonsillectomy	9	<5	*
Cataract extraction	7	0	7
Septoplasty	6	0	6
Coronary artery bypass graft	<5	13	*
Myringoplasty/Tympanoplasty	<5	0	*
Varicose veins stripping and ligation	<5	0	*
Myringotomy	0	0	0

* Values suppressed due to small numbers, to protect patient privacy.

Note: 'Other – General' refers to general surgery procedures recorded as 'Other' in WLCOS.

Patients on elective surgery waiting list who had waited longer than clinically recommended time

The majority of patients (76.9%) on the elective surgery waiting list who had waited longer than the clinically recommended time were waiting for non-urgent surgery. At the end of the October to December 2020 quarter, there were 4,576 patients on the waiting list waiting for non-urgent elective surgery who had waited longer than 365 days, compared with 773 in 2019.

Among those patients waiting for non-urgent elective surgery, who had waited longer than 365 days, the specialties with most patients waiting were orthopaedic surgery (1,801) and ear, nose and throat surgery (829) (Figure 35).

Most of those patients waiting for orthopaedic surgery and ear, nose and throat surgery, who had waited longer than 365 days, were waiting for total knee replacement (815), total hip replacement (298) and tonsillectomy (299) procedures. There were also 625 patients who had waited longer than 365 days for cataract extraction surgery (Figure 36).

Figure 35 Patients on elective surgery waiting list for **non-urgent surgery** at end of quarter, who had waited longer than clinically recommended time, by specialty, as at 31 December 2020

	Patients on waiting list who had waited longer than clinically recommended time		
	This quarter	Same quarter previous year	Change since one year ago
All specialties	4,576	773	3,803
Orthopaedic surgery	1,801	292	1,509
Ear, nose and throat surgery	829	220	609
Ophthalmology	679	75	604
General surgery	539	105	434
Gynaecology	407	31	376
Urology	127	26	101
Neurosurgery	83	7	76
Plastic surgery	61	5	56
Vascular surgery	48	8	40
Medical	<5	<5	*
Cardiothoracic surgery	0	<5	*

* Values suppressed due to small numbers, to protect patient privacy.
Note: 'Medical' refers to surgery performed by a non-specialist medical practitioner.

Figure 36 Patients on elective surgery waiting list for **non-urgent surgery** at end of quarter, who had waited longer than clinically recommended time, by common procedure, as at 31 December 2020

Procedure	Patients on waiting list who had waited longer than clinically recommended time		
	This quarter	Same quarter previous year	Change since one year ago
Total knee replacement	815	101	714
Cataract extraction	625	56	569
Tonsillectomy	299	47	252
Total hip replacement	298	43	255
Septoplasty	177	52	125
Inguinal herniorrhaphy	151	26	125
Abdominal hysterectomy	108	<5	*
Prostatectomy	47	7	40
Cholecystectomy	40	<5	*
Varicose veins stripping and ligation	37	<5	*
Hysteroscopy	34	8	26
Myringoplasty/Tympanoplasty	32	11	21
Other – General	28	9	19
Haemorrhoidectomy	17	8	9
Myringotomy	5	<5	*

* Values suppressed due to small numbers, to protect patient privacy.

Note: 'Other – General' refers to general surgery procedures recorded as 'Other' in WLCOS. Non-urgent cystoscopy is reported in staged procedures.

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