

# Emergency Departments

## Hospital Quarterly:

Performance of  
NSW public hospitals

### October to December 2012

More than half a million patients attended NSW public hospital emergency departments (EDs) during October to December 2012, 3% more than the same quarter in 2011. The greatest increase was seen in the emergency category (triage 2), with presentations 16% higher than the same quarter last year. These patients accounted for 11% of all emergency presentations.

The median times to start treatment are unchanged or slightly shorter compared to the same quarter one year ago and the 95th percentile times to start treatment have decreased by five minutes (triage 2), 13 minutes (triage 3), 20 minutes (triage 4), and 25 minutes (triage 5).

The number of patients who travelled to the ED by ambulance has increased by 3% since the same quarter in 2011. This quarter, 64% of these patients transferred into the care of ED staff within 30 minutes, compared with 66% in the same quarter in 2011.

In this quarter, 64% of all patients left the ED within four hours, compared with 59% in the same quarter in 2011. The NSW 2012 National Emergency Access Target requires that 69% of all patients who present to an ED leave the ED within four hours.

This is one of three *Hospital Quarterly* modules. For the Elective Surgery and Admitted Patients modules visit [www.bhi.nsw.gov.au](http://www.bhi.nsw.gov.au)



Find out how **your local** hospital  
**PERFORMS**  
Results for more than  
**60 NSW hospitals**  
available at  
[www.bhi.nsw.gov.au](http://www.bhi.nsw.gov.au)

During the quarter	Oct-Dec 2012	Oct-Dec 2011	The difference
Visits to NSW emergency departments (EDs)	579,776 visits	562,616 visits	+17,160 (+3%)
People travelling to NSW EDs by ambulance	140,362 people	136,041 people	+4,321 (+3%)
People travelling by ambulance that were transferred into the care of ED staff within 30 minutes	64% in 30 minutes	66% in 30 minutes	-2 percentage points
Emergency attendances that were categorised as triage 2	59,291 attendances	50,980 attendances	+8,311 (+16%)
Median time to start treatment for triage 2 patients	8 minutes	8 minutes	unchanged
People leaving the ED within four hours of presentation (NEAT)	64% in four hours	59% in four hours	+5 percentage points
Admissions to hospital from NSW EDs	155,326 admissions	148,621 admissions	+6,705 (+5%)

# Emergency department journeys

When a person is injured or requires medical care, they begin what we refer to as the patient's journey. The pathway each patient follows through the ED depends on the clinical needs and the decisions made about their treatment and management.

Most patients attend a NSW ED to receive treatment for an injury or acute illness.

Emergency patients are *'triaged'* by specialist clinical staff after they arrive in ED and are allocated to one of five categories, depending on how urgently they require care. Each triage category has a recommended maximum time that the patient should wait to be seen by a healthcare professional.

