bureau of health information

Hospital Quarterly

Activity and performance

in NSW public hospitals

January to March 2016

BUREAU OF HEALTH INFORMATION
Level 11, Sage Building, 67 Albert Avenue
Chatswood NSW 2067
Australia
Telephone: +61 2 9464 4444
bhi.nsw.gov.au

State Health Publication Number: (BHI) 160192
ISSN: 1838-3238

Suggested citation:
Bureau of Health Information. *Hospital Quarterly — Activity and performance in NSW public hospitals, January to March 2016* Sydney (NSW); BHI; 2016.

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.

Published June 2016

Hospital Quarterly reports present data at the point in time when data become available to BHI. Changes in data coverage and analytic methods from quarter to quarter mean that figures published in this document are superseded by subsequent reports. At any time, the most up-to-date data are available on BHI's online data portal, Healthcare Observer, at **bhi.nsw.gov.au/healthcare_observer**

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.

Contents

Introduction

Every day around 25,000 people receive care in the NSW public hospital system. *Hospital Quarterly* is a series of regular reports that tracks services provided to the people of NSW and the timeliness with which they are provided.

The *Hospital Quarterly* report is structured into two main sections. The first section describes measures of hospital activity and the second describes measures of hospital performance. Activity measures are used to describe the volume and type of services provided, while performance measures are used to describe the timeliness of service provision.

Within the section on activity, data are provided for emergency department (ED) presentations; hospital admissions; and elective surgery procedures (Figure i). Within the section on performance, data are provided for ED presentations and elective surgical procedures (Figure ii).

Hospital Quarterly appendix tables provide information about activity and performance in NSW public hospitals at a state, local health district (LHD), peer group and individual hospital level. Additional and comparative information about activity and performance in NSW public hospitals is available on the BHI interactive online portal, Healthcare Observer, at bhi.nsw.gov.au/healthcare_observer

About the data

The data used in *Hospital Quarterly* are transmitted by the state's hospitals to centralised data warehouses administered by the NSW Ministry of Health. Hospital admission and ED data in this report were extracted from the NSW Health Information Exchange (HIE) on 18 and 22 April 2016. Elective surgery data were extracted from the Waiting List Collection On-line System (WLCOS) on 15 April 2016.

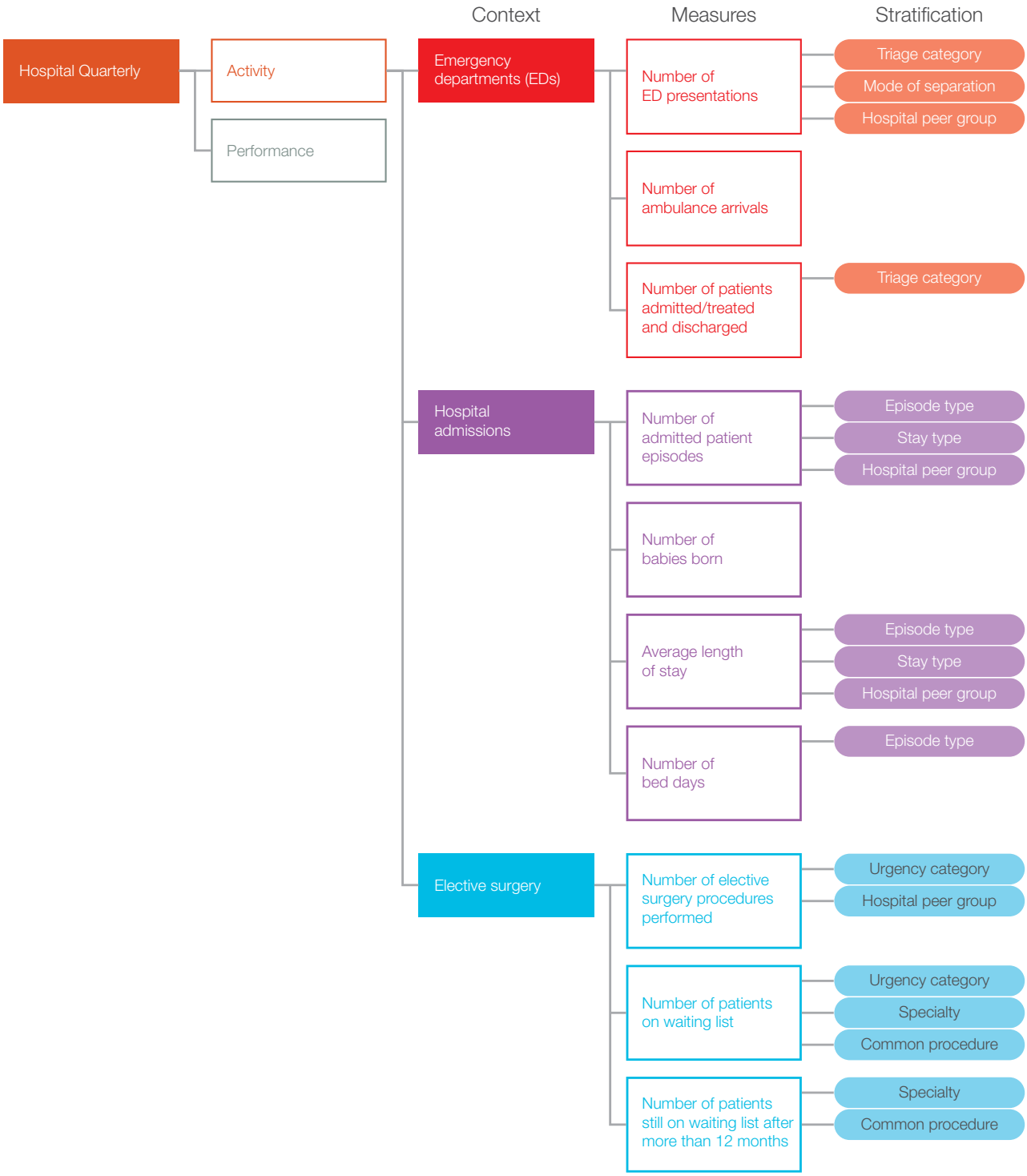
ED data are drawn from the Emergency Department Data Collection (EDDC). While not all EDs have systems in place to supply records to the EDDC, data coverage has increased over time. The ED data in this report cover 131 facilities for which consistent data have been reported to the EDDC for at least five quarters. These account for approximately 98% of all records in the EDDC and approximately 95% of ED presentations in NSW.

Hospital Quarterly reports on the percentage of patients who spent four hours or less in the ED. Due to differences in data definitions, period of reporting and the number of hospitals included, results are not directly comparable to figures reported by the NSW Ministry of Health or the Commonwealth, in relation to time spent in the ED. For more information refer to the technical supplements section of the BHI website at **bhi.nsw.gov.au**

Hospital admission data includes hospitalisations in public hospitals, privately managed hospitals contracted to supply services for public patients, public multi-purpose services, and public psychiatric hospitals. Non-admitted patients (including community residential care), organ donors (posthumously admitted), and hospital boarders are not included in these data. Newborn babies who are aged nine days or less at the time of admission and who do not require treatment for health problems are also not included in these data.

Elective surgery data include procedures performed during the quarter, and patients on the waiting list to receive surgery at the end of the quarter.

Figure i **Hospital activity measures included in this report**



About the measures

Hospital Quarterly uses a number of measures to report activity and performance in NSW public hospitals (Figures i and ii). Where the focus is on measuring activity, numbers and percentages are commonly used. Where the focus is on measuring performance in terms of timeliness of care (for example, waiting times for treatment in the ED or for elective surgery), the median and 90th or 95th percentile times are used. Timeliness is also reported using the percentage of patients who received care within a defined time period (for example, the percentage of patients who arrived by ambulance that had their care transferred within 30 minutes, the percentage of patients who spent four hours or less in the ED, and the percentage of elective surgery performed within clinically recommended timeframes.

About the analyses

The data specifications and analytic methods used for *Hospital Quarterly* are described in the technical supplements section of the BHI website at **bhi.nsw.gov.au**

Hospital Quarterly includes a number of commonly used terms and classifications to describe activity and performance across EDs, hospital admissions and elective surgery. These are described in Table 4 (page 55).

Making direct comparisons of activity and performance between hospitals is not straightforward. For valid comparisons to be made it is important to consider similar hospitals together. To do this, *Hospital Quarterly* uses a NSW Health classification system called 'hospital peer groups' as the basis for comparison (Table 1). An index of NSW public hospitals by LHD and hospital peer group can be found on page 59 of this report.

Urgency categories should also be considered in making fair comparisons in activity and performance across EDs and for elective surgery. See Table 4 (page 55) for a description of ED triage categories and elective surgery urgency categories.

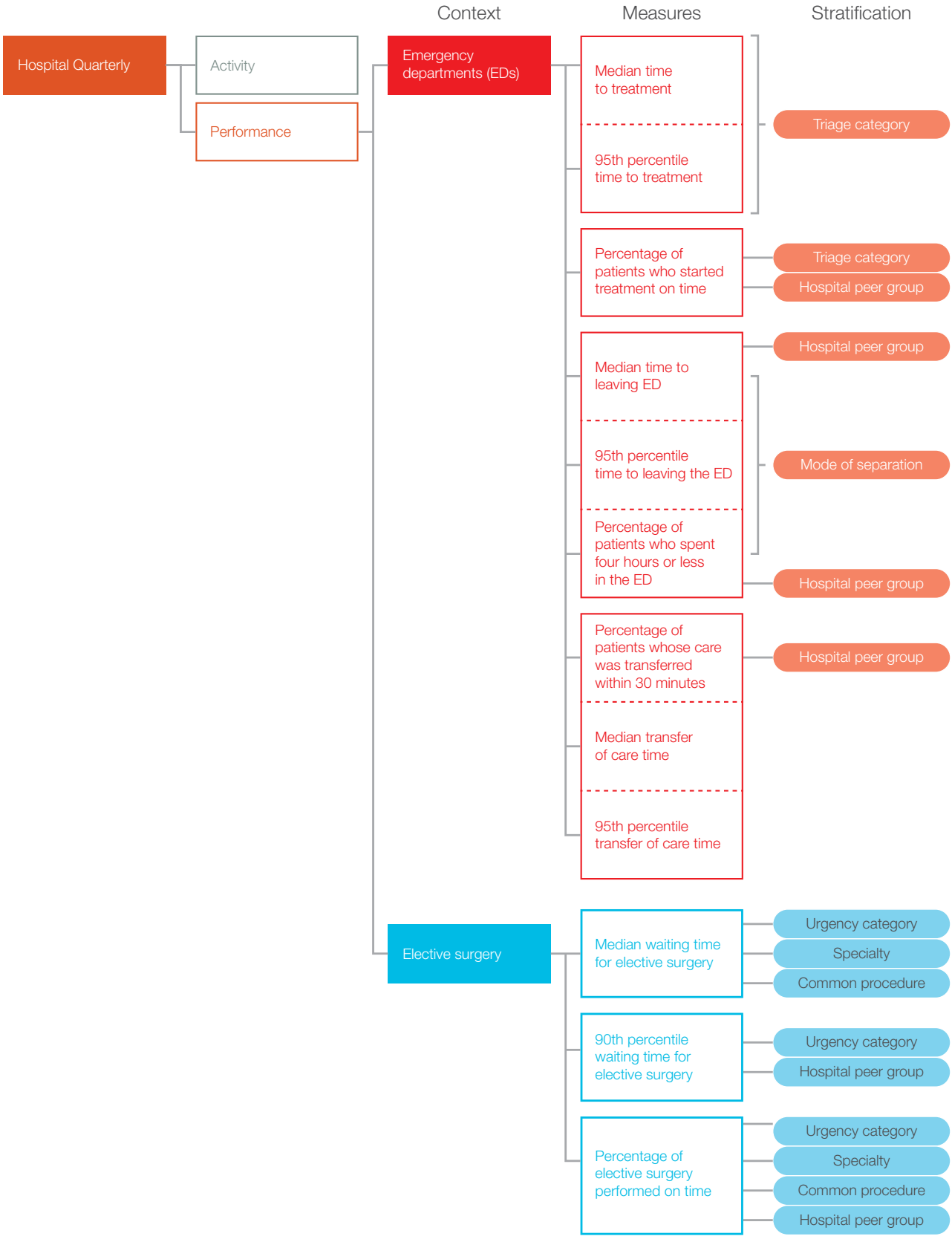
Hospital Quarterly compares this quarter's results with the same quarter in previous years, to take into account seasonal effects on hospital activity and performance.

Percentages in this report are rounded and therefore may not sum to 100%. Percentages greater than 99.5% are rounded to 100%.

Table 1 **NSW public hospital peer groups**

Peer group	Name	Description
A1	Principal referral	Very large hospitals providing a broad range of services, including specialised units at a state or national level.
A2	Paediatric specialist	Specialist hospitals for children and young people.
A3	Ungrouped acute – tertiary referral	Major specialist hospitals that are not similar enough to any other peer group to be classified with them.
B	Major	Large metropolitan and non-metropolitan hospitals.
C1	District group 1	Medium sized hospitals treating between 5,000–10,000 patients each year.
C2	District group 2	Smaller hospitals typically in rural locations.

Figure ii **Hospital performance measures included in this report**



Key findings

Hospital activity measures – January to March 2016

How many people presented to NSW emergency departments?

Compared with the same quarter last year:

- 26,941 more patients presented to NSW emergency departments (EDs) (672,483 presentations in total; up 4%). Most (96%) were unplanned (emergency presentations).
- 333 more patients were assigned to triage category 1 (up 9%), 4,364 more to triage category 2 (up 6%), 15,160 more to triage category 3 (up 8%), 6,940 more to triage category 4 (up 3%) and 469 fewer to triage category 5 (down less than 1%)
- 781 fewer patients arrived by ambulance (142,922 patients in total; down less than 1%).

Where did patients go after leaving the emergency department?

Compared with the same quarter last year:

- 13,573 more patients were treated and discharged (427,226 in total; up 3%)
- 8,936 more patients were treated and admitted to hospital (183,211 in total; up 5%)
- 2,536 more patients left without, or before completing, treatment (36,555 in total; up 7%)
- 787 more patients were transferred to another hospital (13,638 in total; up 6%).

How many patients were admitted to public hospitals?

Compared with the same quarter last year:

- 14,114 more admitted patient episodes were recorded (458,927 in total; up 3%). Most (96%) were acute care episodes
- 9,709 fewer bed days were recorded (1,595,636 in total; down 1%), and 24,023 more acute bed days (1,337,867 in total; up 2%)
- The average length of stay for an acute overnight admitted patient episode was 4.8 days
- Among women admitted to NSW public hospitals, 582 more babies were born (18,212 babies in total; up 3%).

How many elective surgical procedures were performed?

Compared with the same quarter last year:

- 691 fewer elective surgical procedures were performed (49,153 procedures in total; down 1%). This included:
  - 414 fewer procedures categorised as urgent (10,300 in total; down 4%)
  - 248 more procedures categorised as semi-urgent (15,444 in total; up 2%)
  - 127 more procedures categorised as non-urgent (20,782 in total; up 1%)
  - 652 fewer procedures procedures categorised as staged (2,627 in total; down 20%).

How many patients were on the waiting list for elective surgery?

Compared with the same quarter last year:

- 1,474 more people were ready for surgery and on the elective surgery waiting list at the end of the quarter (74,351 in total; up 2%). Of these:
  - 1,759 people (2%) were waiting for urgent surgery
  - 11,323 (15%) were waiting for semi-urgent surgery
  - 61,269 (82%) were waiting for non-urgent surgery.
- At the end of the quarter, more people were still waiting for urgent and non-urgent surgery (up 1% and 3% respectively) and fewer people were waiting for semi-urgent surgery (down 2%) compared with the same quarter last year.

Table 2 provides a summary of NSW public hospital activity measures for January to March 2016.

Table 2 **Summary of NSW public hospital activity measures, January to March 2016**

Emergency department activity		January to March 2016	January to March 2015	Difference	% change
All arrivals at NSW EDs by ambulance		142,922	143,703	-781	<1%
All ED presentations		672,483	645,542	26,941	4%
Emergency presentations		645,832	619,504	26,328	4%
Emergency presentations by triage category					
Triage category	T1: Resuscitation	4,069	3,736	333	9%
	T2: Emergency	75,765	71,401	4,364	6%
	T3: Urgent	214,764	199,604	15,160	8%
	T4: Semi-urgent	280,316	273,376	6,940	3%
	T5: Non-urgent	70,918	71,387	-469	<1%
Admissions to hospital from NSW EDs		183,211	174,275	8,936	5%

Admitted patient activity		January to March 2016	January to March 2015	Difference	% change
All admitted patient episodes		458,927	444,813	14,114	3%
All acute episodes		441,974	428,102	13,872	3%
Overnight episodes		237,421	229,793	7,628	3%
Same-day episodes		204,553	198,309	6,244	3%
Non-acute episodes		16,953	16,711	242	1%
Average length of stay (days)	All acute episodes	3.0	3.1	-0.1	
	Acute overnight episodes	4.8	4.9	-0.1	
	Non-acute episodes	15.2	17.4	-2.2	
Hospital bed days	All bed days	1,595,636	1,605,345	-9,709	-1%
	Acute bed days	1,337,867	1,313,844	24,023	2%
	Non-acute bed days	257,769	291,501	-33,732	-12%
Babies born in NSW public hospitals		18,212	17,630	582	3%

Elective surgery activity		January to March 2016	January to March 2015	Difference	% change
Elective surgical procedures performed		49,153	49,844	-691	-1%
Urgency category	Urgent surgery	10,300	10,714	-414	-4%
	Semi-urgent surgery	15,444	15,196	248	2%
	Non-urgent surgery	20,782	20,655	127	1%
Patients on waiting list ready for elective surgery at end of quarter		74,351	72,877	1,474	2%
Urgency category	Urgent surgery	1,759	1,737	22	1%
	Semi-urgent surgery	11,323	11,553	-230	-2%
	Non-urgent surgery	61,269	59,587	1,682	3%

Key findings

Hospital performance measures – January to March 2016

How long did patients wait for ED treatment?

Compared with the same quarter last year:

- The percentage of patients whose care was transferred from ambulance to ED staff within 30 minutes was 91% (up four percentage points)
- The median and 95th percentile times from presentation to starting treatment were largely unchanged across all triage categories
- Overall, the percentage of patients who started treatment on time was 75% (unchanged). This included: 68% of triage category 2 patients (up one percentage point), 70% of triage category 3 patients (unchanged), 78% of triage category 4 patients (unchanged), and 93% of triage category 5 patients (unchanged)
- Across hospitals, the percentage of patients who started treatment on time increased in 38 out of 76 hospitals. For 11 hospitals, the increase was more than five percentage points. Of these, for two hospitals, the increase was more than 10 percentage points
- The percentage of patients who started treatment on time decreased in 38 of 76 hospitals. For 11 hospitals, the decrease was more than five percentage points. Of these, for two hospitals, the decrease was more than 10 percentage points.

How long were patients in the ED?

Compared with the same quarter last year:

- The median time patients spent in the ED was two minutes longer and the 95th percentile time was seven minutes longer
- There was a decrease in the percentage of patients who spent four hours or less in the ED (74%; down one percentage point)
- Across hospitals, the percentage of patients who spent four hours or less in the ED increased in 42 out of 80 hospitals. For six hospitals, the increase was more than five percentage points
- The percentage of patients who spent four hours or less in the ED decreased in 37 hospitals. For seven hospitals, the decrease was more than five percentage points.

How long did patients wait for elective surgery?

Compared with the same quarter last year:

- The median waiting time for urgent elective surgery was unchanged (10 days), while the median waiting time for semi-urgent surgery decreased by one day (to 47 days) and the median waiting time for non-urgent surgery increased by four days (to 229 days)
- The 90th percentile waiting time for urgent surgery increased by one day, while the 90th percentile waiting time for semi-urgent and non-urgent elective surgery was unchanged (84 and 356 days respectively).

Was elective surgery performed on time?

Compared with the same quarter last year:

- The percentage of elective surgery performed within recommended timeframes was 97% (down one percentage point). This included:
  - 100% of urgent surgery (unchanged)
  - 97% of semi-urgent surgery (down one percentage point)
  - 96% of non-urgent surgery (down one percentage point).
- Across hospitals, the percentage of elective surgery performed on time increased in 18 out of 81 hospitals. For three hospitals, the increase

was more than five percentage points. Of these, for one hospital, the increase was more than 10 percentage points.

- The percentage of elective surgery performed on time decreased in 31 hospitals. For five hospitals, the decrease was more than five percentage points. Of these, for one hospital, the decrease was more than 10 percentage points.
- Among specialties, ophthalmological surgery and medical (non-specialist) surgery had the highest percentage of patients who received surgery on time (both 99%). Ear, nose and throat surgery (92%), orthopaedic and cardiothoracic surgery (both 96%) had the lowest.
- Among common surgical procedures, cataract extraction and hysteroscopy (both 99%) had the highest percentage of patients who received surgical procedures on time. Myringoplasty/ tympanoplasty (83%) and septoplasty (90%) had the lowest.

Table 3 provides a summary of NSW public hospital performance measures for January to March 2016.

Table 3 **Summary of NSW public hospital performance measures, January to March 2016**

Emergency department performance			January to March 2016	January to March 2015	Difference
Percentage of patients with transfer of care within 30 minutes			91%	87%	+4 percentage points
Time to treatment by triage category	T2: Emergency	Median	8 mins	8 mins	0 mins
		95th percentile	35 mins	35 mins	0 mins
	T3: Urgent	Median	20 mins	20 mins	0 mins
		95th percentile	1h 39m	1h 38m	1 min
	T4: Semi-urgent	Median	26 mins	26 mins	0 mins
		95th percentile	2h 17m	2h 17m	0 mins
	T5: Non-urgent	Median	23 mins	24 mins	-1 min
		95th percentile	2h 15m	2h 14m	1 min
Percentage of patients whose treatment started on time	All patients		75%	75%	unchanged
	T2: Emergency		68%	67%	+1 percentage point
	T3: Urgent		70%	70%	unchanged
	T4: Semi-urgent		78%	78%	unchanged
	T5: Non-urgent		93%	93%	unchanged
Median time spent in the ED			2h 40m	2h 38m	2 mins
95th percentile time spent in the ED			9h 25m	9h 18m	7 mins
Patients who left the ED within four hours of presentation			74%	75%	-1 percentage point

Elective surgery performance			January to March 2016	January to March 2015	Difference
Waiting time (days)	Urgent	Median	10 days	10 days	unchanged
		90th percentile	26 days	25 days	1 day
	Semi-urgent	Median	47 days	48 days	-1 day
		90th percentile	84 days	84 days	unchanged
	Non-urgent	Median	229 days	225 days	4 days
		90th percentile	356 days	356 days	unchanged
Elective surgery procedures performed on time	All procedures		97%	98%	-1 percentage point
	Urgent surgery		100%	100%	unchanged
	Semi-urgent surgery		97%	98%	-1 percentage point
	Non-urgent surgery		96%	97%	-1 percentage point

Hospital activity measures

Key findings – January to March 2016

Compared with the same quarter last year...

26,941 more emergency department presentations
672,483 presentations in total
▲ 4%

14,114 more people admitted to hospital
458,927 admissions in total
▲ 3%

691 fewer elective surgical procedures performed
49,153 elective surgery procedures in total
▼ 1%

9,709 fewer bed days of care provided
1,595,636 bed days in total

▼ 1%

781 fewer patients arrived at the ED by ambulance
142,922 arrivals in total

▼ <1%

582 more babies born
18,212 babies born in total

▲ 3%

The average length of stay for all acute overnight admissions was **4.8 days**
down 0.1 days compared with the same quarter last year

NSW emergency departments

This section provides information about patients who presented to emergency departments, ambulance arrivals, how urgently patients required care (triage category) and where they went after leaving the emergency department (mode of separation).

NSW hospital admissions

This section provides information about the number and type of hospital admissions (admitted patient episodes), number of babies born, average length of stay and number of bed days provided.

NSW elective surgery

This section provides information about the number of elective surgical procedures performed, how urgently patients required surgery and the number of patients on the elective surgery waiting list.

How many people presented to NSW emergency departments?

During the January to March 2016 quarter, a total of 672,483 people presented to NSW public hospital emergency departments (EDs), an increase of 4% compared with the same quarter last year. Almost all were emergency presentations (645,832 patients or 96%) (Figure 1). The remaining 4% (26,651 patients) presented to ED for non-emergency reasons such as a planned return visit, or a planned hospital admission.

There was an increase in the number of ED presentations across all triage categories. The largest increase in volumes was in triage category 3 (15,160 more patients; up 8%) and triage category 4 (6,940 more patients; up 3%). There was a 9% increase in triage category 1 (333 more patients), a 6% increase in triage category 2 (4,364 more patients), and a decrease of less than 1% in triage category 5 (469 fewer patients) (Figure 1).

There has been a sizeable increase in the number of emergency presentations over time, from 514,512 in January to March 2011 to 645,832 this quarter, representing a 26% increase over the past five years (Figure 2).

The number of presentations increased this quarter in the majority of NSW hospital EDs (69 out of 80). Of these, 36 had an increase of more than 5%, including eight that had an increase of more than 10%. Eleven hospitals had a decrease in the number of ED presentations this quarter, including two that had a decrease of more than 10%. Hospitals identified in Figure 3 are those that had more than 5,000 ED presentations this quarter and more than a 5% change in the number of presentations compared with the same quarter last year.

This quarter, 142,922 ED patients arrived by ambulance, a decrease of less than 1% compared with the same quarter last year (Figure 1).

A small number of patients visit the ED for routine care, or as an entry point for planned admission to the hospital. The majority of ED visits however, are unplanned 'emergency' presentations.

Figure 1 **Emergency department presentations and ambulance arrivals at NSW emergency departments, January to March 2016**

	This quarter	Same quarter last year	Change since one year ago
All presentations	672,483	645,542	4%
Emergency presentations by triage category	645,832	619,504	4%
Triage 1: Resuscitation 1%	4,069	3,736	9%
Triage 2: Emergency 12%	75,765	71,401	6%
Triage 3: Urgent 33%	214,764	199,604	8%
Triage 4: Semi-urgent 43%	280,316	273,376	3%
Triage 5: Non-urgent 11%	70,918	71,387	<1%
Ambulance arrivals	142,922	143,703	<1%

Figure 2 Emergency presentations and ambulance arrivals at NSW emergency departments, January 2011 to March 2016

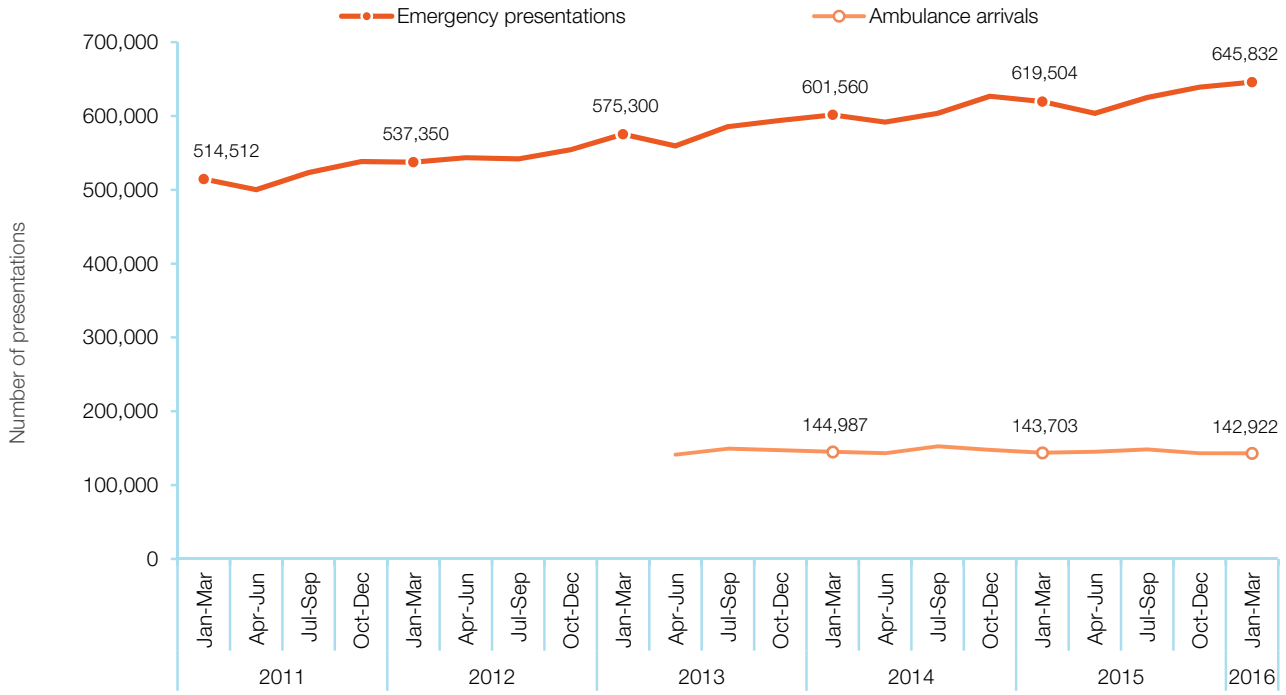
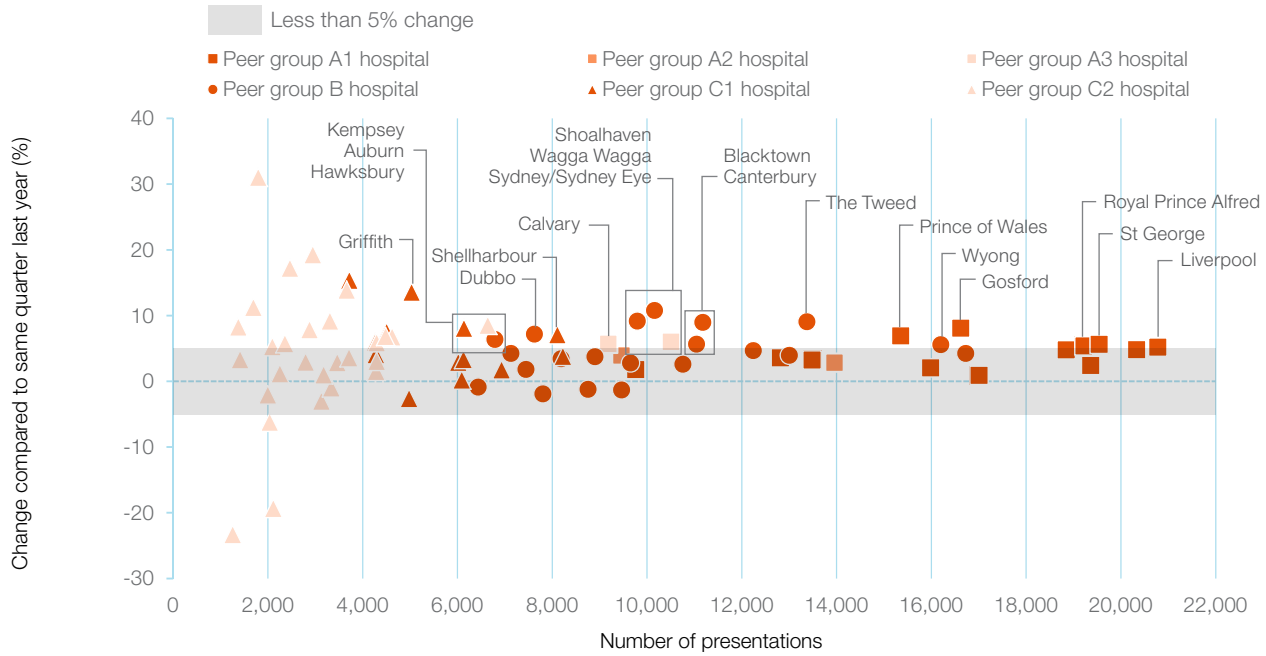


Figure 3 Change in number of emergency department presentations compared with the same quarter last year, hospitals by peer group, January to March 2016



Where did patients go after leaving the emergency department?

Following ED treatment, the majority of patients either leave or they are admitted to hospital. Some patients choose not to wait for treatment and leave, and others are transferred to a different hospital.

During the January to March 2016 quarter, 64% of patients were treated and discharged from the ED (427,226 in total; up 3% compared with the same quarter last year), and 27% of patients were treated and admitted to hospital (183,211 in total; up 5%).

The number of patients transferred to another hospital increased by 6% this quarter (13,638) and the number who left without, or before completing, treatment (36,555) increased by 7%, compared with the same quarter last year (Figure 4).

The majority of patients assigned to triage category 1 (81%), and 59% of patients assigned to triage category 2 were treated and admitted to hospital this quarter (Figure 5). The majority of patients assigned to triage categories 4 and 5 (75% and 81%, respectively), and 53% of patients assigned to triage category 3 were treated and discharged (Figure 6).

The number of patients who were treated and discharged, treated and admitted to hospital, and transferred to another hospital has increased over the past five years. The number of patients who left without, or before completing, treatment has decreased (Figure 7).

Figure 4 **Patients who left the emergency department, by mode of separation, January to March 2016**

	This quarter		Same quarter last year	Change since one year ago
Treated and discharged	64%	427,226	413,653	3%
Treated and admitted to hospital	27%	183,211	174,275	5%
Patient left without, or before completing, treatment	5%	36,555	34,019	7%
Transferred to another hospital	2%	13,638	12,851	6%
Other	2%	11,853	10,744	10%

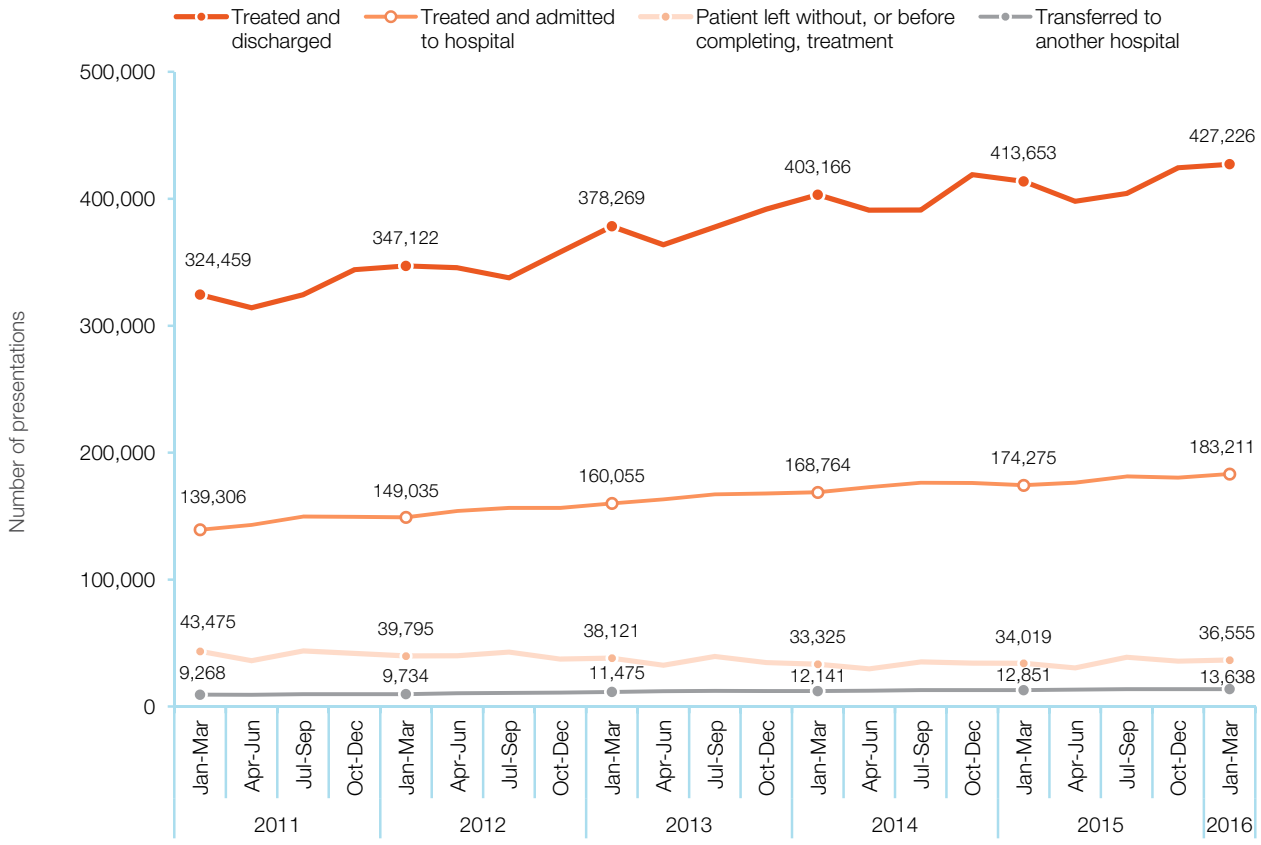
Figure 5 **Percentage of patients treated and admitted, by triage category, January to March 2016**

		Same quarter last year	Percentage point change since one year ago
All ED presentations	27%	27%	unchanged
Triage 1	81%	83%	-2
Triage 2	59%	58%	+1
Triage 3	40%	40%	unchanged
Triage 4	15%	16%	-1
Triage 5	5%	5%	unchanged

Figure 6 Percentage of patients treated and discharged, by triage category, January to March 2016

		Same quarter last year	Percentage point change since one year ago
All ED presentations	64%	64%	unchanged
Triage 1	8%	8%	unchanged
Triage 2	34%	35%	-1
Triage 3	53%	53%	unchanged
Triage 4	75%	75%	unchanged
Triage 5	81%	82%	-1

Figure 7 Patients who left the emergency department, by mode of separation, January 2011 to March 2016



How many patients were admitted to public hospitals?

During the January to March 2016 quarter, there were 458,927 admitted patient episodes; up 3% compared with the same quarter last year (Figure 8). The majority were acute admitted patient episodes (96%) and of these, 54% were for overnight care and 46% were for same-day care (Figure 9).

Hospital admissions can be planned (arranged in advance) or unplanned (emergency hospital admissions or unplanned surgical procedures). This quarter, the majority of acute same-day admitted patient episodes (72%) were planned. Similarly, the majority of acute overnight episodes (86%) were unplanned.

There has been a gradual increase over the past five years in all admitted patient episodes and all acute admitted patient episodes (Figure 8). During this time, the number of acute overnight admitted patient episodes has increased by 11% and the number of same-day episodes increased by 21% (Figure 9).

Figure 10 shows differences in the proportion of acute admissions that were same-day this quarter across hospital peer groups. Peer group C2 hospitals had a higher percentage of same-day admissions than other peer groups and also had the widest range – with 23% to 91% of all acute admissions for same-day care.

The number of babies born in NSW public hospitals (18,212) increased by 3% compared with the same quarter last year (Figure 8).

Patients can have more than one admitted episode during the same hospital admission. For example, a person may be admitted for acute care and then require an episode of rehabilitation or palliative care prior to being discharged.

Figure 8 All admitted patient episodes, acute admitted patient episodes and babies born, January 2011 to March 2016

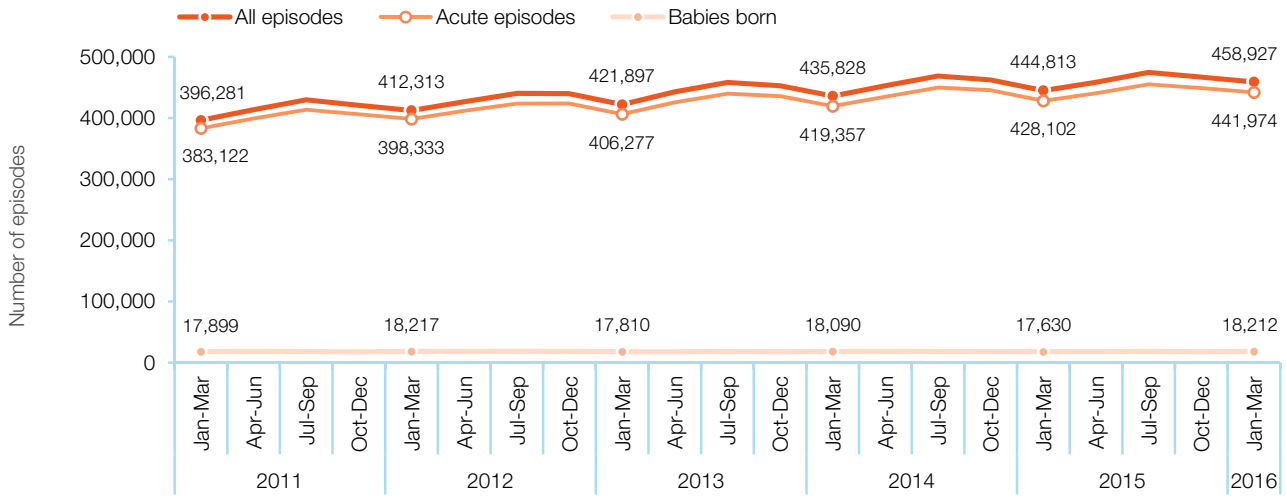


Figure 9 Overnight and same-day acute admitted patient episodes, January 2011 to March 2016

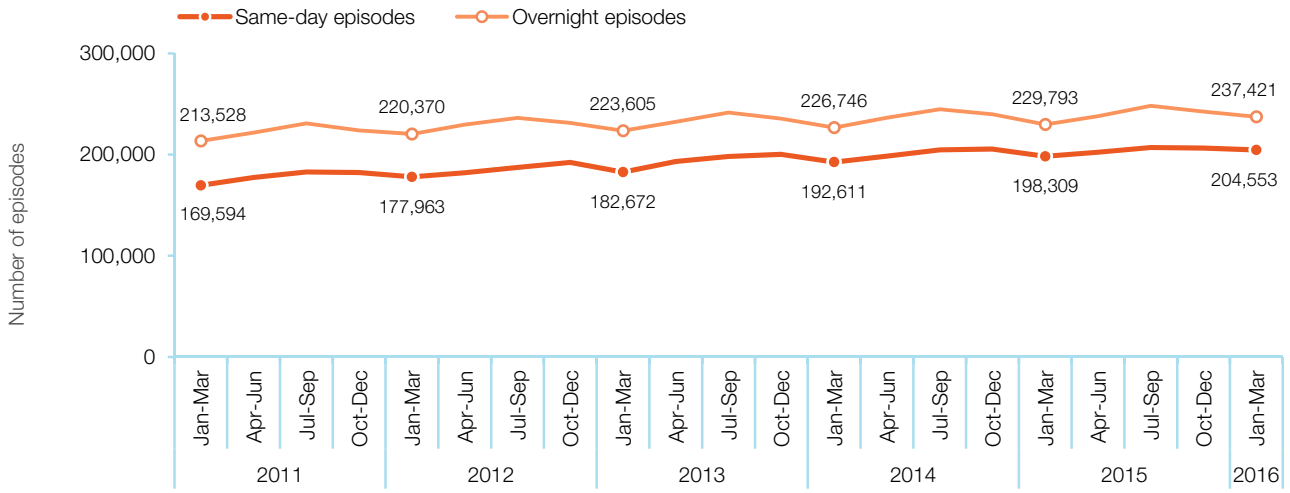
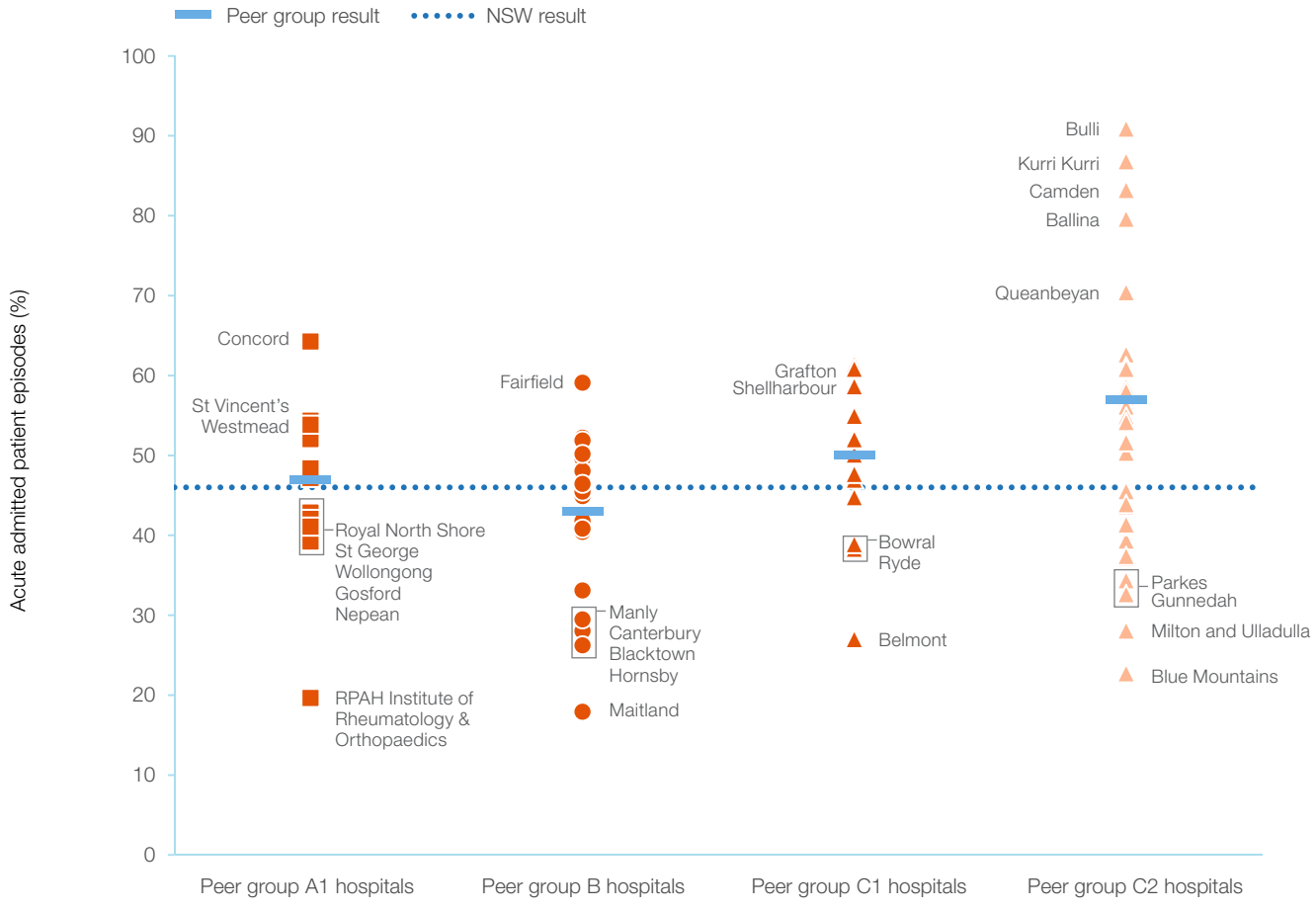


Figure 10 Same-day admitted patient episodes as percentage of all acute admitted patient episodes, by peer group, January to March 2016



Note: Same day refers to patients who are admitted and discharged on the same day. Same day episodes count as one bed day.

How long did patients spend in hospital?

Bed days are a measure of hospital utilisation and service provision. During the January to March 2016 quarter, there were 1,595,636 hospital bed days recorded across all admitted patient episodes; down 1% compared with the same quarter last year. The majority of bed days (84%) were for acute care, which increased 2% this quarter. The number of non-acute bed days decreased by 12% compared with the same quarter last year (Figure 11).

Between January 2011 and March 2016 there was a 4% increase in the number of bed days for acute care. During this time, there was a 2% decrease in the number of bed days for non-acute care (Figure 12).

The average length of stay for all acute admissions was 3.0 days this quarter, down 0.1 days compared with the same quarter last year. The average length of stay for acute overnight admissions was 4.8 days, down 0.1 days compared with the same quarter last year. The average length of stay for all acute admissions has remained relatively stable in the same quarter over the past three years (Figure 13).

There were hospital-level differences in the average length of stay for acute overnight admissions this quarter, even within peer groups. The greatest variation was in the C2 peer group, where there was a 8.4 day difference between the highest and lowest average length of stay for individual hospitals, compared with a 2.2 day difference in the B peer group (Figure 14).

Figure 11 **Total number of hospital bed days by episode type, January to March 2016**

		This quarter	Same quarter last year	Change since one year ago
Total bed days		1,595,636	1,605,345	-1%
Acute	84%	1,337,867	1,313,844	2%
Non-acute	16%	257,769	291,501	-12%

Figure 12 **Total number of hospital bed days by episode type, January 2011 to March 2016**

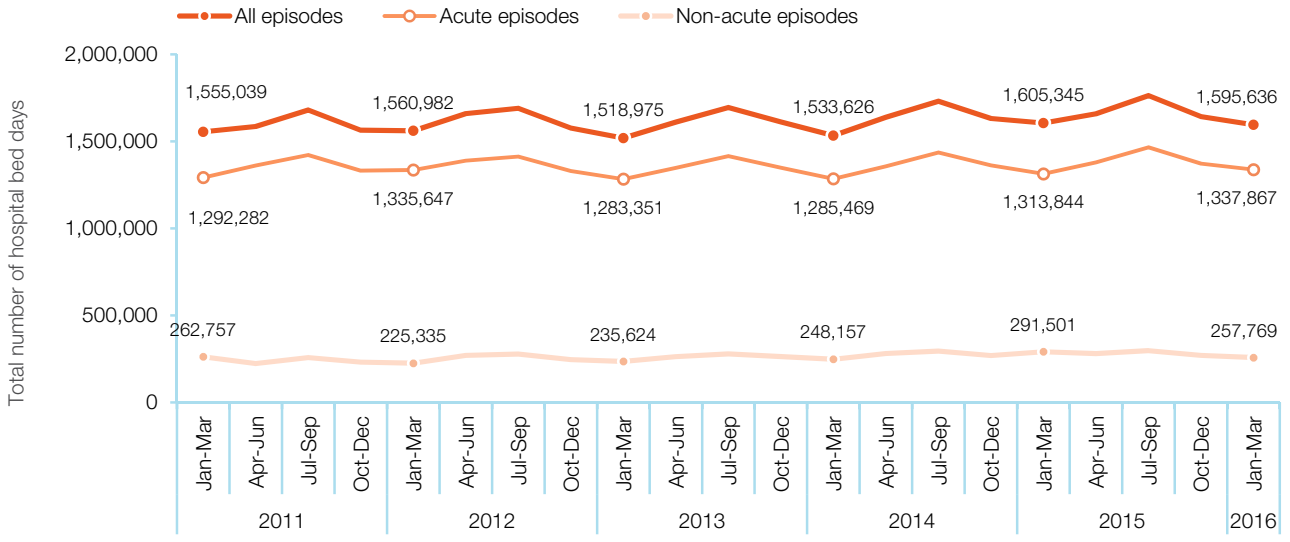


Figure 13 Average length of stay by type of admitted patient episodes, January 2011 to March 2016

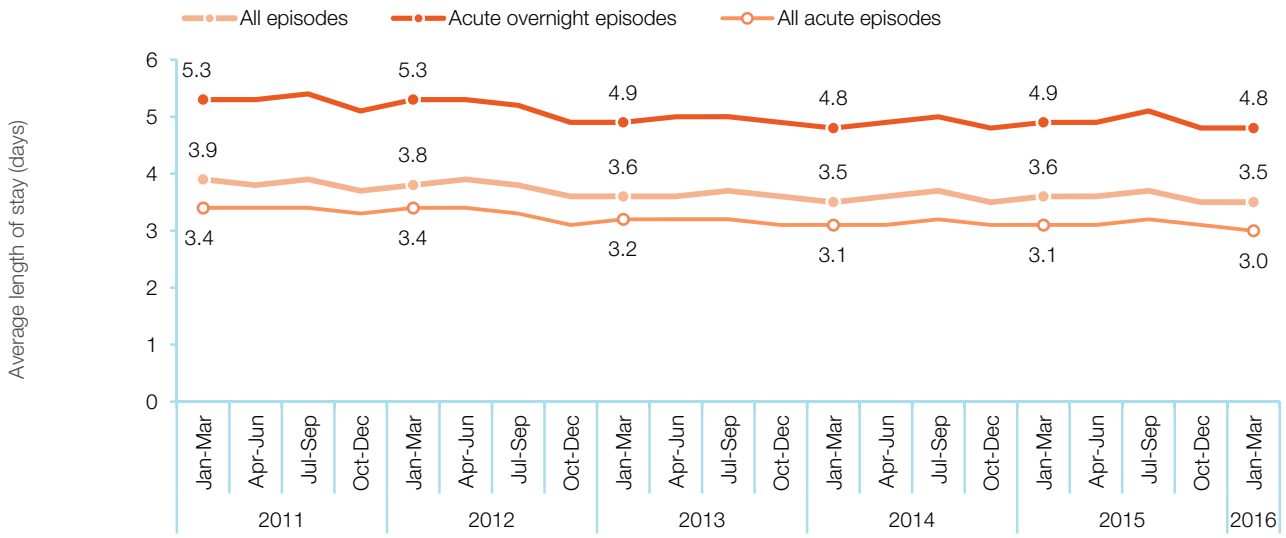
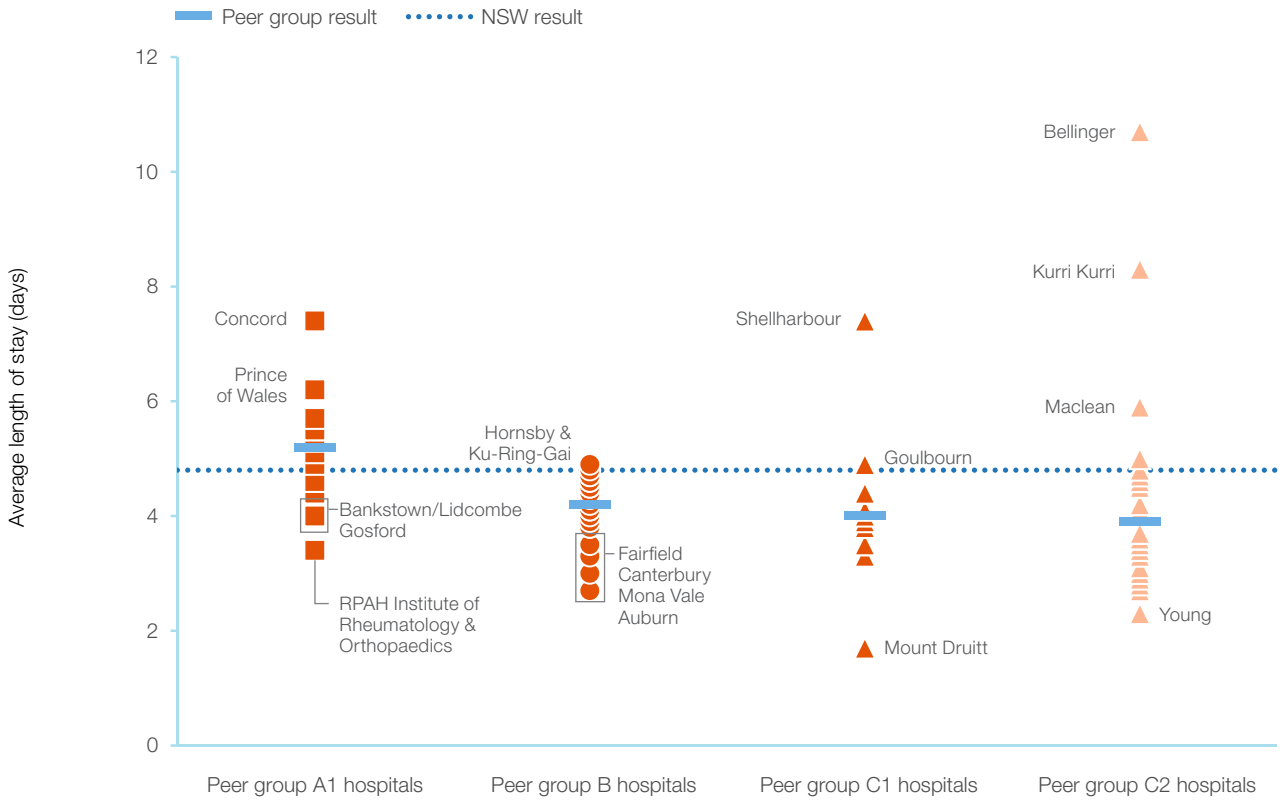


Figure 14 Average length of stay for acute overnight admitted patient episodes, by peer group, January to March 2016



How many elective surgical procedures were performed?

During the January to March 2016 quarter, a total of 49,153 elective surgical procedures were performed, 691 (1%) fewer than in the same quarter last year. Of all the elective surgical procedures performed this quarter, 21% were categorised as urgent, 31% as semi-urgent, and 42% as non-urgent. A further 5% were categorised as staged (Figure 15).

Compared with the same quarter last year, there was a decrease of 4% in the number of urgent procedures performed and an increase of 2% and 1% respectively in the number of semi-urgent and non-urgent procedures performed. The number of staged procedures performed decreased by 20% (Figure 15).

There are three elective surgery urgency categories, each with a clinically recommended maximum time by which the procedure should be performed: urgent (within 30 days), semi-urgent (within 90 days) and non-urgent surgery (within 365 days).

Figure 15 **Elective surgical procedures performed, by urgency category, January to March 2016**

	This quarter	Same quarter last year	Change since one year ago
Total number of elective surgery procedures	49,153	49,844	-1%
Urgent 21%	10,300	10,714	-4%
Semi-urgent 31%	15,444	15,196	2%
Non-urgent 42%	20,782	20,655	1%
Staged 5%	2,627	3,279	-20%

Figure 16 **Distribution of elective surgery by urgency category and peer group, January to March 2016**

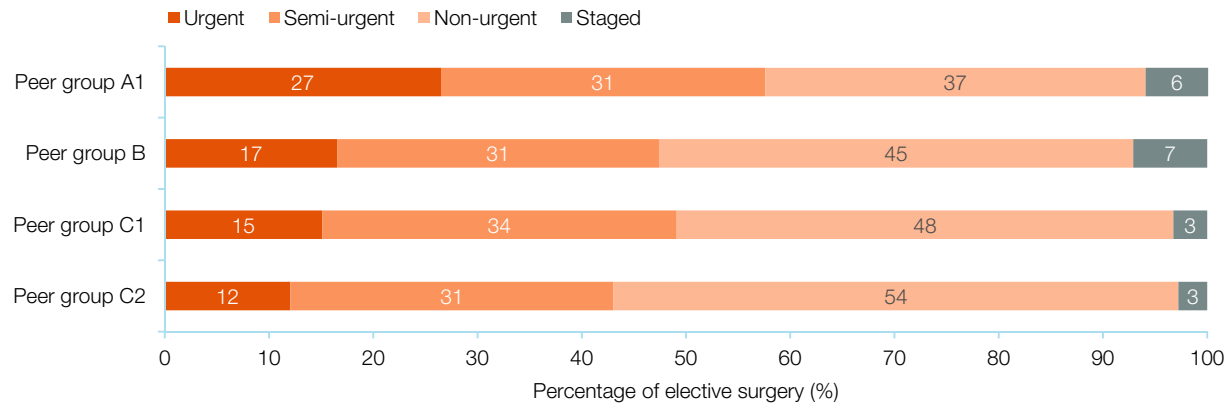
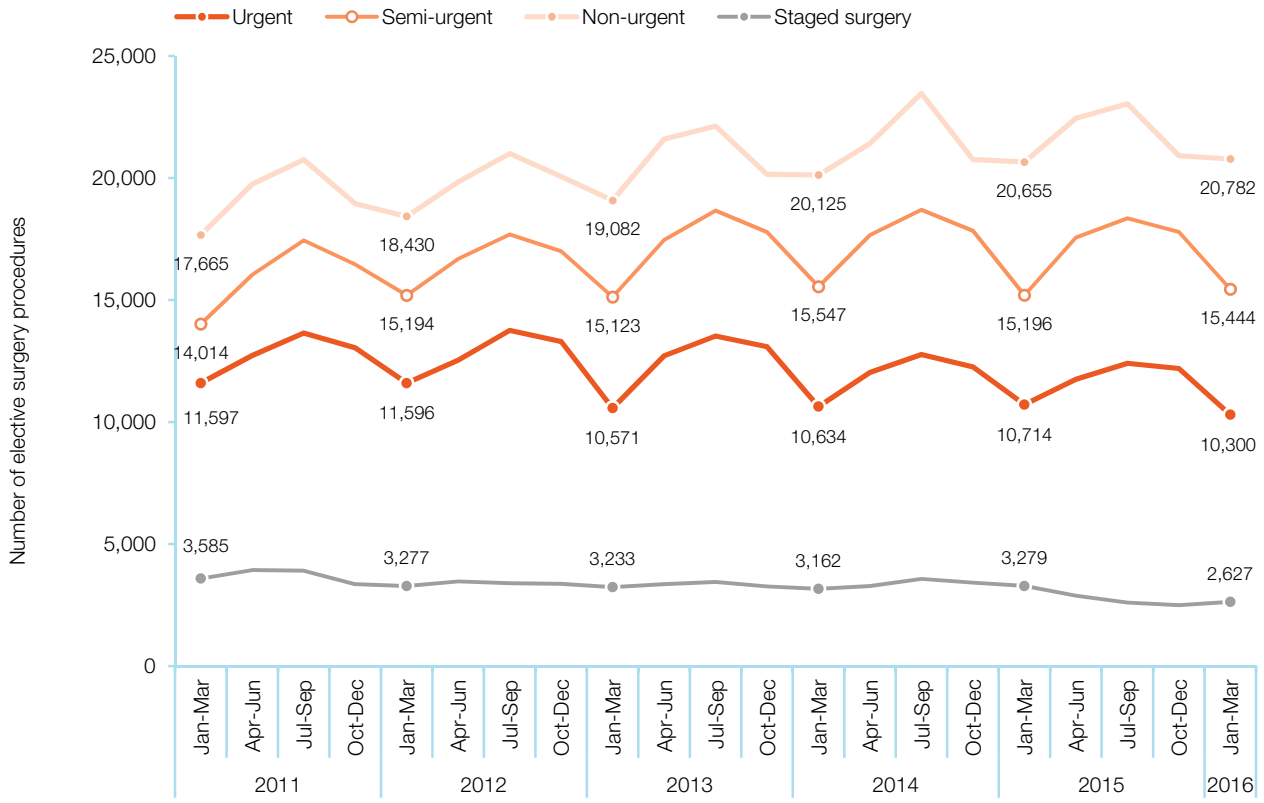


Figure 16 shows variation in the distribution of elective surgery, by urgency categories across different hospital peer groups. Peer group A1 had the highest percentage of elective surgical procedures that were urgent and the lowest percentage that were non-urgent.

The volume of elective surgical procedures performed has increased over the past five years. The number categorised as semi-urgent and non-urgent increased by 10% and 18% respectively. The number categorised as urgent decreased by 11% and the number categorised as staged decreased by 27% during this time (Figure 17).

Figure 17 **Elective surgical procedures performed, by urgency category, January 2011 to March 2016**



How many patients were on the elective surgery waiting list at the end of the quarter?

At the end of March 2016, 74,351 patients were ready for surgery and on the elective surgery waiting list. Of these, 2% were waiting for urgent surgery, 15% were waiting for semi-urgent surgery and 82% were waiting for non-urgent surgery. Compared with the same quarter last year, there was an increase in the number of patients waiting for urgent surgery (1,759 in total; up 1%) and non-urgent surgery (61,269 in total; up 3%), and a decrease in the number of patients waiting for semi-urgent surgery (11,323 in total; down 2%) (Figure 18).

At the end of the quarter, 13,031 patients were 'not ready for surgery' and on the elective surgery waiting list, up 3% compared with the same quarter last year (Figure 18).

Comparing across surgical specialties

Orthopaedic surgery and ophthalmological surgery were the specialties with the most patients waiting at the end of the quarter. Together, these specialties made up 49% of all patients waiting for elective surgery in NSW public hospitals. Cardiothoracic surgery and medical (non-specialist) surgery had the smallest number of patients waiting (Figure 19).

At the end of the quarter, there were 597 patients who were still waiting for surgery after more than 12 months on the waiting list; a 32% increase compared with the same quarter last year. Orthopaedic surgery, ear, nose and throat surgery and general surgery had the most patients still waiting after more than 12 months on the waiting list. Compared with the same quarter last year, the largest increase in absolute numbers was for orthopaedic surgery (from 95 to 191 patients). The largest decrease was for ophthalmological surgery (from 98 to 24 patients) (Figure 19).

Comparing across common procedures

Cataract extraction, the highest volume procedure, had the most patients waiting for surgery at the end of the quarter (15,088 patients, up 5% compared with the same quarter last year). Procedures with the fewest patients waiting were coronary artery bypass graft (63 patients; down 26%) and myringotomy (134 patients; up 16%) (Figure 20).

At the end of the quarter, septoplasty and total knee replacement had the most patients still waiting for surgery after more than 12 months on the waiting list (37 and 35 patients, respectively) (Figure 20).

Figure 18 Elective surgery waiting list, by urgency category, as at 31 March 2016

	This quarter	Same quarter last year	Change since one year ago
Patients ready for surgery on waiting list as at 31 March 2016	74,351	72,877	2%
Urgent 2%	1,759	1,737	1%
Semi-urgent 15%	11,323	11,553	-2%
Non-urgent 82%	61,269	59,587	3%
Patients not ready for surgery on waiting list at the end of quarter	13,031	12,614	3%

Figure 19

Patients waiting for elective surgery and patients still on waiting list at the end of the quarter, after more than 12 months, by specialty, as at 31 March 2016

	Patients on waiting list at end of quarter			Patients still waiting after more than 12 months	
	This quarter	Same quarter last year	Change since one year ago	This quarter	Same quarter last year
All specialties	74,351	72,877	2%	597	453
Orthopaedic surgery	19,056	18,571	3%	191	95
Ophthalmology	17,275	16,642	4%	24	98
General surgery	12,554	12,660	-1%	120	116
Ear, nose and throat surgery	9,996	9,816	2%	133	71
Gynaecology	6,264	6,302	-1%	33	38
Urology	3,863	3,681	5%	24	12
Plastic surgery	2,482	2,441	2%	36	14
Neurosurgery	1,235	1,211	2%	30	5
Vascular surgery	1,077	955	13%	5	<5
Cardiothoracic surgery	320	354	-10%	<5	0
Medical	229	244	-6%	0	<5

Figure 20

Patients waiting for elective surgery and patients still on waiting list at the end of the quarter, after more than 12 months, by common procedure, as at 31 March 2016

	Patients on waiting list at end of quarter			Patients still waiting after more than 12 months	
	This quarter	Same quarter last year	Change since one year ago	This quarter	Same quarter last year
Cataract extraction	15,088	14,423	5%	16	85
Total knee replacement	5,605	5,243	7%	35	34
Tonsillectomy	3,886	3,771	3%	24	19
Total hip replacement	2,517	2,248	12%	20	11
Inguinal herniorrhaphy	2,216	2,101	5%	29	30
Cholecystectomy	1,687	1,711	-1%	<5	9
Hysteroscopy	1,564	1,505	4%	<5	<5
Septoplasty	1,326	1,345	-1%	37	12
Other–general	1,273	1,213	5%	21	13
Cystoscopy	1,114	1,026	9%	0	0
Abdominal hysterectomy	840	775	8%	11	5
Varicose veins stripping and ligation	744	728	2%	6	<5
Prostatectomy	622	641	-3%	<5	0
Haemorrhoidectomy	404	412	-2%	11	<5
Myringoplasty/Tympanoplasty	321	322	unchanged	10	<5
Myringotomy	134	116	16%	0	<5
Coronary artery bypass graft	63	85	-26%	0	0

Hospital performance measures

Key findings – January to March 2016

91% of patients who arrived by ambulance had their care transferred within 30 minutes

up four percentage points compared with the same quarter last year

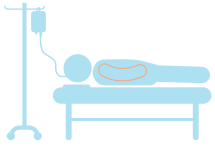
75% of patients had their ED treatment start within recommended timeframes

- **68%** triage category 2
- **70%** triage category 3
- **78%** triage category 4
- **93%** triage category 5

Median time to ED treatment was largely unchanged across all triage categories

74% of patients spent four hours or less in the emergency department

down one percentage point compared with the same quarter last year



97% of patients received their surgery within recommended timeframes

- **100%** urgent surgery procedures performed on time
- **97%** semi-urgent surgery procedures performed on time
- **96%** non-urgent surgery procedures performed on time

18 out of 81 hospitals performed more elective surgical procedures on time – 31 performed less, compared with the same quarter last year

NSW emergency departments

This section provides information about timeliness measures for NSW emergency departments.

NSW elective surgery

This section provides information about timeliness measures for elective surgery in NSW public hospitals.

How long did patients wait for treatment in the emergency department?

Time patients waited to start treatment in the ED

On arrival at the emergency department (ED), patients are allocated to one of five triage categories, based on urgency. Each category has a maximum waiting time within which treatment should start:

- Triage category 1: Resuscitation (within two minutes)
- Triage category 2: Emergency (within 10 minutes)
- Triage category 3: Urgent (within 30 minutes)
- Triage category 4: Semi-urgent (within 60 minutes)
- Triage category 5: Non-urgent (within 120 minutes).

During the January to March 2016 quarter, the median and 95th percentile times from presenting to the ED to starting treatment was largely unchanged for patients in all triage categories, compared with the same quarter last year (Figure 21).

How have ED treatment waiting times changed over time?

For triage category 2, the median time patients waited to start treatment has remained unchanged in the January to March quarter over the past five years. The median times have decreased for patients in triage category 3, 4 and 5 during this time (Figure 22).

Over the past five years, the 95th percentile times triage categories 3, 4 and 5 patients waited to start treatment has decreased. There has been little change in the 95th percentile times triage category 2 patients waited to start treatment (Figure 23).

Figure 21 Time from presentation to starting treatment, by triage category, January to March 2016

		Same quarter last year	Change since one year ago
Triage 2 Emergency (e.g. chest pain, severe burns): 74,863 patients			
Median time to start treatment	8m	8m	unchanged
95th percentile time to start treatment	35m	35m	unchanged
Triage 3 Urgent (e.g. moderate blood loss, dehydration): 208,615 patients			
Median time to start treatment	20m	20m	unchanged
95th percentile time to start treatment	1h 39m	1h 38m	1m
Triage 4 Semi-urgent (e.g. sprained ankle, earache): 260,572 patients			
Median time to start treatment	26m	26m	unchanged
95th percentile time to start treatment	2h 17m	2h 17m	unchanged
Triage 5 Non-urgent (e.g. small cuts or abrasions): 60,890 patients			
Median time to start treatment	23m	24m	-1m
95th percentile time to start treatment	2h 15m	2h 14m	1m

Figure 22 Median time from presentation to starting treatment, by triage category, January 2011 to March 2016

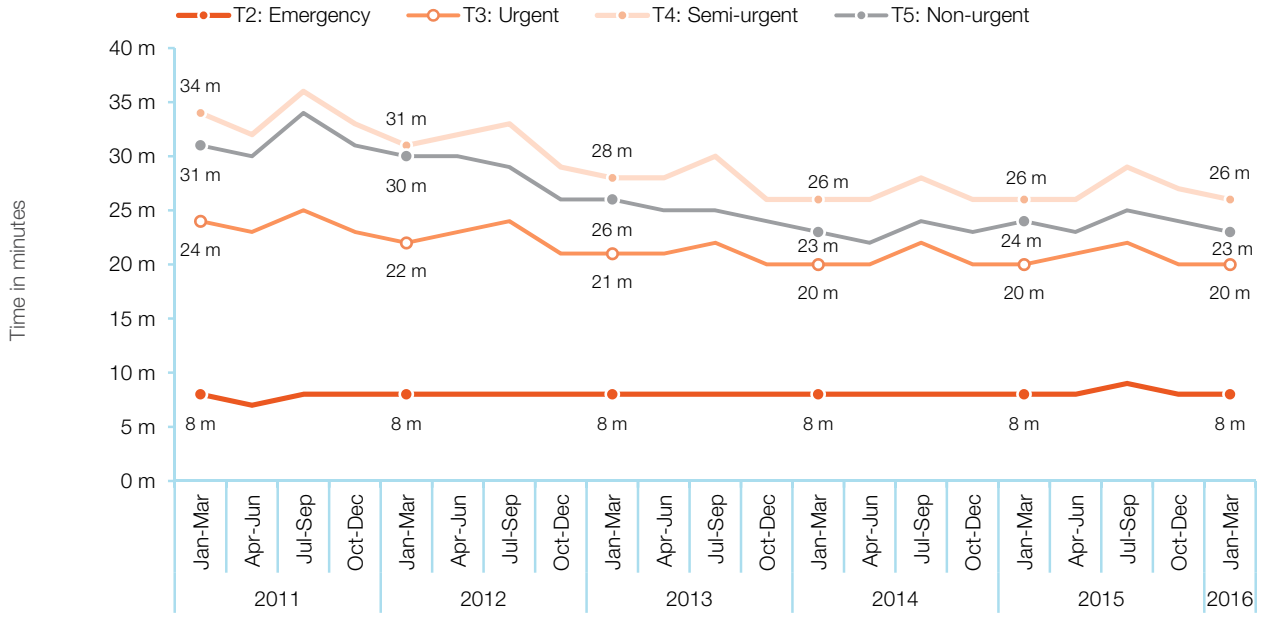
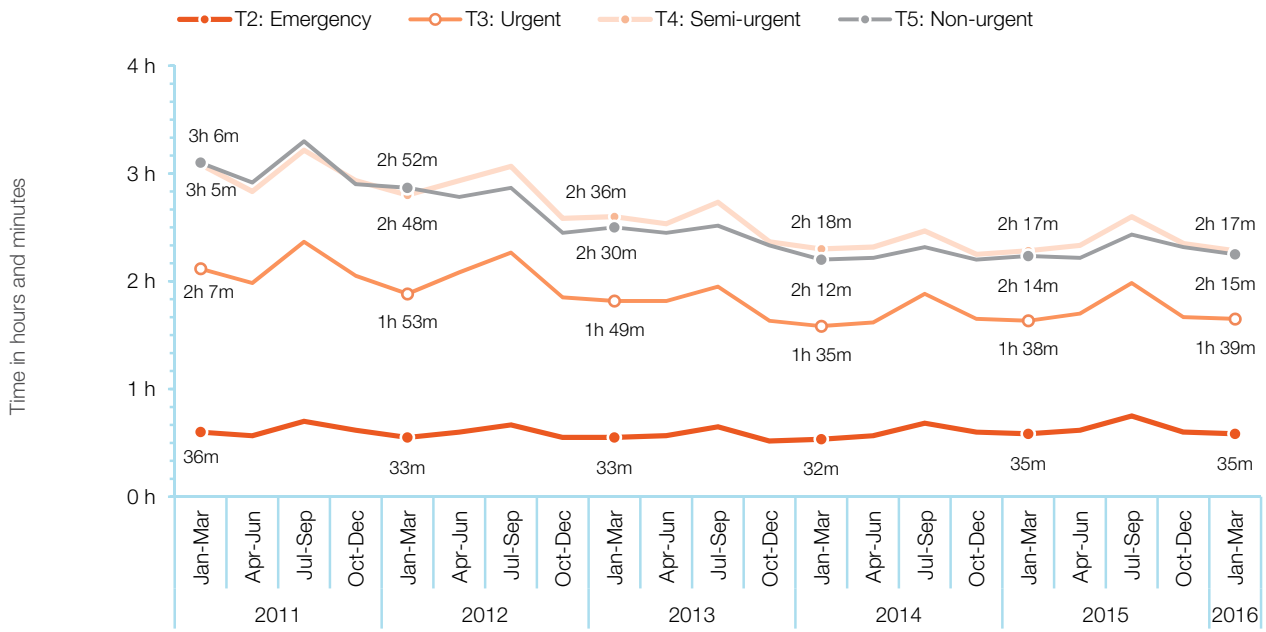


Figure 23 95th percentile time from presentation to starting treatment, by triage category, January 2011 to March 2016



How long did patients wait for treatment in the emergency department?

Percentage of patients whose treatment started on time

During the January to March 2016 quarter, 75% of ED patients had their treatment start within clinically recommended timeframes; unchanged compared with the same quarter last year.

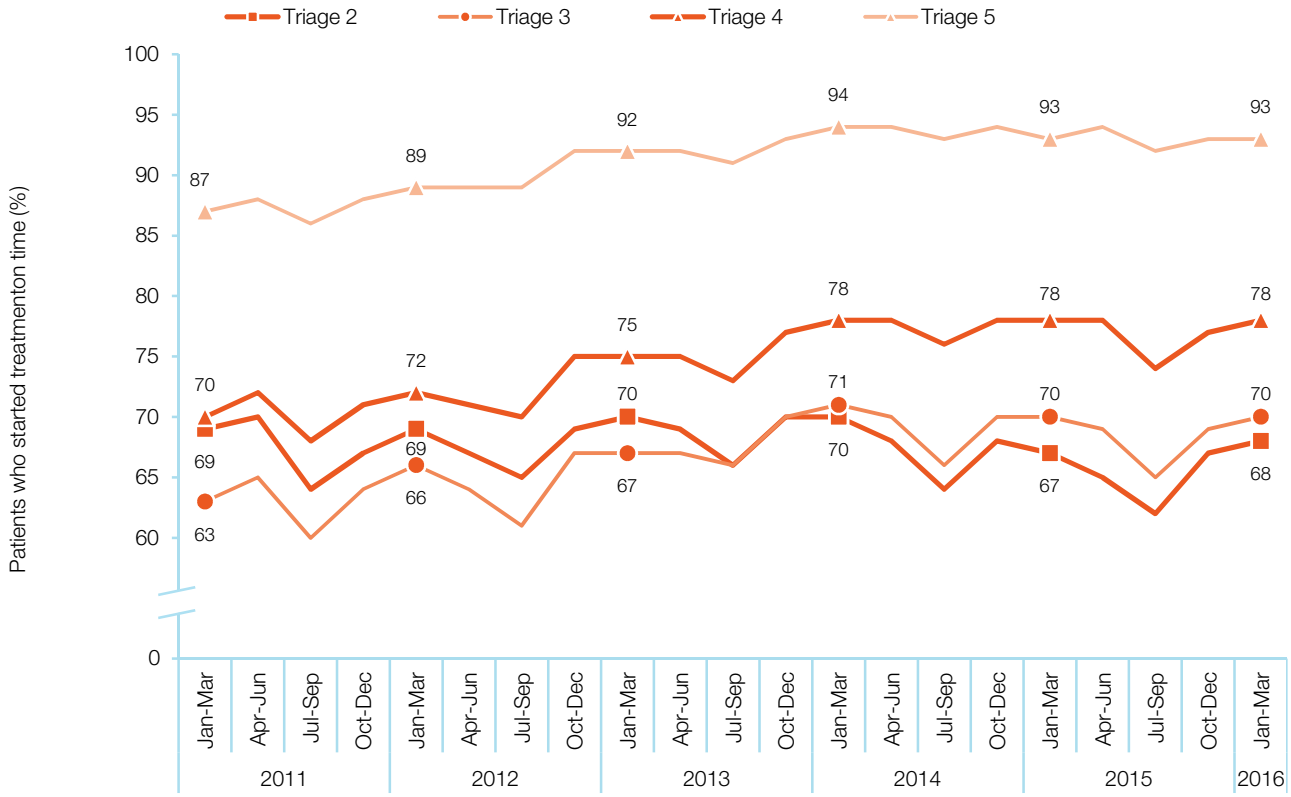
This quarter, 68% of patients assigned to triage category 2 and 70% of patients assigned to triage category 3 had their treatment start on time. For triage category 4 and 5 patients, 78% and 93%, respectively, started treatment on time. With the exception of triage category 2, these results are unchanged compared with the same quarter last year (Figure 24).

In January to March 2011, 70% of patients had their treatment start on time, compared with 75% this quarter (up five percentage points). The percentage of patients whose treatment started on time has increased across all triage categories during this time, with the exception of triage category 2, which decreased by one percentage point. The largest increase was seen in triage category 3 and 4 (up seven and eight percentage points, respectively) (Figure 25).

Figure 24 Percentage of patients whose treatment started on time, by triage category, January to March 2016

	This quarter	Same quarter last year	Percentage point change since one year ago
All patients	75%	75%	unchanged
Triage category 2	Recommended: 10 minutes 68%	67%	1
Triage category 3	Recommended: 30 minutes 70%	70%	unchanged
Triage category 4	Recommended: 60 minutes 78%	78%	unchanged
Triage category 5	Recommended: 120 minutes 93%	93%	unchanged

Figure 25 Percentage of patients whose treatment started on time, by triage category, January 2011 to March 2016



How long did patients wait for treatment in the emergency department?

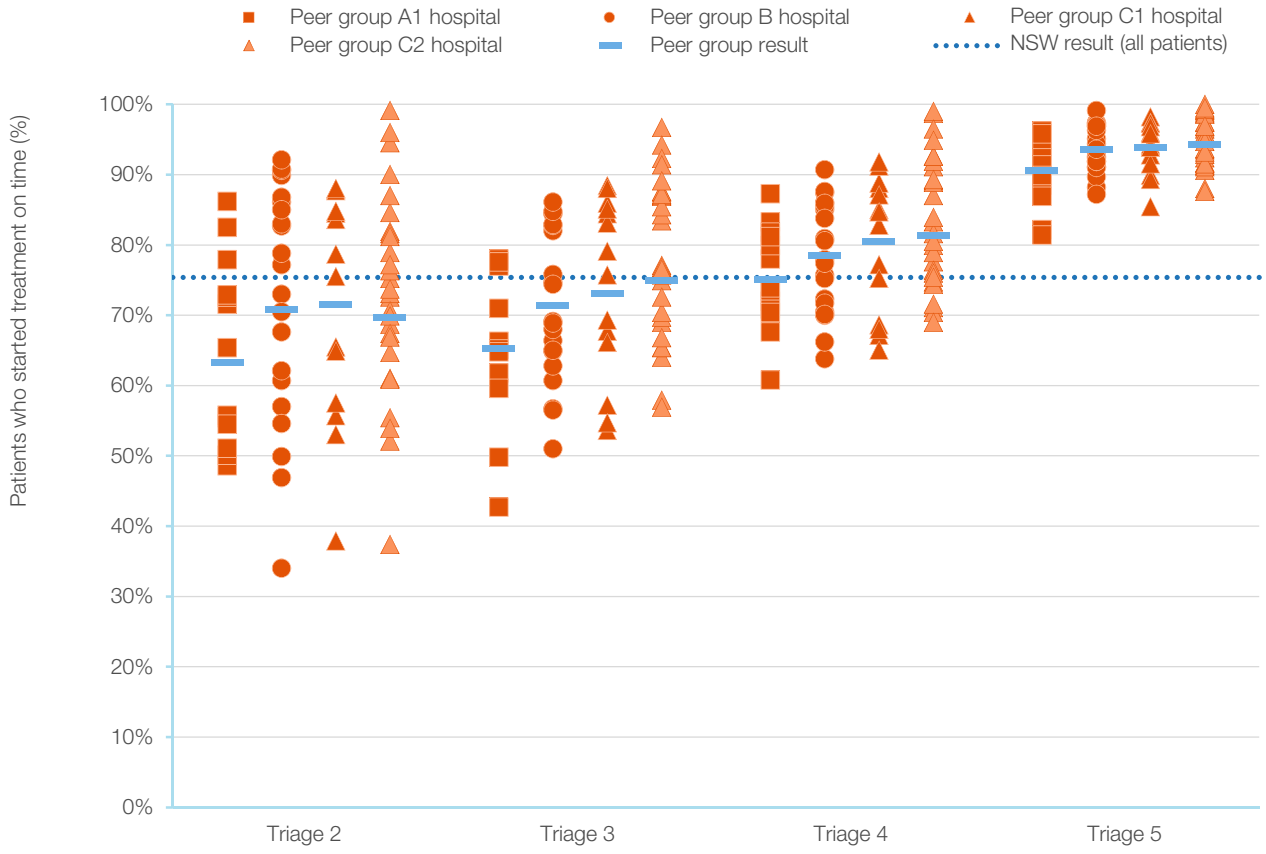
Variation in the percentage of patients whose treatment started on time

During the January to March 2016 quarter, there was considerable variation between and within hospital peer groups in the percentage of patients whose treatment started within clinically recommended timeframes. This variation was most marked for patients in triage category 2 (Figure 26).

Figure 27 maps hospital results for this quarter on two axes: the percentage of patients whose treatment started on time (Y-axis), and the percentage point change since the same quarter last year (X-axis). For hospitals shown above the blue NSW line, a higher percentage of patients started treatment on time compared with the overall NSW result. For hospitals below this line, a lower percentage of patients started treatment on time compared with the overall NSW result. Hospitals shown to the left of the vertical '0' line had lower results, compared with the same quarter last year, while those shown to the right of the vertical line had higher results.

Hospitals in the upper right quadrant (Figure 27) achieved higher results than NSW overall, and an increase in the percentage of patients whose treatment started on time, compared with the same quarter last year. Hospitals in the upper left quadrant had results that were higher than the overall NSW

Figure 26 Percentage of patients whose treatment started on time, by peer group, January to March 2016



result and a decrease in the percentage of patients whose treatment started on time.

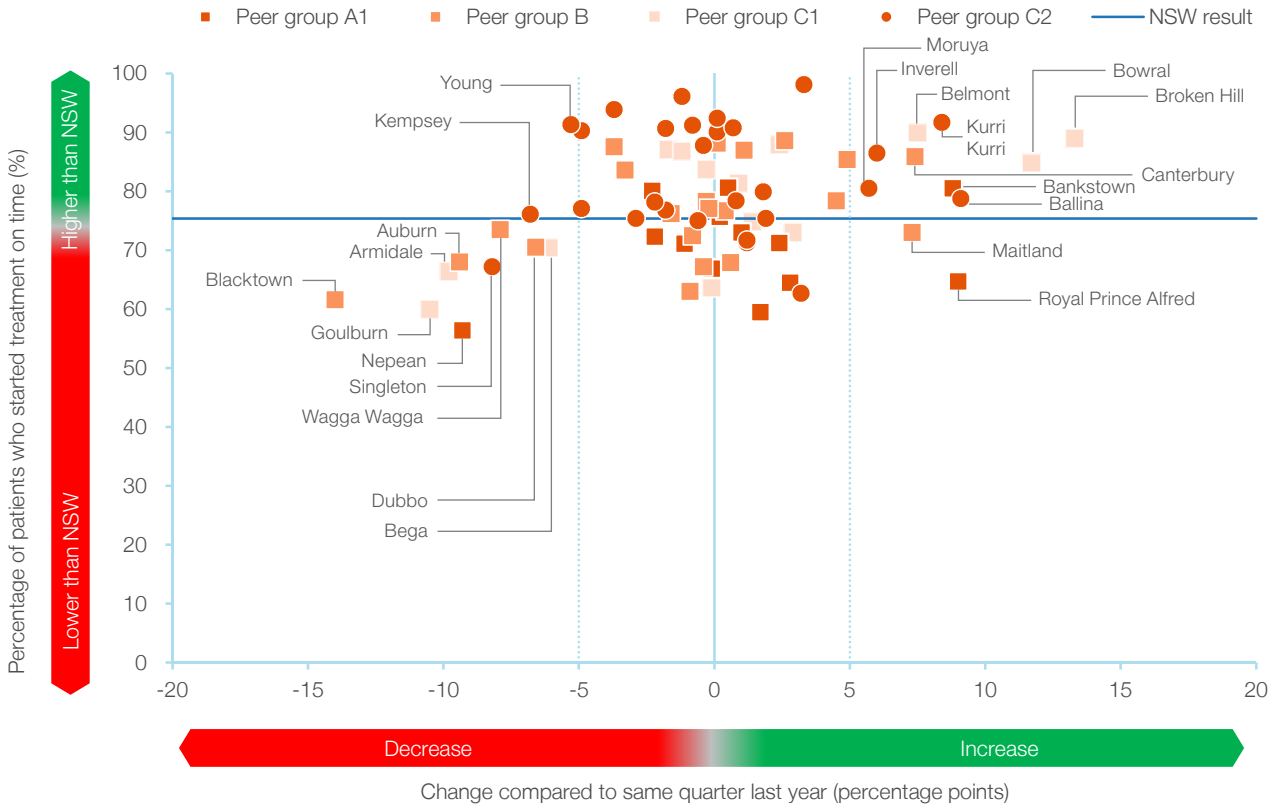
Hospitals in the lower right quadrant had results that were lower than NSW overall and an increase in the percentage of patients whose treatment started on time. Hospitals in the lower left quadrant had results that were lower than NSW and a decrease in the percentage of patients whose treatment started on time, compared with the same quarter last year.

Hospitals identified in Figure 27 are those that had an increase or a decrease in the percentage of patients whose treatment started on time of more than five percentage points, compared with the same quarter last year.

Across hospitals, the percentage of patients who started treatment on time increased this quarter in 38 out of 76 hospitals. For 11 hospitals, the increase was more than five percentage points. Of these, for two hospitals, the increase was more than 10 percentage points.

The percentage who started treatment on time decreased this quarter in 38 of 76 hospitals. For 11 hospitals, the decrease was more than five percentage points. Of these, for two hospitals, the decrease was more than 10 percentage points (Figure 27).

Figure 27 Percentage of patients whose treatment started on time, and percentage point change since same quarter last year, hospitals by peer group, January to March 2016



Note: Results for hospitals in peer group A2 and A3 are not shown in Figure 27. Results for these hospitals are as follows: Calvary Mater Newcastle, 77% (down one percentage points), Sydney/Sydney Eye Hospital, 86% (down five percentage points), Sydney Children's Hospital, 66% (down three percentage points), and The Children's Hospital at Westmead, 64% (down three percentage points).

How long did patients wait for treatment to start in the emergency department?

Change over time in the percentage of patients whose treatment started on time

In peer group A1, 70% of patients had their treatment start on time this quarter; up one percentage point, compared with the same quarter last year. In peer group B, 77% of patients had their treatment start on time (unchanged) and in peer groups C1, 78% of patients had their treatment start on time (unchanged). In peer group C2, 80% of patients had their treatment start on time; down one percentage point, compared with the same quarter last year (Figure 28).

For peer group A1, 63% of triage category 2 patients and 65% of triage category 3 patients had their treatment start on time; up three and one percentage points respectively, compared with the same quarter last year. The majority of patients in triage category 4 (75%) and triage category 5 (91%), had their treatment start on time; unchanged compared with the same quarter last year (Figure 29).

Compared to the same quarter in 2011, the percentage of patients whose treatment started on time has increased across all peer groups, with the exception of peer group C2 (no change) (Figure 28).

In peer group A1 and C2, the percentage of patients whose treatment started on time increased across all triage categories, compared with the same quarter in 2011, with the exception of triage category 2 (down seven and three percentage points respectively), and triage category 5, for peer group C2 (unchanged). In peer group B and C1, the percentage whose treatment started on time increased across all triage categories during this time (Figure 29).

Figure 28 Percentage of patients whose treatment started on time, by peer group, January 2011 to March 2016

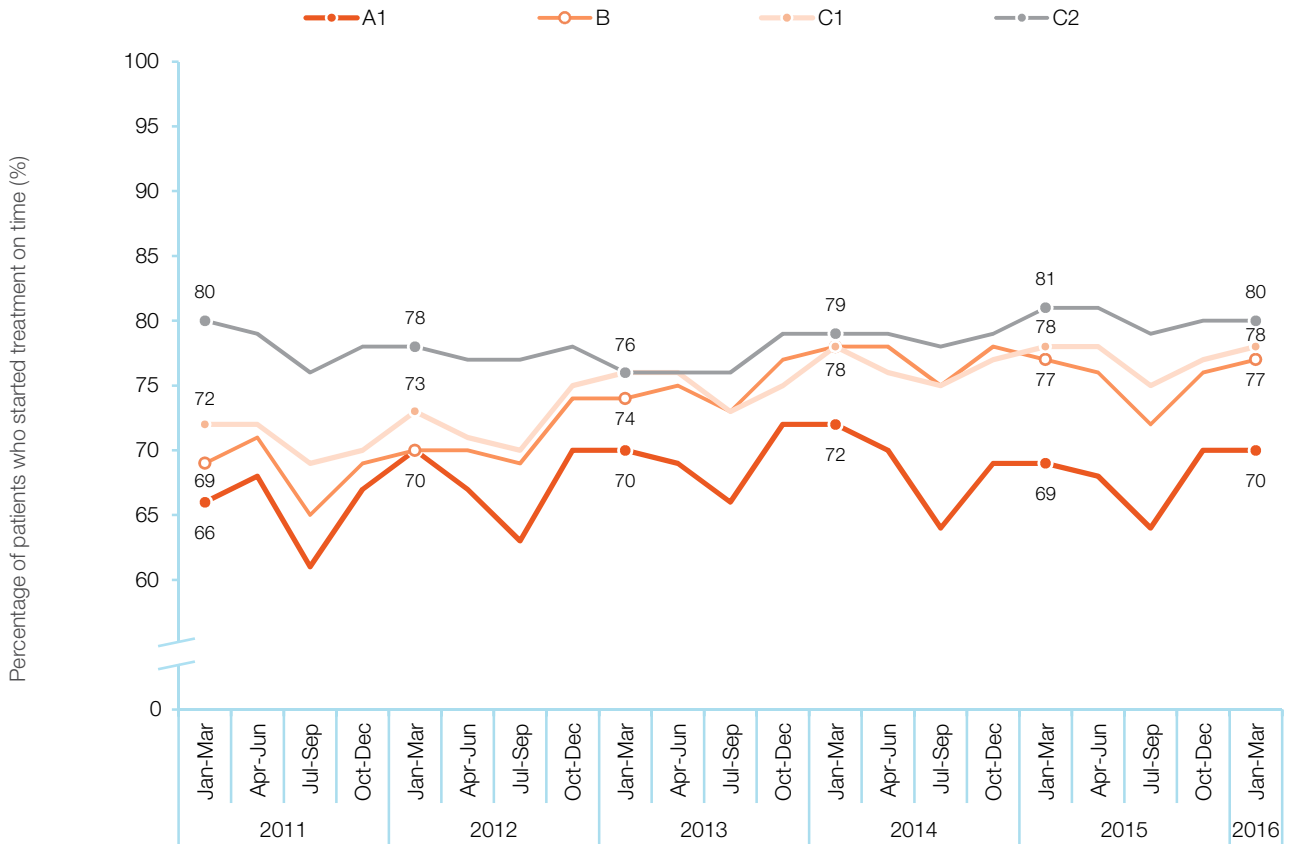
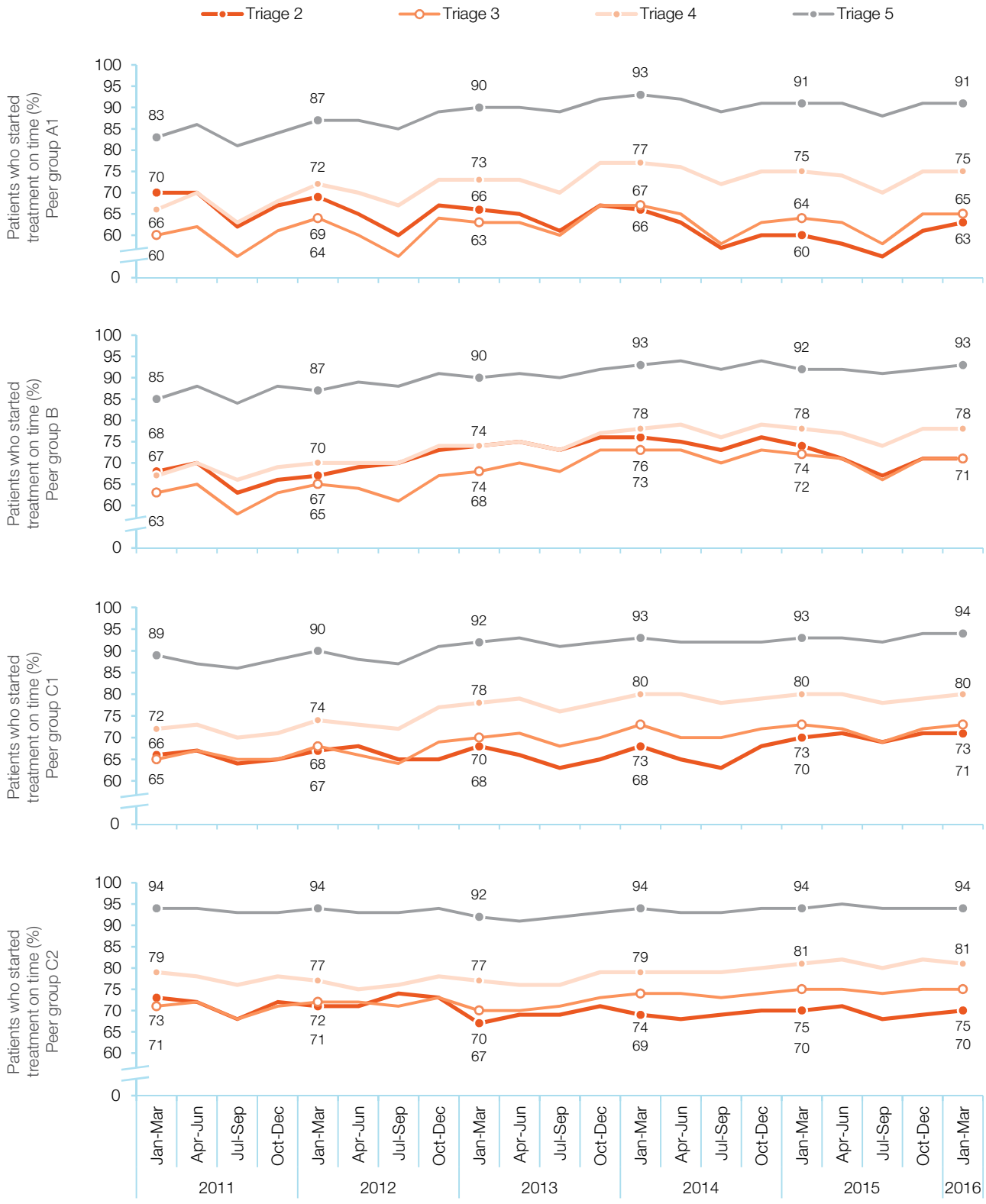


Figure 29 Percentage of patients whose treatment started on time, by triage and peer group, January 2011 to March 2016



How long did patients spend in the emergency department?

Time spent in the emergency department by mode of separation

During the January to March 2016 quarter, the median time patients spent in the ED was two hours and 40 minutes, two minutes longer than the same quarter last year. The 95th percentile time patients spent in the ED was nine hours and 25 minutes, seven minutes longer than the same quarter last year (Figure 30).

Does the time patients spend in the ED differ across hospital peer groups?

Figure 31 shows the median time patients spent in the ED over the past five years for peer groups A1, B, C1 and C2. The shaded areas illustrate the range of values between the highest and lowest median times for hospitals in each peer group.

Overall, in peer group A1, B and C1 there has been a decrease in the median time patients spent in the ED over the past five years. For peer group C2 hospitals, however, the median time has increased, and was 11 minutes longer this quarter than in the same quarter in 2011 (Figure 31).

There is little variation in the median time spent in the ED between hospitals in peer group A1, as evidenced by the narrow band between the highest and lowest median times for individual hospitals. More variation is seen in the median time patients spent in the ED for peer group B, C1 and C2 hospitals (Figure 31).

In peer group C1 and C2, patients spend less time in the ED (Figure 31). These hospitals also have a higher percentage of patients who spend four hours or less in the ED, compared with other peer groups (See page 39, Figure 37).

The cohort of EDs included in this report has changed over the past five years, and this has affected overall volumes and performance measures. Results for peer group C2 hospitals are most affected by these changes. The number of EDs in peer group C2 hospitals that contribute data to *Hospital Quarterly* has more than doubled since 2010 (from 14 to 28 hospitals). For more information refer to the technical supplements section of the BHI website at **bhi.nsw.gov.au**

Figure 30 Time patients spent in the emergency department, January to March 2016

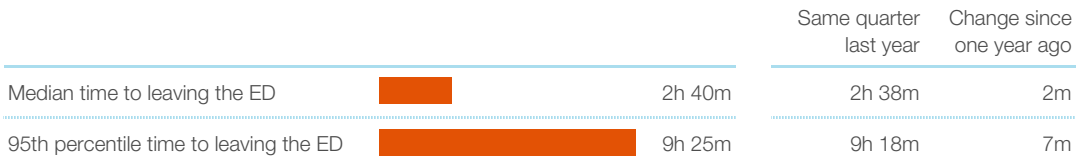
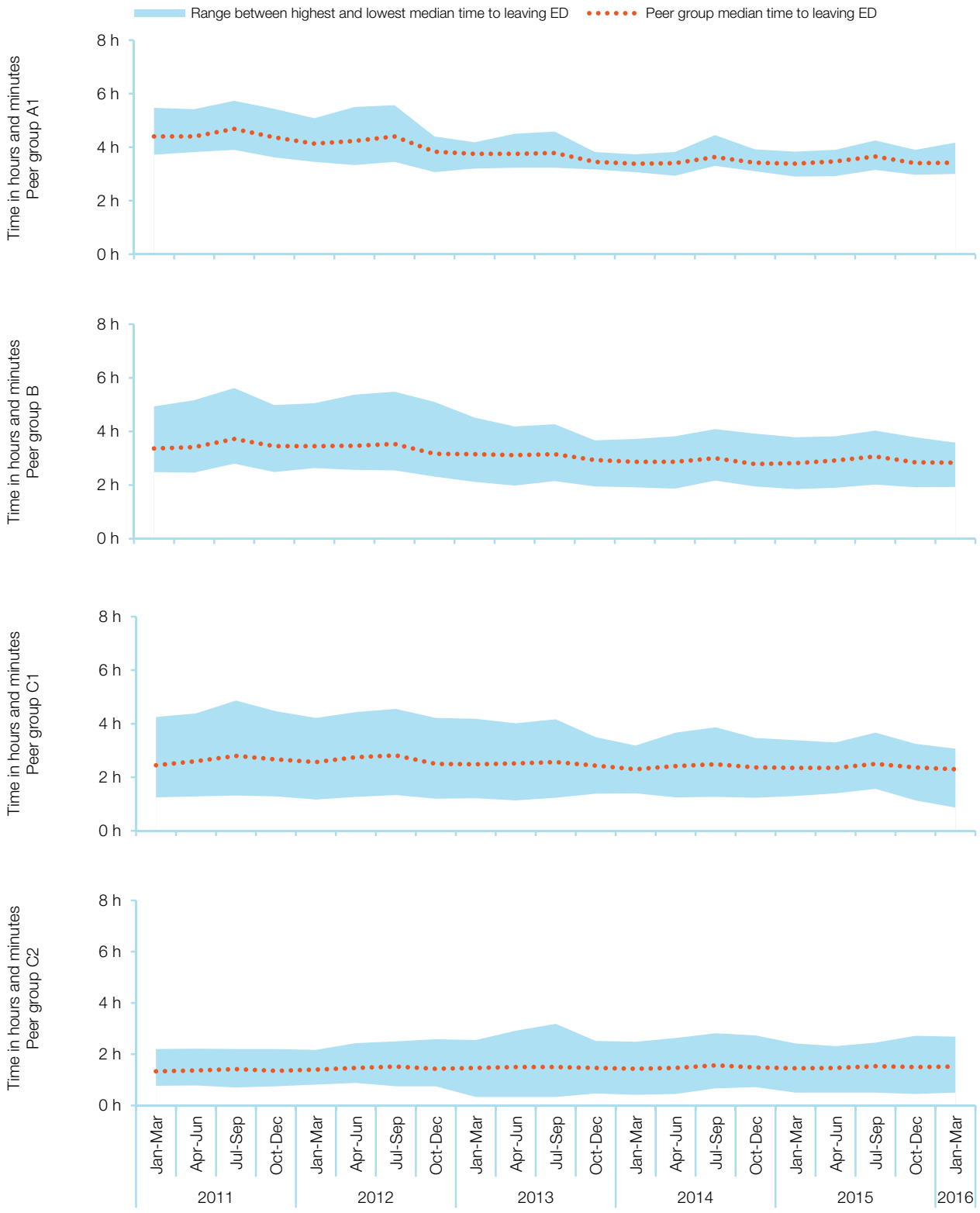


Figure 31 Median time patients spent in the emergency department, and range, peer group hospitals, January 2011 to March 2016



How long did patients spend in the emergency department?

Time spent in the emergency department by mode of separation

The median time patients spent in the ED increased this quarter across all modes of separation, compared with the same quarter last year. For patients whose ED visit ended in transfer to another hospital, the median time spent in the ED was nine minutes longer (Figure 32).

The 95th percentile time patients spent in the ED was three minutes longer for those treated and discharged and 14 minutes longer for those treated and admitted to hospital, compared with the same quarter last year. For patients transferred to another hospital, the 95th percentile time spent in the ED was 52 minutes shorter (Figure 33).

Has time spent in the ED changed by mode of separation?

Despite a 28% increase in the volume of presentations since 2011, the median time patients spent in the ED decreased from three hours and 12 minutes in January to March 2011 quarter to two hours and 40 minutes this quarter.

Figure 32 shows a downward trend over the past five years in the median time patients spent in the ED across all modes of separation. For patients who were treated and admitted to hospital, the median time spent in the ED was four hours and 38 minutes this quarter, compared with six hours and 39 minutes in January to March 2011.

Compared with the same quarter in 2011, the 95th percentile time patients spent in the ED has decreased across all modes of separation. For patients who were treated and admitted to hospital, the 95th percentile time spent in the ED was 15 hours and 52 minutes this quarter, compared with 19 hours and 41 minutes in January to March 2011 (Figure 33).

Figure 32 Median time patients spent in the emergency department, January 2011 to March 2016

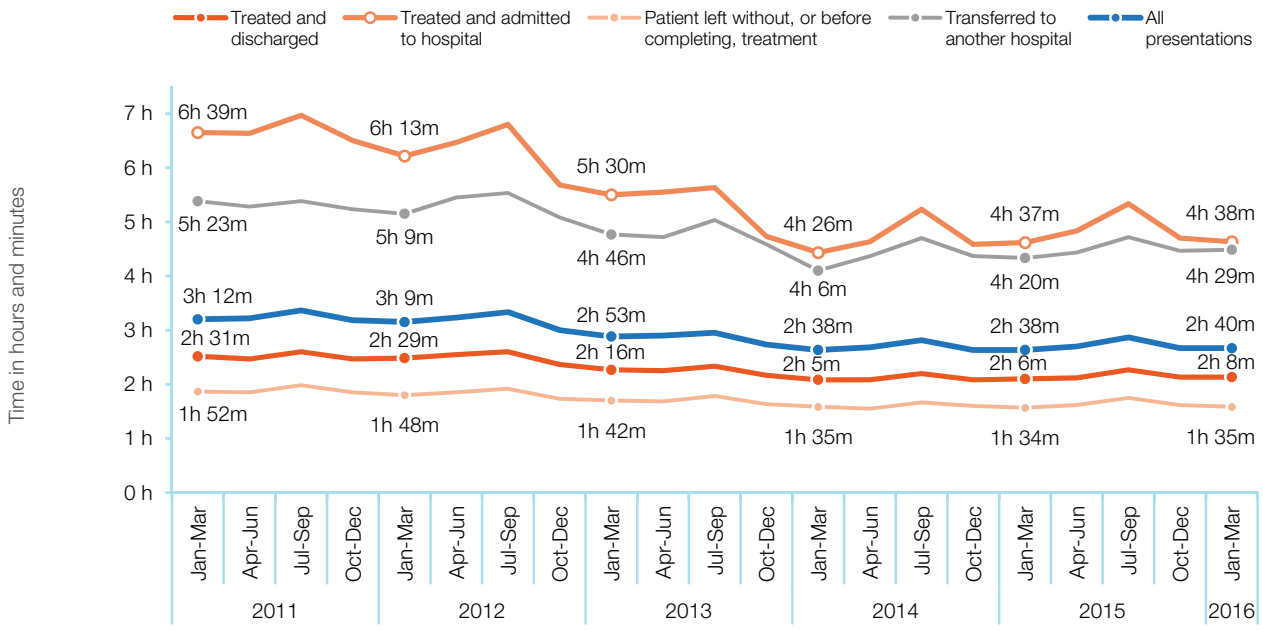
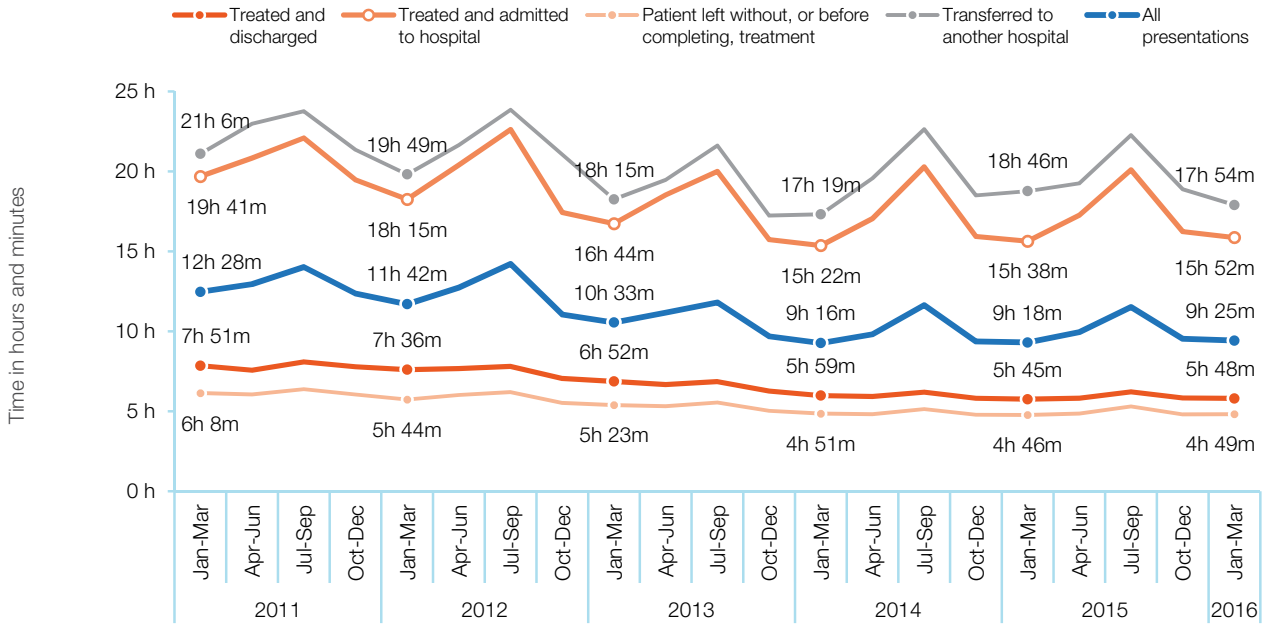


Figure 33 95th percentile time patients spent in the emergency department, January 2011 to March 2016



How long did patients spend in the emergency department?

Percentage of patients who spent four hours or less in the ED

During the January to March 2016 quarter, 74% of patients spent four hours or less in the ED, a decrease of one percentage point compared with the same quarter last year (Figure 34). These results show that the trend of improvement seen from about mid-2012 onwards has now plateaued (Figure 35).

Patients who require admission to hospital from the ED usually have more complex health needs than those who are treated in the ED and discharged, and therefore often spend longer periods in the ED.

Among patients who were treated and discharged this quarter, the majority (86%) spent four hours or less in the ED. Among patients who were treated and subsequently admitted to hospital, and those who were transferred to another hospital, 43% and 45% (respectively) spent four hours or less in the ED. Of those who left without, or before, completing treatment, 91% spent four hours or less in the ED (Figure 34).

While 74% of patients spent four hours in the ED this quarter, a further 19% spent between four and eight hours, and a further 4% spent between eight to 12 hours in the ED (Figure 36).

Due to differences in data definitions, period of reporting and the number of hospitals included, *Hospital Quarterly* results for the percentage of patients who spent four hours or less in the ED are not directly comparable to figures reported by the NSW Ministry of Health or the Commonwealth, in relation to time spent in the ED. For more information refer to the technical supplements section of the BHI website at bhi.nsw.gov.au

Figure 34 Percentage of patients who spent four hours or less in the emergency department, by mode of separation, January to March 2016

		Same quarter last year	Percentage point change since one year ago
All ED presentations	74%	75%	-1
Treated and discharged	86%	86%	unchanged
Treated and admitted	43%	44%	-1
Left without, or before completing, treatment	91%	92%	-1
Transferred to another hospital	45%	47%	-2

Figure 35 Percentage of patients who spent four hours or less in the emergency department, by mode of separation, January 2011 to March 2016

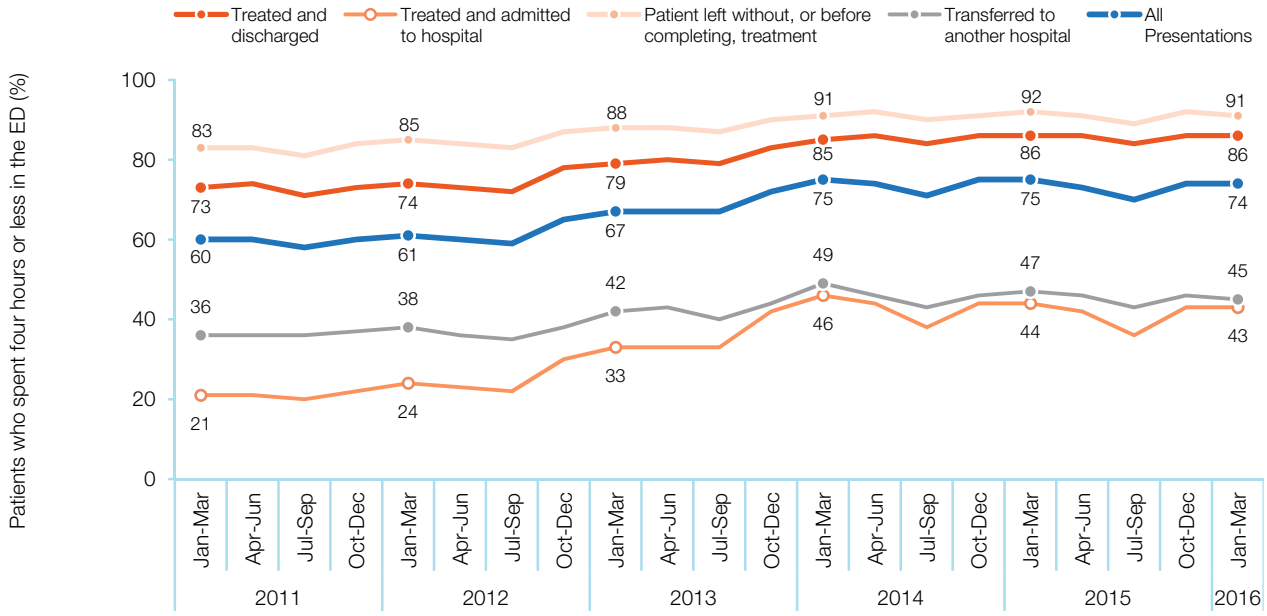
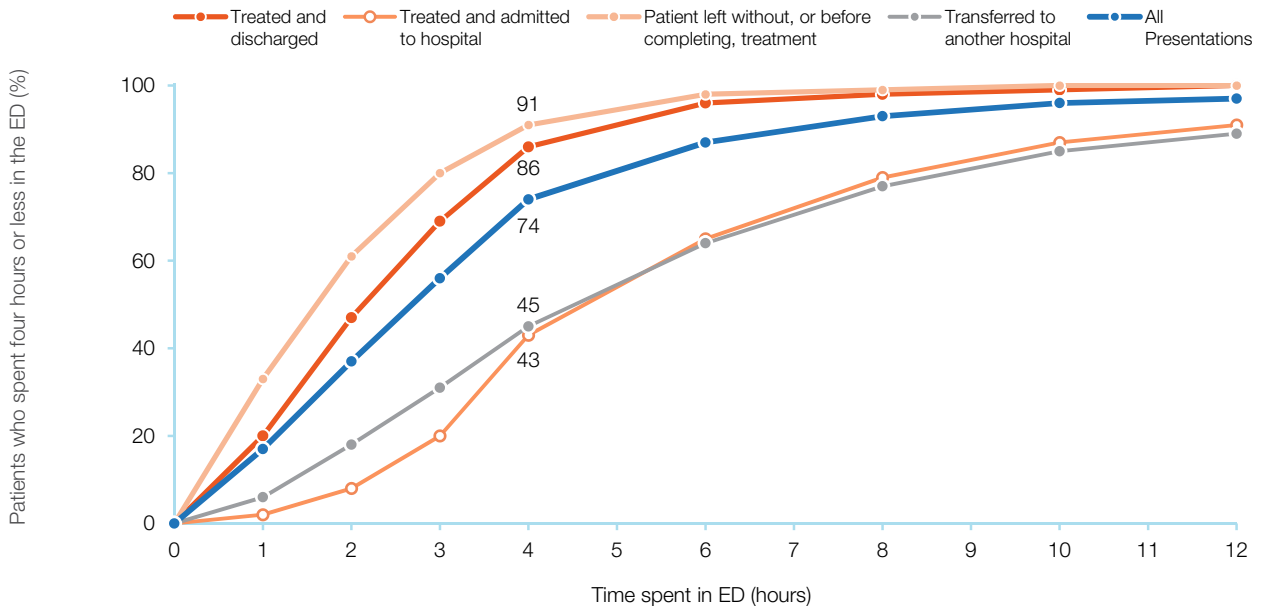


Figure 36 Percentage of patients and time spent in the emergency department, by mode of separation, January to March 2016



How long were patients in the emergency department?

Variation in the percentage of patients who spend four hours or less in the ED

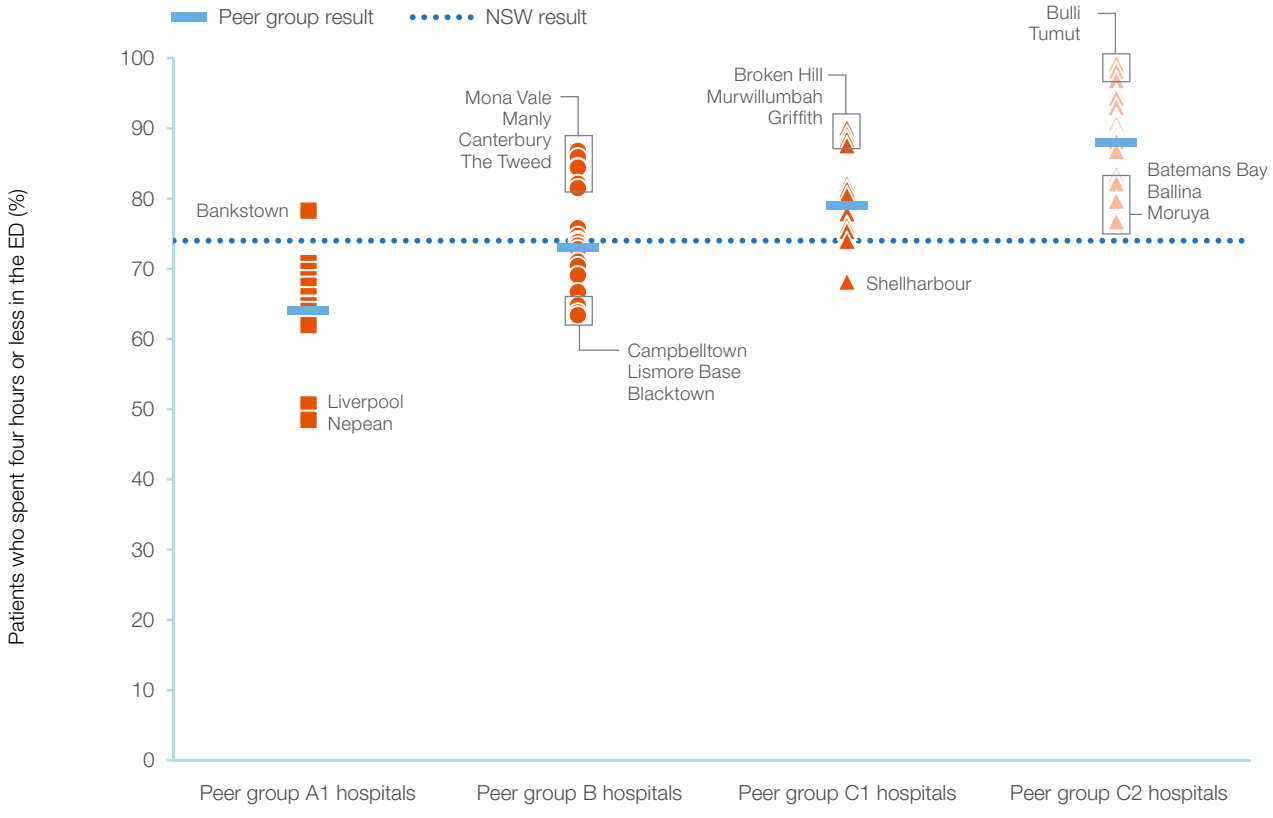
There is considerable variation between and within hospital peer groups in the percentage of patients who spent four hours or less in the ED. Peer group C2 hospitals have a higher percentage of patients who spent four hours or less in the ED compared with other peer group hospitals. Peer group A1 hospitals have a smaller percentage of patients who spent four hours or less in the ED (Figure 37).

Figure 38 maps hospital results for this quarter on two axes: the percentage of patients who spent four hours or less in the ED (Y-axis), and the percentage point change since the same quarter last year (X-axis).

For hospitals shown above the blue NSW line, a higher percentage of patients spent four hours or less in the ED, compared with the overall NSW result. For hospitals below this line, a lower percentage of patients spent four hours or less in the ED, compared with the overall NSW result. Hospitals shown to the left of the vertical '0' line had lower results, compared with the same quarter last year, while those shown to the right of the vertical line had higher results.

Hospitals in the upper right quadrant (Figure 38) achieved higher results than NSW overall, and an increase in percentage of patients who spent four hours or less in the ED, compared with the same quarter last year. Hospitals in the upper left quadrant had results that were higher than NSW and a decrease in the percentage of their patients who spent four hours or less in the ED.

Figure 37 Percentage of patients who spent four hours or less in the emergency department, by peer group, January to March 2016



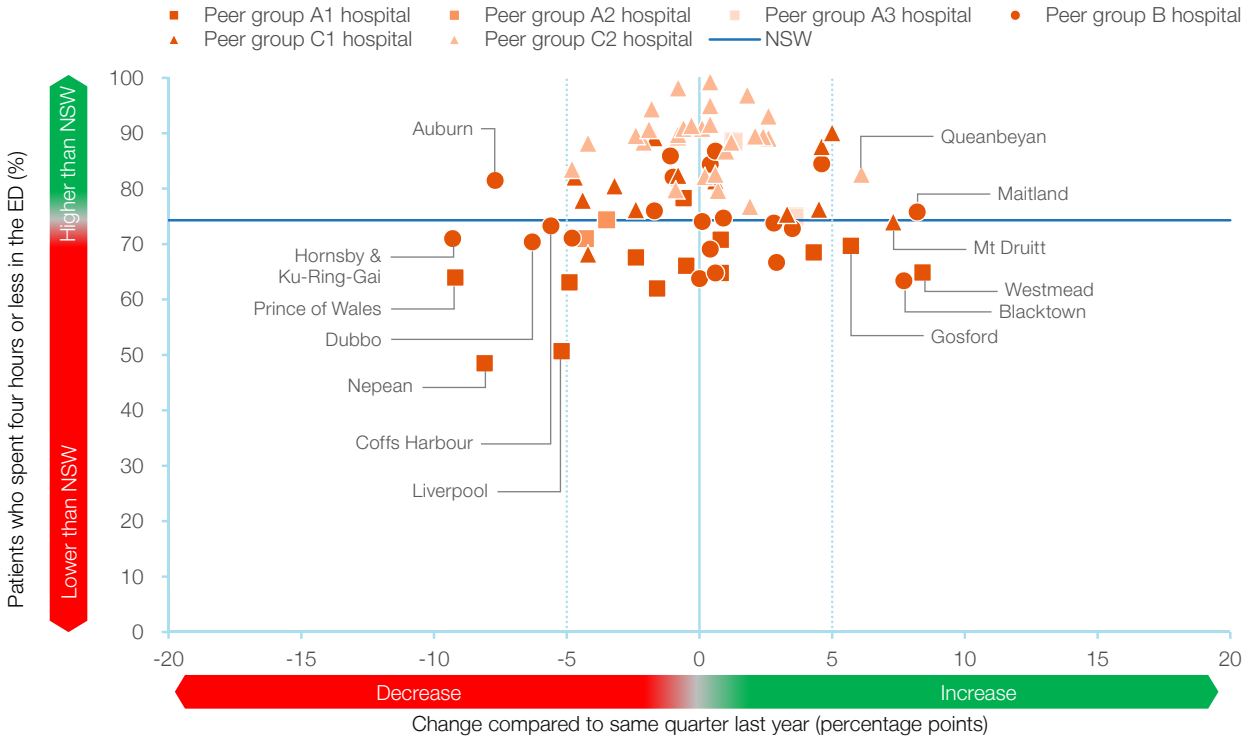
Hospitals in the lower right quadrant had results that were lower than NSW, and an increase in the percentage of their patients who spent four hours or less in the ED. Hospitals in the lower left quadrant had results that were lower than NSW and a decrease the percentage who spent four hours or less in the ED.

Hospitals identified in Figure 38 are those that had an increase or a decrease in the percentage of their patients who spent four hours or less in the ED of more than five percentage points compared with the same quarter last year.

Across hospitals, the percentage of patients who spent four hours or less in the ED increased in 42 out of 80 hospitals this quarter. For six hospitals, the increase was more than five percentage points (Figure 38).

The percentage of patients who spent four hours or less in the ED decreased in 37 hospitals. For seven hospitals, the decrease was more than five percentage points (Figure 38).

Figure 38 Percentage of patients who spent four hours or less in the emergency department, and percentage point change since same quarter last year, hospitals by peer group, January to March 2016



How long did patients spend in the emergency department?

Change over time in percentage of patients who spent four hours or less in the ED

Across hospital peer groups, there was a decrease this quarter in the percentage of patients in peer group A1 who spent four hours or less in the ED (64%; down one percentage point), no change for patients in peer group B (74%), and a one percentage point increase for patients in peer groups C1 and C2 (80% and 88%, respectively) compared with the same quarter last year (Figure 39).

There was a decrease in the percentage of patients who spent four hours or less in the ED in peer group A1 hospitals across all modes of separation, compared with the same quarter last year. Peer group B had an increase in the percentage who spent four hours or less in the ED across all modes of separation, with the exception of patients transferred to another hospital (down one percentage point) (Figure 40).

Over the past five years, peer group C1 and C2 hospitals have had a consistently higher percentage of patients who spent four hours or less in the ED compared with peer group A1 and B hospitals (Figure 40). The slight decrease seen over the past five years for peer group C2 hospitals is, in part, due to the addition of 14 new C2 hospitals to the *Hospital Quarterly* report since 2010.

Figure 39 Percentage of patients who spent four hours or less in the emergency department, by peer group, January 2011 to March 2016

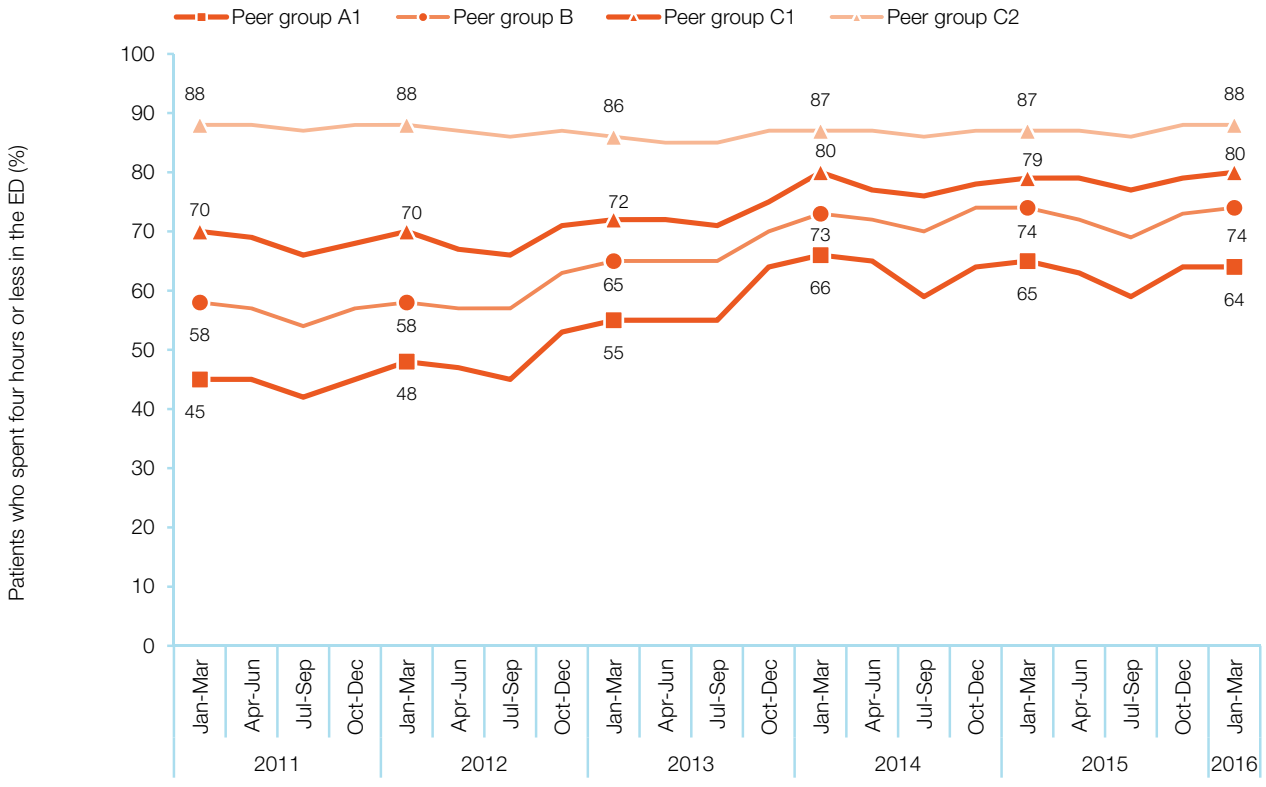
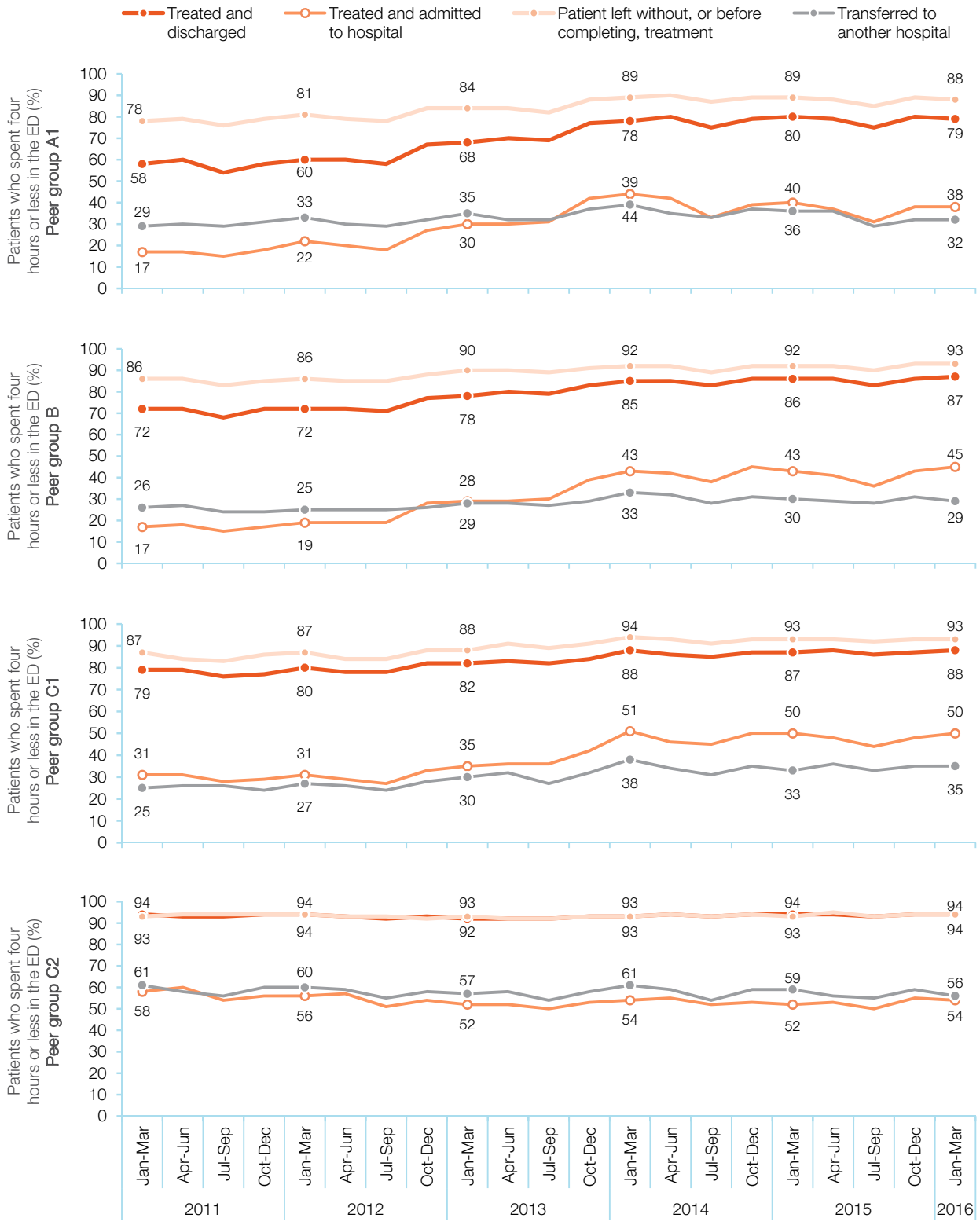


Figure 40

Percentage of patients who spent four hours or less in the emergency department, by mode of separation and peer group, January 2011 to March 2016



How many patients who arrived by ambulance had their care transferred within 30 minutes?

During the January to March 2016 quarter, 142,922 patients arrived at NSW EDs by ambulance (down less than 1% compared with the same quarter last year). This quarter, 127,339 patient records (matched between ambulance service and ED records) were used to calculate transfer of care time (Figure 41).

The median transfer of care time from ambulance to ED staff (12 minutes) was unchanged this quarter and the 95th percentile transfer of care time (42 minutes) was 10 minutes shorter compared with the same quarter last year (Figure 41).

In NSW, transfer of care, from ambulance to ED staff, should have occurred within 30 minutes for 90% of patients. This quarter, 91% of patients arriving by ambulance had their care transferred within 30 minutes; four percentage points higher than in the same quarter last year (Figure 42).

Figure 43 shows variation between and within hospital peer groups in the percentage of patients who had their care transferred within 30 minutes this quarter.

In Hospital Quarterly, January to March 2016, transfer of care data has been included for four additional hospitals where data were previously unavailable. Results for transfer of care in previous issues of Hospital Quarterly therefore cannot be compared with Hospital Quarterly, January to March 2016, onwards.

For more information refer to the technical supplements section of the BHI website at **bhi.nsw.gov.au**

Figure 41 Emergency department transfer of care time, January to March 2016

		Same quarter last year	Change since one year ago
Arrivals used to calculate transfer of care time: 127,339 patients		124,825 patients	2%
ED transfer of care time			
Median time	12m	12m	0m
95th percentile time	42m	52m	-10m

Figure 42 Percentage of ambulance arrivals with transfer of care time within 30 minutes, April 2013 to March 2016

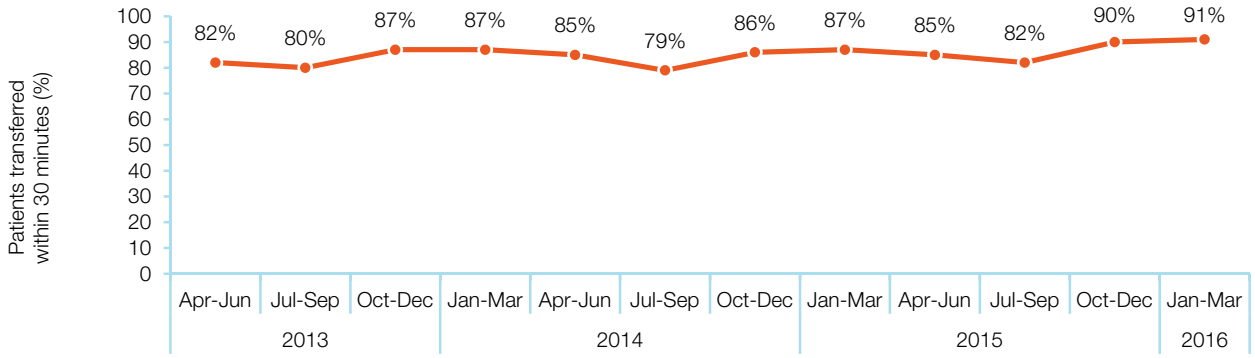
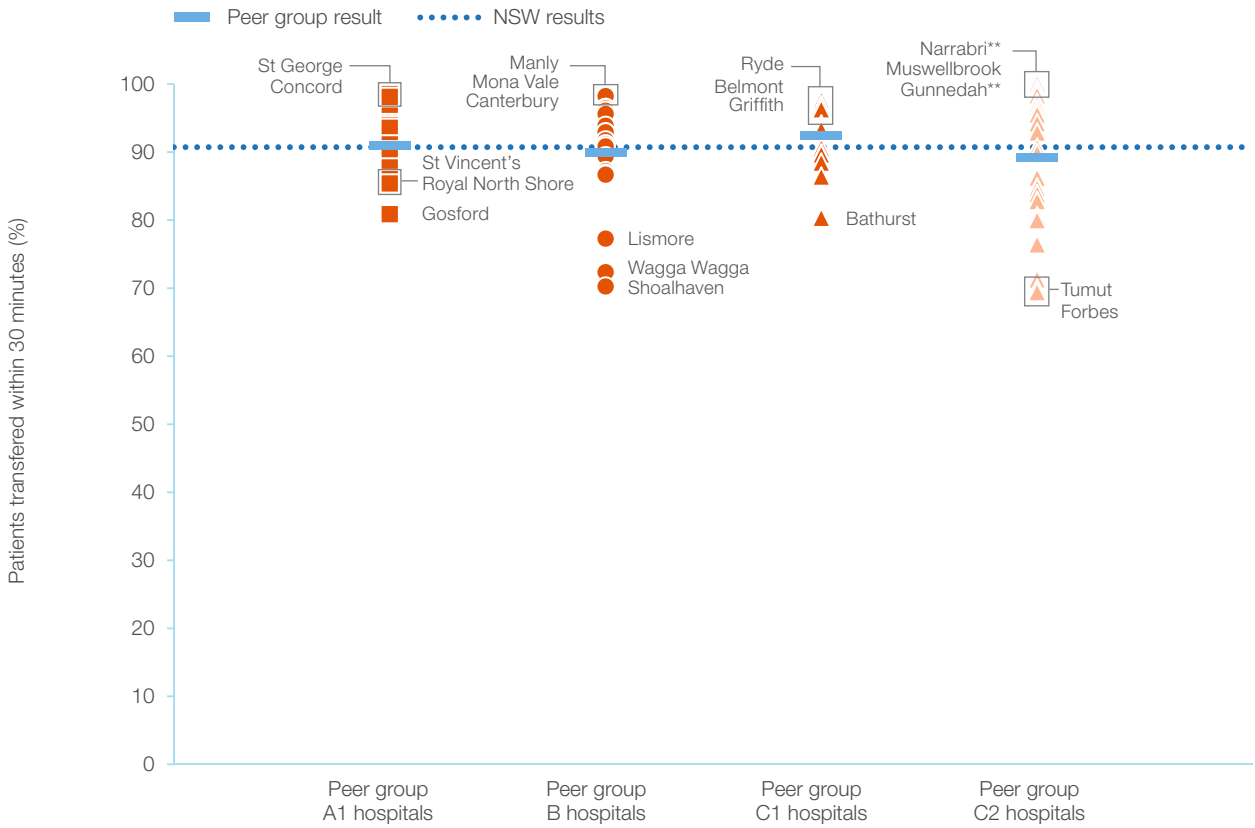


Figure 43 Percentage of ambulance arrivals whose care was transferred within 30 minutes, by peer group, January to March 2016



(**) Use caution when interpreting these results – more than 30% of total records where transfer of care cannot be calculated.

How long did patients wait for elective surgery?

During the January to March 2016 quarter, the median waiting time for urgent surgery was 10 days (Figure 44). This has remained largely unchanged in the same quarter over the past five years (Figure 45). The median waiting time for semi-urgent surgery (47 days) decreased by one day compared with the same quarter last year, while the median waiting time for non-urgent surgery (229 days) increased by four days (Figure 44).

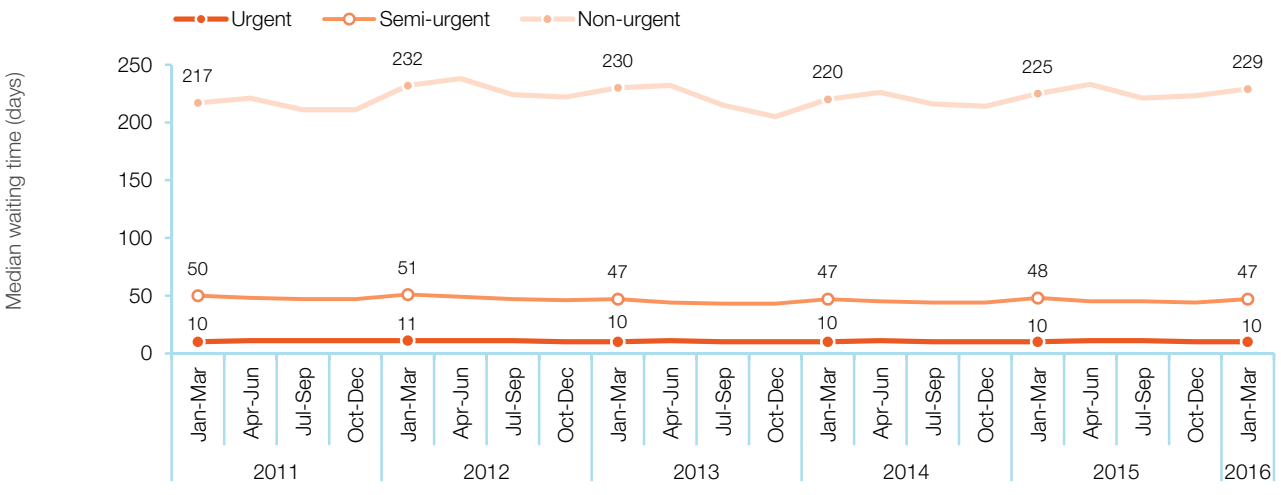
Compared with the same quarter in 2011, the median waiting time for semi-urgent surgery has decreased by three days and the median waiting time for non-urgent surgery has increased by 12 days (Figure 45).

There has been a downward trend in the 90th percentile waiting times for elective surgery across all urgency categories since the January to March 2011 quarter (Figure 46).

Figure 44 **Waiting times for elective surgery, by urgency category, January to March 2016**

		Same quarter last year	Change since one year ago
Urgent: 10,300 patients			
Median time to receive surgery	10 days	10 days	unchanged
90th percentile time to receive surgery	26 days	25 days	1 day
Semi-urgent: 15,444 patients			
Median time to receive surgery	47 days	48 days	-1 day
90th percentile time to receive surgery	84 days	84 days	unchanged
Non-urgent: 20,782 patients			
Median time to receive surgery	229 days	225 days	4 days
90th percentile time to receive surgery	356 days	356 days	unchanged

Figure 45 **Median waiting time for elective surgery, by urgency category, January 2011 to March 2016**



Compared with the same quarter in 2011, the largest decrease in the 90th percentile waiting time for elective surgery was for procedures categorised as semi-urgent (11 days less) (Figure 46).

Figure 47 shows the percentage of elective surgery completed by day and urgency category. The lines drawn at 30 days, 90 days and 365 days represent the recommended times for patients to receive surgery in each urgency category.

Figure 46 90th percentile waiting time for elective surgery, by urgency category, January 2011 to March 2016

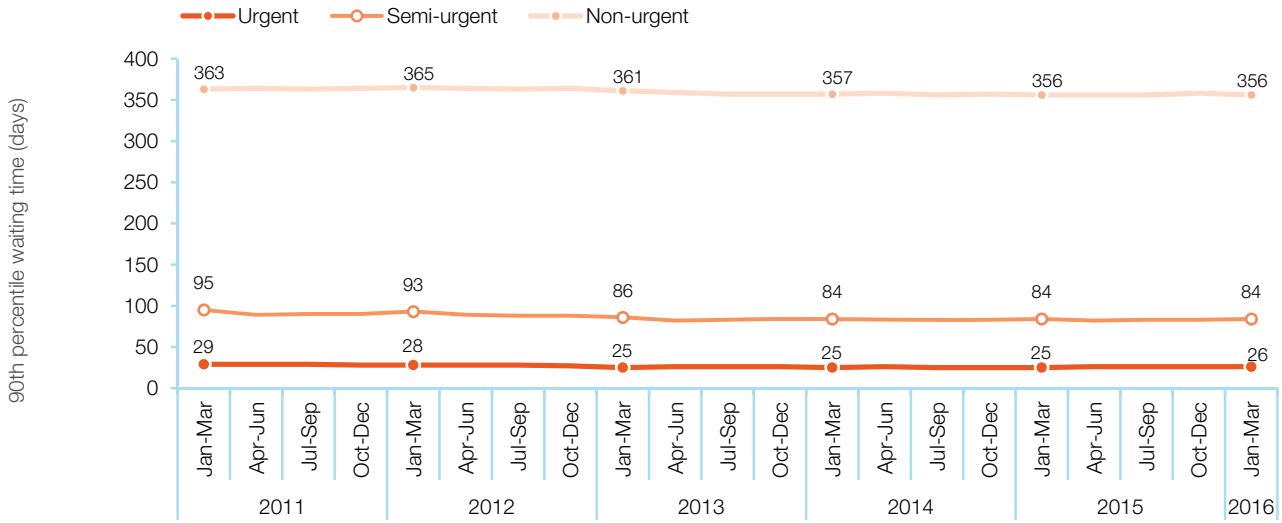
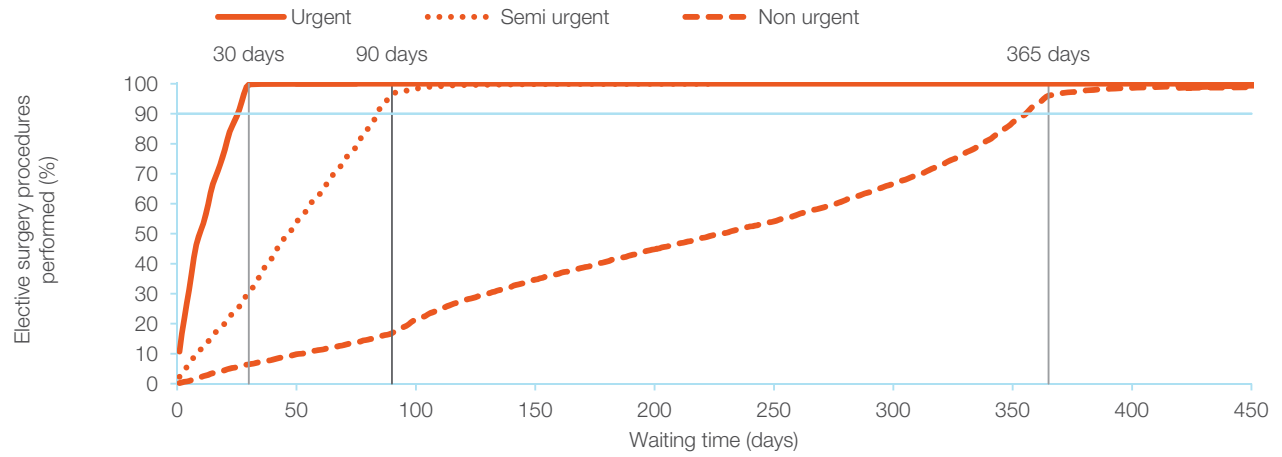


Figure 47 Cumulative percentage of elective surgery completed by day and urgency category, January to March 2016



How long did patients wait for elective surgery?

Variations in waiting times for elective surgery

During the January to March 2016 quarter, there was variation between and within hospital peer groups in the 90th percentile waiting times for elective surgery. This variation was most marked for patients requiring non-urgent surgery (Figure 48).

Across most specialty groups, median waiting times increased or remained unchanged this quarter, compared with the same quarter last year, with the exception of general surgery and urology (decreased by one and two days, respectively). Median waiting times ranged from 18 days for medical surgery to 223 days for ophthalmological surgery (Figure 49).

Across common surgical procedures, septoplasty (328 days), myringoplasty/tympanoplasty (308 days), and total knee replacement (301 days) had the longest median waiting times this quarter. Other–general (26 days), coronary artery bypass graft (28 days), and cystoscopy (30 days) had the shortest median waiting times (Figure 50).

Due to the large amount of information presented, individual facilities are not identified in Figure 48. This information is available in Healthcare Observer.

Figure 48 90th percentile waiting time for elective surgery, by urgency category and peer group, January to March 2016

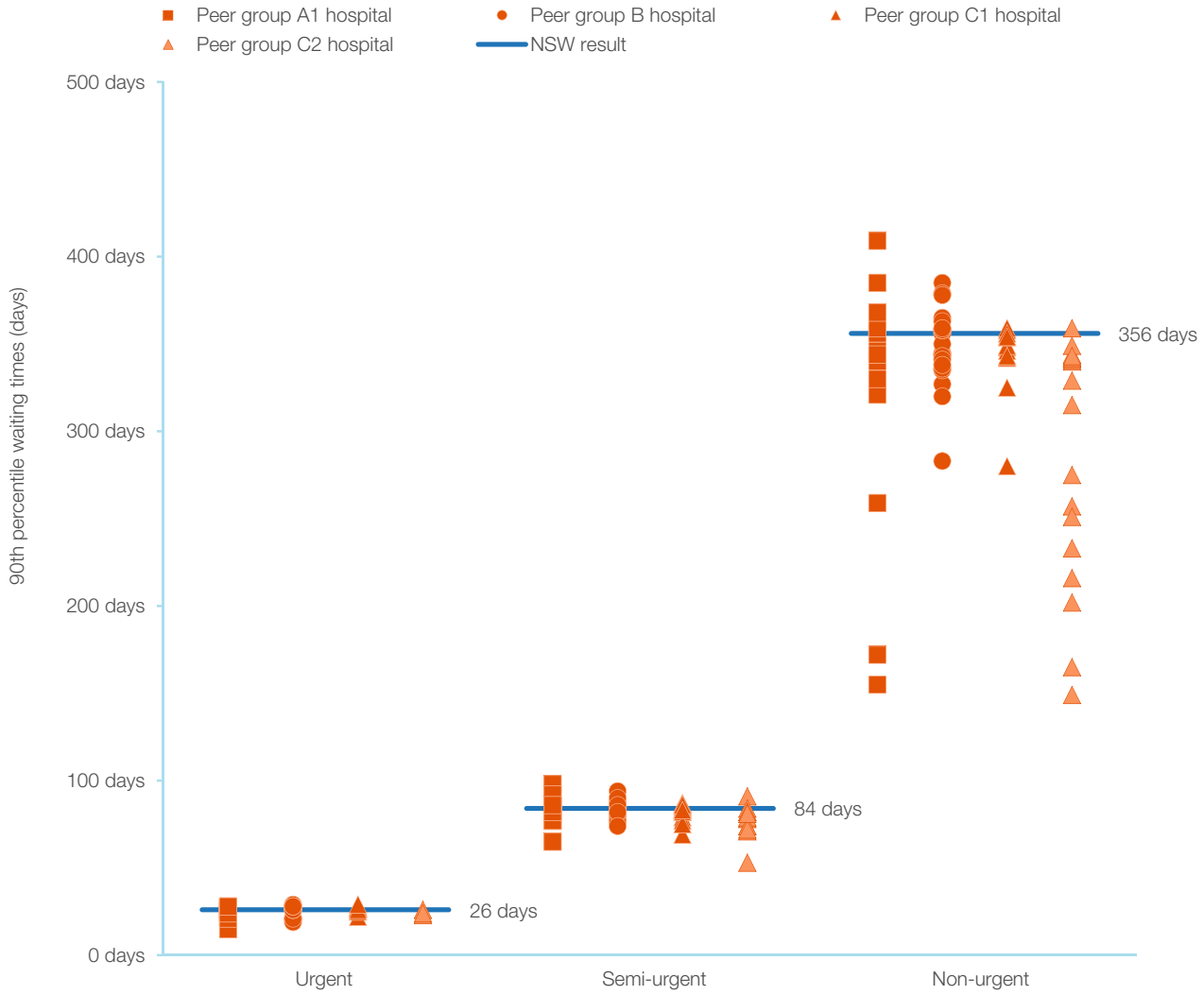


Figure 49

Median waiting time for patients who received elective surgery, by specialty, January to March 2016

	Number of procedures	This quarter	Same quarter last year	Change since one year ago
General surgery	12,581	40 days	41 days	-1 day
Orthopaedic surgery	7,687	142 days	142 days	unchanged
Urology	6,554	39 days	41 days	-2 days
Ophthalmology	6,461	223 days	205 days	18 days
Gynaecology	6,222	41 days	40 days	1 day
Ear, nose and throat surgery	3,786	183 days	176 days	7 days
Plastic surgery	2,085	42 days	41 days	1 day
Vascular surgery	1,442	22 days	21 days	1 day
Neurosurgery	1,027	55 days	43 days	12 days
Cardiothoracic surgery	907	27 days	27 days	unchanged
Medical	401	18 days	14 days	4 days

Figure 50

Median waiting time for patients who received elective surgery, by common procedure, January to March 2016

	Number of procedures	This quarter	Same quarter last year	Change since one year ago
Cataract extraction	5,151	253 days	232 days	21 days
Cystoscopy	2,951	30 days	32 days	-2 days
Hysteroscopy	1,992	36 days	32 days	4 days
Other–general	1,550	26 days	24 days	2 days
Cholecystectomy	1,482	62 days	62 days	unchanged
Total knee replacement	1,442	301 days	297 days	4 days
Inguinal herniorrhaphy	1,373	76 days	79 days	-3 days
Tonsillectomy	1,253	277 days	266 days	11 days
Total hip replacement	835	221 days	238 days	-17 days
Prostatectomy	594	76 days	76 days	unchanged
Abdominal hysterectomy	530	64 days	72 days	-8 days
Septoplasty	366	328 days	320 days	8 days
Varicose veins stripping and ligation	314	135 days	162 days	-27 days
Haemorrhoidectomy	277	76 days	71 days	5 days
Coronary artery bypass graft	173	28 days	42 days	-14 days
Myringoplasty/Tympanoplasty	92	308 days	329 days	-21 days
Myringotomy	51	70 days	78 days	-8 days

How long did patients wait for elective surgery?

Percentage of elective surgery performed on time

Most elective surgical procedures (97%) were performed on time this quarter – 100% of urgent surgery, 97% of semi-urgent surgery and 96% of non-urgent surgery (Figure 51). These results have been largely stable for all urgency categories in the same quarter over the past three years (Figure 52).

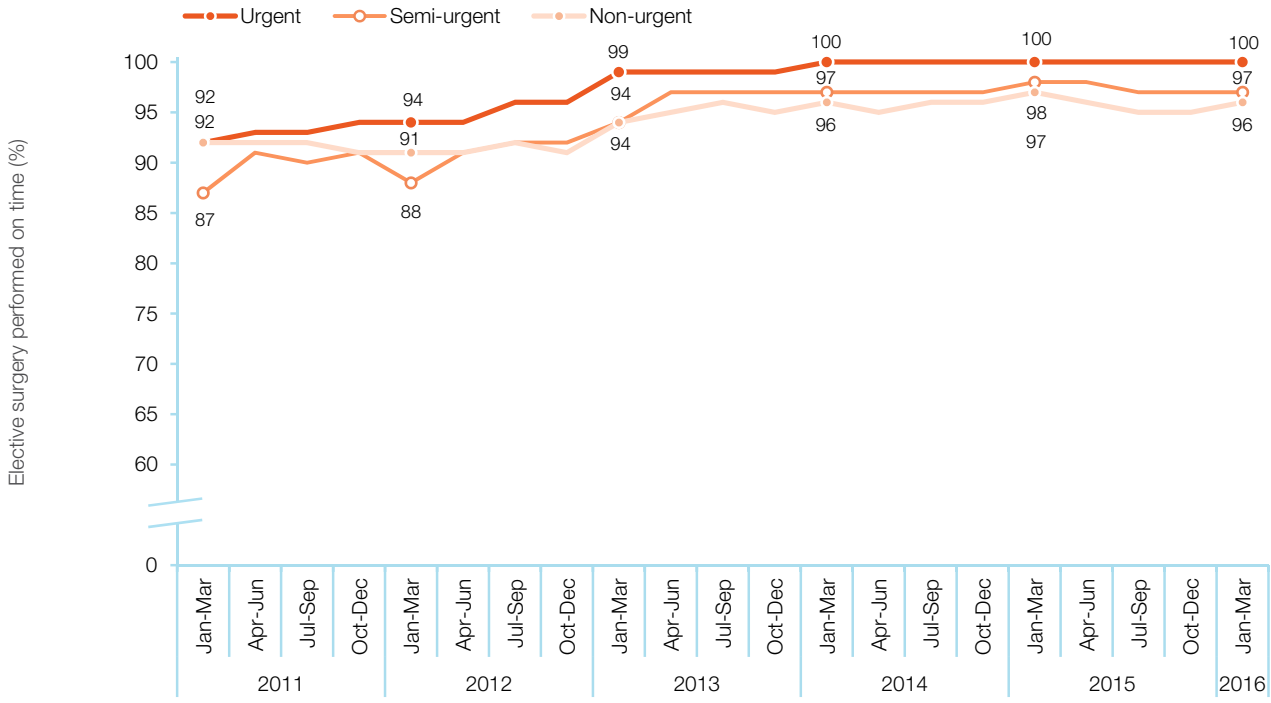
Figure 53 maps hospital results for this quarter on two axes: the percentage of elective surgery performed on time (Y-axis), and the percentage point change since the same quarter last year (X-axis).

For hospitals shown above the blue NSW line, a higher percentage of surgery was performed on time this quarter compared with the overall NSW result. For hospitals below this line, a lower percentage of surgery was performed on time this quarter compared with the overall NSW result. Hospitals shown to the left of the vertical '0' line had lower results, compared with the same quarter last year, while those shown to the right of the vertical line had higher results.

Figure 51 Percentage of elective surgical procedures performed on time, by urgency, January to March 2016

		Same quarter last year	Percentage point change since one year ago
All elective surgery	97%	98%	-1
Urgent	Recommended: 30 days 100%	100%	unchanged
Semi-urgent	Recommended: 90 days 97%	98%	-1
Non-urgent	Recommended: 365 days 96%	97%	-1

Figure 52 Percentage of elective surgical procedures performed on time, by urgency, January 2011 to March 2016



Hospitals in the upper right quadrant of Figure 53 have achieved higher results than NSW overall, and an increase in the percentage of elective surgery performed on time this quarter, compared with the same quarter last year. Hospitals in the upper left quadrant achieved results higher than NSW this quarter and a decrease in the percentage of elective surgery performed on time, compared with the same quarter last year.

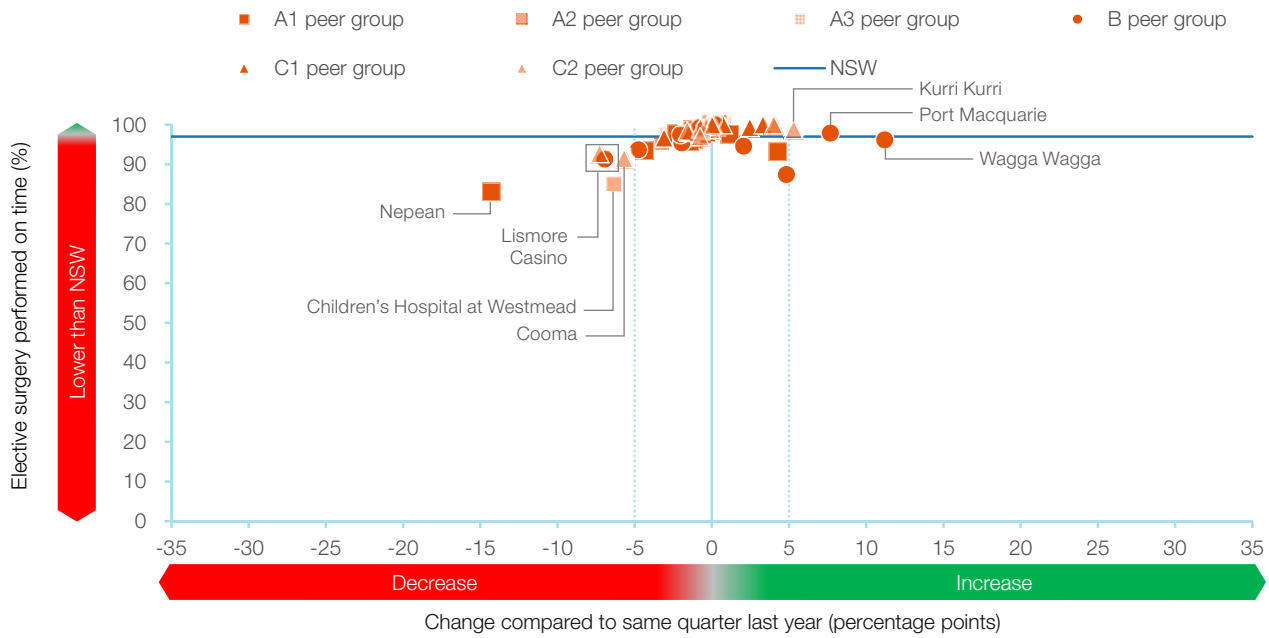
Hospitals in the lower right quadrant had results that were lower than NSW overall, and an increase in the percentage of elective surgery performed on time this quarter, compared with the same quarter last year. Hospitals in the lower left quadrant had results that were lower than NSW and a decrease in the percentage of elective surgery performed on time, compared with the same quarter last year.

Hospitals identified in Figure 53 are those that had an increase or a decrease in the percentage of of elective surgery performed on time this quarter of more than five percentage points, compared with the same quarter last year.

Across hospitals, the percentage of elective surgery performed on time increased in 18 out of 81 hospitals. For three hospitals, the increase was more than five percentage points. Of these, for one hospital, the increase was more than 10 percentage points (Figure 53).

The percentage of elective surgery performed on time decreased in 31 hospitals. For five hospitals, the decrease was more than five percentage points. Of these, for one hospital, the decrease was more than 10 percentage points (Figure 53).

Figure 53 Percentage of elective surgery performed on time and percentage point change since same quarter last year, hospitals by peer group, January to March 2016



How long did patients wait for elective surgery?

Percentage of elective surgery performed on time by specialty

The percentage of elective surgical procedures performed on time reached almost 100% this quarter across several specialty groups.

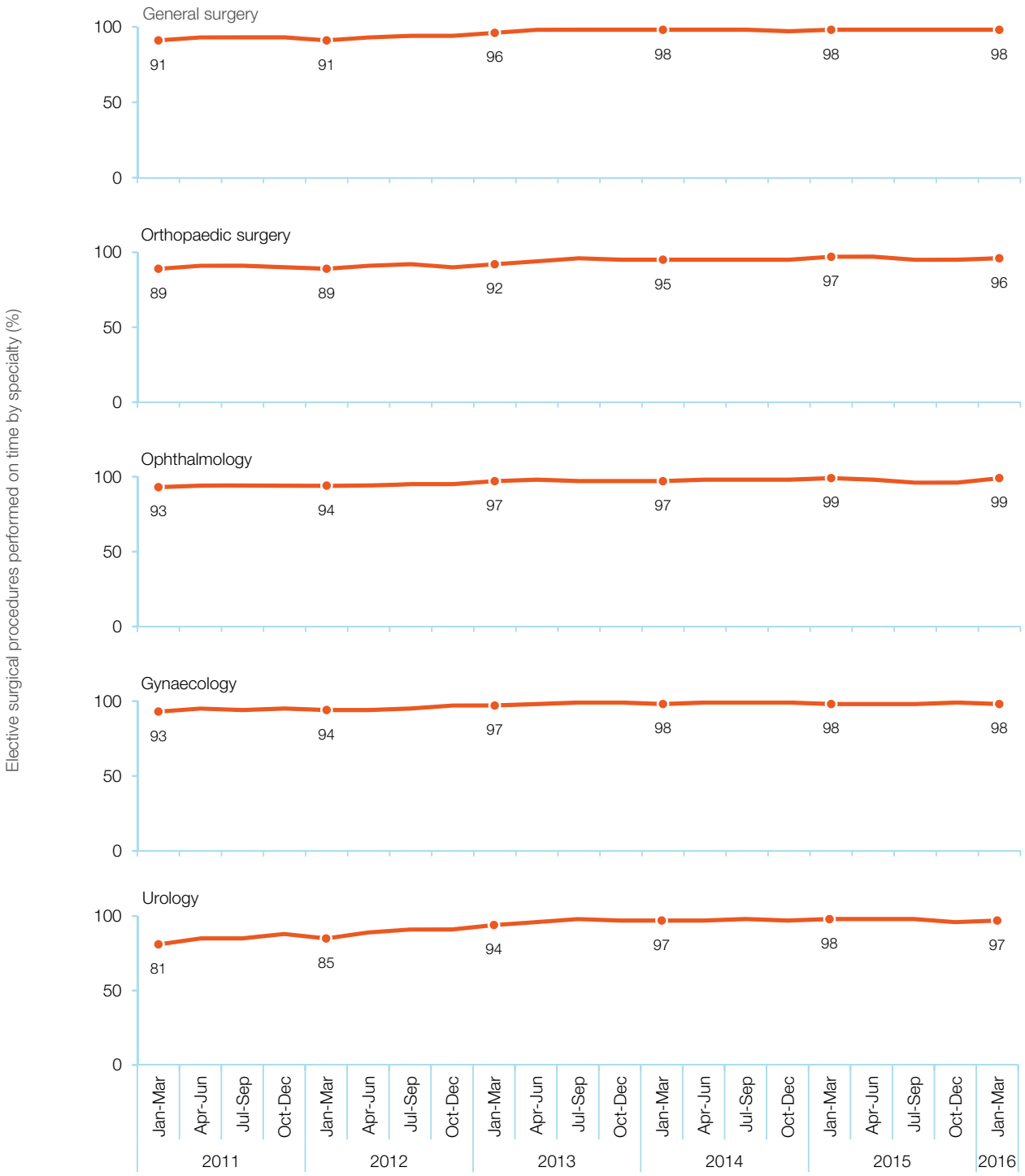
Ophthalmological surgery and medical surgery had the highest percentage of patients who received surgery on time this quarter (both 99%). Ear, nose and throat surgery (92%), orthopaedic and cardiothoracic surgery (both 96%) had the lowest (Figure 54).

Figure 55 shows change over the past five years in the percentage of elective surgery performed on time for the five highest volume surgical specialty groups. Urology has seen the largest (16 percentage points) increase in the percentage of elective surgery completed within recommended timeframes since January to March 2011.

Figure 54 Percentage of elective surgery performed on time, by specialty, January to March 2016

	Number of procedures	Percentage on time	Same quarter last year	Percentage point change since one year ago
General surgery	12,581	98%	98%	unchanged
Orthopaedic surgery	7,687	96%	97%	-1
Urology	6,554	97%	98%	-1
Ophthalmology	6,461	99%	99%	unchanged
Gynaecology	6,222	98%	98%	unchanged
Ear, nose and throat surgery	3,786	92%	95%	-3
Plastic surgery	2,085	97%	98%	-1
Vascular surgery	1,442	98%	99%	-1
Neurosurgery	1,027	97%	99%	-2
Cardiothoracic surgery	907	96%	99%	-3
Medical	401	99%	100%	-1

Figure 55 Percentage of elective surgery performed on time, by specialty, January 2011 to March 2016



How long did patients wait for elective surgery?

Percentage of elective surgery performed on time by common procedure

The percentage of elective surgical procedures performed on time reached almost 100% this quarter across several common procedures.

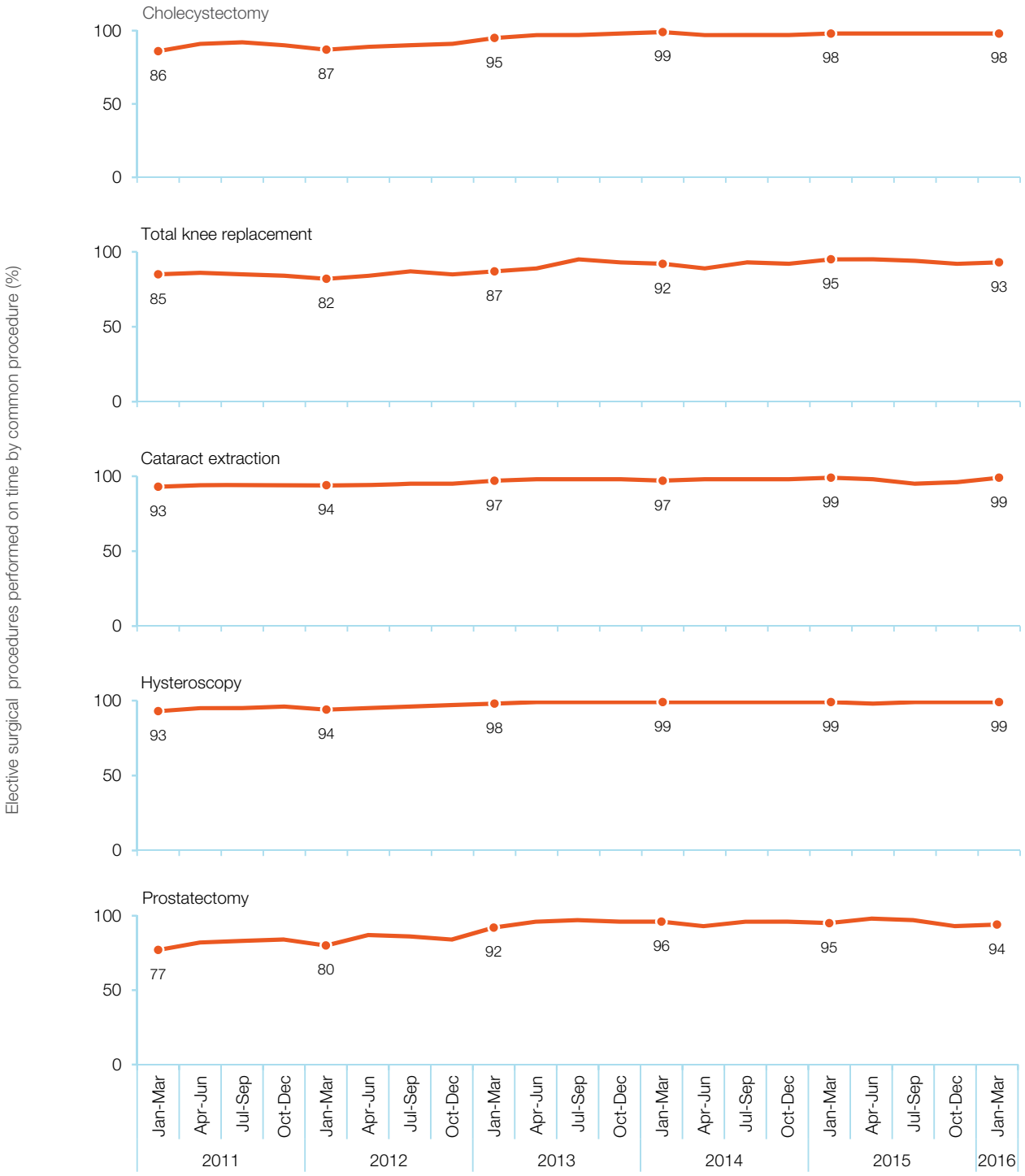
Cataract extraction and hysteroscopy (both 99%) had the highest percentage of patients who received surgery on time this quarter, while myringoplasty/ tympanoplasty (83%) and septoplasty (90%) had the lowest. With the exception of other-general, total hip replacement and varicose vein stripping and ligation (all up one percentage point), the percentage of procedures performed on time either remained unchanged or decreased this quarter compared with the same quarter last year (Figure 56).

Figure 57 shows change over the past five years in the percentage of surgery performed on time across key common procedures in five of the highest volume specialties. Since the same quarter in 2011, prostatectomy and cholecystectomy have seen the largest increase in the percentage of on-time surgery (17 and 12 percentage point increase, respectively).

Figure 56 Percentage of elective surgery performed on time, by common procedure, January to March 2016

	Number of procedures	Percentage on time	Same quarter last year	Percentage point change since one year ago
Cataract extraction	5,151	99%	99%	unchanged
Cystoscopy	2,951	97%	98%	-1
Hysteroscopy	1,992	99%	99%	unchanged
Other–general	1,550	98%	97%	1
Cholecystectomy	1,482	98%	98%	unchanged
Total knee replacement	1,442	93%	95%	-2
Inguinal herniorrhaphy	1,373	97%	98%	-1
Tonsillectomy	1,253	92%	94%	-2
Total hip replacement	835	96%	95%	1
Prostatectomy	594	94%	95%	-1
Abdominal hysterectomy	530	96%	97%	-1
Septoplasty	366	90%	95%	-5
Varicose veins stripping and ligation	314	96%	95%	1
Haemorrhoidectomy	277	95%	99%	-4
Coronary artery bypass graft	173	97%	99%	-2
Myringoplasty/Tympanoplasty	92	83%	93%	-10
Myringotomy	51	98%	100%	-2

Figure 57 Percentage of elective surgery performed on time, by common procedure, January 2011 to March 2016



Terms and classifications

Table 4 Terms and classifications used in the report

Emergency departments	
All presentations	All emergency and non-emergency attendances at the emergency department (ED).
Emergency presentations	All presentations that have a triage category and are coded as emergency presentations or unplanned return visits or disaster.
Presentation time	Presentation time is the earliest time recorded of the patient being in the ED and the earlier of the following fields in the emergency visit database of the Health Information Exchange (HIE): **Arrival time:** the date and time the patient presented at the ED **Triage time:** the date and time when the patient was assessed by a triage nurse. Times to starting treatment and times to leaving the ED are both measured starting from presentation time.
Treatment time	Treatment time is the earlier of the following fields in the ED visit database of the HIE: **First seen by clinician time:** the date and time when the patient is first seen by a medical officer and has a physical examination / treatment performed that is relevant to their presenting problem(s) **First seen by nurse time:** the date and time when the patient is first seen by a nurse and has an assessment/treatment performed that is relevant to their presenting problem(s). Some patients are excluded from ED treatment time measures due to calculation requirements.
Percentage of patients whose treatment started on time	The percentage of patients whose treatment started on time is calculated as the percentage of patients with waiting times, from presentation, less than or equal to the clinically recommended maximum waiting time in as per the Australasian Triage Scale: **Triage category 2:** Emergency 10 minutes **Triage category 3:** Urgent 30 minutes **Triage category 4:** Semi-urgent 60 minutes **Triage category 5:** Non-urgent 120 minutes Note: Triage 1 patients are the most urgent and are almost all treated within two minutes. Clinicians treating them are focused on providing immediate and essential care, rather than recording times, therefore times to start treatment are generally not reported
Median time patients waited to start treatment	The time from presentation by which half of patients had their treatment started. The other half of patients took equal to or longer than this time.
95th percentile time patients waited to start treatment	The time from presentation by which 95% of patients had their treatment started. The final 5% of patients took equal to or longer than this time.
Departure time	BHI has revised the definition used for calculating the time spent in the ED in line with the definition of the Commonwealth National Emergency Access Target (NEAT). Departure time is defined as follows: For patients who were treated and discharged, departure time is the time when treatment was completed. For all other patients, departure time is the time when the patient actually left the ED.
Median time spent in the ED	The time half the patients spent in the ED. The other half of patients spent equal to or longer than this time. The median time patients spent in the ED is calculated from all ED presentations with a valid departure time.
95th percentile time spent in the ED	The time 95% of patients spent in the ED. The remaining 5% spent equal to or longer than this time. The 95th percentile time patients spent in the ED is calculated from all ED presentations with a valid departure time.

Table 4 Terms and classifications used in the report (cont)

Emergency departments	
Mode of separation	ED presentations by mode of separation includes all presentations at the ED that have a departure time recorded.
Percentage of patients who spent four hours or less in the ED	The percentage of patients who spent four hours or less in the ED is calculated from all ED presentations with a valid time to departing the ED. The percentage of patients who spent four hours or less in the ED reported in *Hospital Quarterly* is not directly comparable to figures reported by the NSW Ministry of Health or the Commonwealth due to slight differences in definitions, period of reporting and the number of hospitals included. Revision of departure time definition, together with the inclusion of 14 additional EDs in this issue of *Hospital Quarterly* has resulted in a two percentage point increase in the percentage of patients who spent four hours or less in the ED than would have otherwise been reported this quarter. For more information visit bhi.nsw.gov.au
Transfer of care time	The period between arrival of patients at the ED by ambulance and transfer of responsibility for their care from paramedics to ED staff in an ED treatment zone. Transfer of care time is calculated for records that can be matched between the ED and ambulance information systems. This report includes transfer of care times for matched records only.
Triage category	A classification system based on how urgent the patient's need is for treatment: **Triage category 1:** Resuscitation (for example, cardiac arrest) **Triage category 2:** Emergency (for example, chest pain, severe burns) **Triage category 3:** Urgent (for example, moderate blood loss, dehydration) **Triage category 4:** Semi-urgent (for example, sprained ankle, earache) **Triage category 5:** Non-urgent (for example, small cuts, abrasions).

Hospital admissions	
Episode of care	A period of care in a hospital or other healthcare facility with a defined start and end. When a person is admitted to hospital they begin what is termed an admitted patient episode or 'episode of care'. Acute episodes are typically short-term admissions for immediate care or treatment. Non-acute episodes include admissions for rehabilitation, palliative care and other non-acute reasons. Patients can have more than one episode of care during the same hospital admission. For example, a patient may begin with acute care and then change to rehabilitation or palliative care.
Stay type	Admitted patient episodes can be for 'same-day' or 'overnight' care. Same-day refers to patients who are admitted and discharged on the same day. Overnight refers to patients who spend at least one night in hospital. Admitted patient episodes can be either 'planned' or 'unplanned'. Planned refers to admissions that are arranged in advance (for example, patients who are admitted for planned elective surgery). Unplanned refers to emergency admissions (for example, for unplanned surgical patients).
Average length of stay	The total number of days in hospital for all admitted patient episodes (including same-day and overnight patients) divided by the total number of admitted patient episodes. The average length of stay is usually measured from midnight.
Bed days	Bed days are calculated for all admitted patient episodes completed during the reference period. Total acute bed days is the sum of bed days for all acute episodes with an episode end date within the defined period. Total acute bed days for an overnight episode is the difference, in days, between the episode start date and the episode end date, minus the number of episode leave days recorded. Same-day episodes count as one bed day.

Terms and classifications

Table 4 Terms and classifications used in the report (cont)

Elective surgery	
Common procedure	Commonly performed elective surgery procedures.
Specialty	The area of clinical expertise held by the doctor who performed the surgery. Medical (specialty) refers to any surgery performed by a non-specialist medical practitioner.
Median waiting time	The number of days by which half of patients received surgery. The other half took equal to or longer than this time.
90th percentile waiting time	The number of days by which 90% of patients received surgery. The remaining 10% took equal to or longer than this time.
Urgency category	A classification system based on how urgent the patient's need for surgery is: **Urgent surgery**: Admission within 30 days is desirable for a condition that has potential to deteriorate quickly and become an emergency **Semi-urgent surgery**: Admission within 90 days is desirable for a condition unlikely to deteriorate quickly **Non-urgent surgery**: Admission within 365 days acceptable for a condition unlikely to deteriorate quickly.
Staged surgery	Surgery that, for medical reasons, cannot take place before a certain amount of time has elapsed. BHI uses this term to define all patients that could be identified as being a staged patient for most of their time on the waiting list and all non-urgent cystoscopy patients. Because of differences in how hospitals have historically coded cystoscopy, BHI includes all non-urgent cystoscopy in the staged surgery category for measures of surgical activity.
Elective surgery waiting list	Patients ready for elective surgery and on the waiting list excludes those waiting for staged procedures. Patients ready for non-urgent surgery on the waiting list also excludes those waiting for non-urgent cystoscopy. Patients not ready for surgery on the waiting list includes those waiting for staged procedures, non-urgent cystoscopy, and patients currently not available for personal reasons. The time a patient waited for the initial appointment with a specialist is not included in the time a patient spent on the waiting list for elective surgery.

Appendix tables

These tables present activity and performance measures for individual hospitals from principal referral (peer group A1), paediatric specialist hospitals (peer group A2), ungrouped acute – tertiary referral hospitals (peer group A3), major hospitals (peer group B), district group 1 (peer group C1) and district group 2 hospitals (peer group C2). Information for smaller hospitals is presented under the category 'Other'.

Hospital admissions

Appendix tables 1 and 2 present hospital admission activity measures for public hospitals in NSW for this quarter, by local health district (LHD) and hospital peer group.

Download appendix tables by LHD

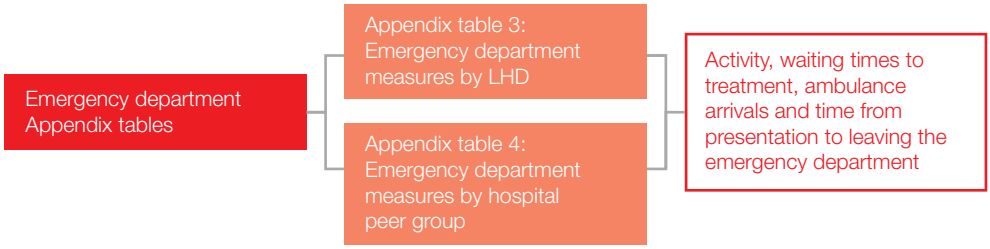
Download appendix tables by hospital peer group

Emergency departments

Appendix tables 3 and 4 present emergency department activity and performance measures for public hospitals in NSW for this quarter, by LHD and hospital peer group.

Download appendix tables by LHD

Download appendix tables by hospital peer group

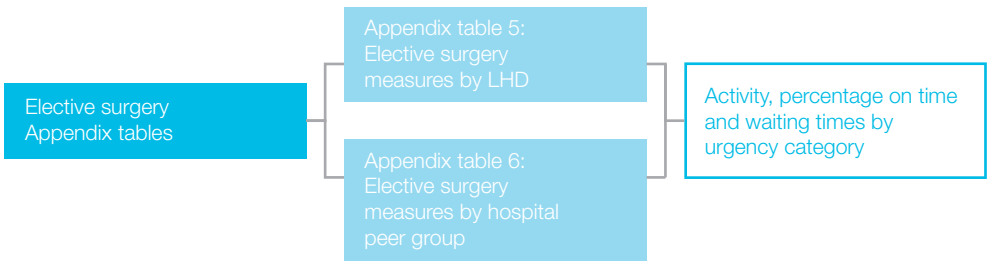


Elective surgery

Appendix tables 5 and 6 present elective surgery activity and performance measures for public hospitals in NSW for this quarter, by LHD and hospital peer group.

Download appendix tables by LHD

Download appendix tables by hospital peer group



Index of hospitals by local health district and hospital peer group

Hospital name	Local health district	Hospital peer group
Armidale and New England Hospital	Hunter New England	C1
Auburn Hospital	Western Sydney	B
Ballina District Hospital	Northern NSW	C2
Bankstown/Lidcombe Hospital	South Western Sydney	A1
Bateman's Bay District Hospital	Southern NSW	C2
Bathurst Base Hospital	Western NSW	C1
Bega District Hospital	Southern NSW	C1
Bellinger River District Hospital	Mid North Coast	C2
Belmont Hospital	Hunter New England	C1
Blacktown Hospital	Western Sydney	B
Blue Mountains District Anzac Memorial Hospital	Nepean Blue Mountains	C2
Bowral and District Hospital	South Western Sydney	C1
Broken Hill Base Hospital	Far West	C1
Bulli District Hospital	Illawarra Shoalhaven	C2
Calvary Mater Newcastle	Hunter New England	A3
Camden Hospital	South Western Sydney	C2
Campbelltown Hospital	South Western Sydney	B
Canterbury Hospital	Sydney	B
Casino and District Memorial Hospital	Northern NSW	C2
Cessnock District Hospital	Hunter New England	C2
Coffs Harbour Base Hospital	Mid North Coast	B
Concord Hospital	Sydney	A1
Cooma Health Service	Southern NSW	C2
Cowra District Hospital	Western NSW	C2
Deniliquin Health Service	Murrumbidgee	C2
Dubbo Base Hospital	Western NSW	B
Fairfield Hospital	South Western Sydney	B
Forbes District Hospital	Western NSW	C2
Gosford Hospital	Central Coast	A1
Goulburn Base Hospital	Southern NSW	C1
Grafton Base Hospital	Northern NSW	C1
Griffith Base Hospital	Murrumbidgee	C1
Gunnedah District Hospital	Hunter New England	C2
Hawkesbury District Health Services (public hospital services only)	Nepean Blue Mountains	C1
Hornsby and Ku-Ring-Gai Hospital	Northern Sydney	B
Inverell District Hospital	Hunter New England	C2
John Hunter Hospital	Hunter New England	A1
Kempsey Hospital	Mid North Coast	C2
Kurri Kurri District Hospital	Hunter New England	C2
Lismore Base Hospital	Northern NSW	B
Lithgow Health Service	Nepean Blue Mountains	C2
Liverpool Hospital	South Western Sydney	A1
Macksville District Hospital	Mid North Coast	C2
Maclean District Hospital	Northern NSW	C2

Hospital name	Local health district	Hospital peer group
Maitland Hospital	Hunter New England	B
Manly District Hospital	Northern Sydney	B
Manning Base Hospital	Hunter New England	B
Milton and Ulladulla Hospital	Illawarra Shoalhaven	C2
Mona Vale and District Hospital	Northern Sydney	B
Moree District Hospital	Hunter New England	C2
Moruya District Hospital	Southern NSW	C2
Mount Druitt Hospital	Western Sydney	C1
Mudgee District Hospital	Western NSW	C2
Murwillumbah District Hospital	Northern NSW	C1
Muswellbrook District Hospital	Hunter New England	C2
Narrabri District Hospital	Hunter New England	C2
Nepean Hospital	Nepean Blue Mountains	A1
Orange Health Service	Western NSW	B
Parkes District Hospital	Western NSW	C2
Port Macquarie Base Hospital	Mid North Coast	B
Prince of Wales Hospital	South Eastern Sydney	A1
Queanbeyan Health Service	Southern NSW	C2
Royal Hospital for Women	South Eastern Sydney	A3
Royal North Shore Hospital	Northern Sydney	A1
Royal Prince Alfred Hospital	Sydney	A1
RPAH Institute of Rheumatology & Orthopaedics	Sydney	A1
Ryde Hospital	Northern Sydney	C1
Shellharbour Hospital	Illawarra Shoalhaven	C1
Shoalhaven and District Memorial Hospital	Illawarra Shoalhaven	B
Singleton District Hospital	Hunter New England	C2
St George Hospital	South Eastern Sydney	A1
St Vincent's Hospital, Darlinghurst	St Vincent's Health Network	A1
Sutherland Hospital	South Eastern Sydney	B
Sydney Children's Hospital	Sydney Children's Network	A2
Sydney/Sydney Eye Hospital	South Eastern Sydney	A3
Tamworth Base Hospital	Hunter New England	B
The Children's Hospital at Westmead	Sydney Children's Network	A2
The Tweed Hospital	Northern NSW	B
Tumut Health Service	Murrumbidgee	C2
Wagga Wagga Base Hospital	Murrumbidgee	B
Westmead Hospital	Western Sydney	A1
Wollongong Hospital	Illawarra Shoalhaven	A1
Wyong Hospital	Central Coast	B
Young Health Service	Murrumbidgee	C2

Acknowledgements

The Bureau of Health Information (BHI) is the main source of information for the people of NSW about the performance of their healthcare system. A NSW based board-governed organisation, BHI, is led by Acting Chairperson Mary Elizabeth Rummery AM and Chief Executive Jean-Frédéric Lévesque MD, PhD. BHI would like to thank the expert advisors and reviewers (2015–16) alongside staff that contributed to the development of the Hospital Quarterly report. BHI acknowledges the contribution of the NSW Ministry of Health, including through the provision and validation of data and peer review of the report.

External advisors and reviewers

David Blumenthal	Commonwealth Fund, US
Anna Greenberg	Health Quality Ontario
Richard Hamblin	Health Quality and Safety Commission, New Zealand
Kira Leeb	Canadian Institute for Health Information
Donald MacLellan	Agency for Clinical Innovation
Michele McKinnon	South Australia Health
Robin Osborn	Commonwealth Fund, US
Patricia Sullivan-Taylor	Health System Performance, Health Quality Ontario
Alain Vadeboncoeur	Montreal Heart Institute

Bureau of Health Information project team

Research

Lilian Daly

Analysis

Carolynn Fredericks

Jill Kaldor

Behnoosh Khalaj

Design

Michael Ellis

Adam Myatt

Efren Sampaga

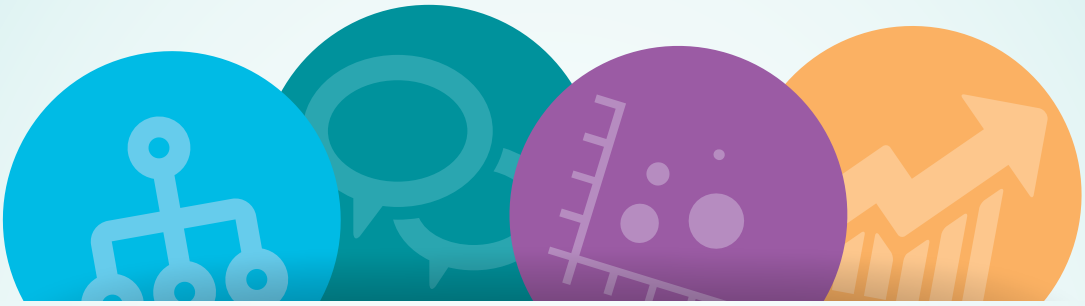
Mark Williams

Communications and Stakeholder Engagement

Karen Perini

Rohan Lindeman

Discover how your hospital is performing



BHI's interactive portal Healthcare Observer lets you explore, analyse and download information about the performance of more than 80 NSW hospitals

Hospital Quarterly provides information on performance and activity of NSW public hospitals across:

Hospital admissions

Elective surgery

Emergency departments

Visit **bhi.nsw.gov.au/healthcare_observer**

bureau of health information

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 public healthcare system.

BHI was established in 2009 to provide system-wide support through transparent reporting.

BHI 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 in public hospitals and other healthcare facilities.

BHI publishes a range of reports and tools that provide relevant, accurate and impartial information about how the health system is measuring up in terms of:

- Accessibility – healthcare when and where needed
- Appropriateness – the right healthcare, the right way
- Effectiveness – making a difference for patients
- Efficiency – value for money
- Equity – health for all, healthcare that's fair
- Sustainability – caring for the future

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 report 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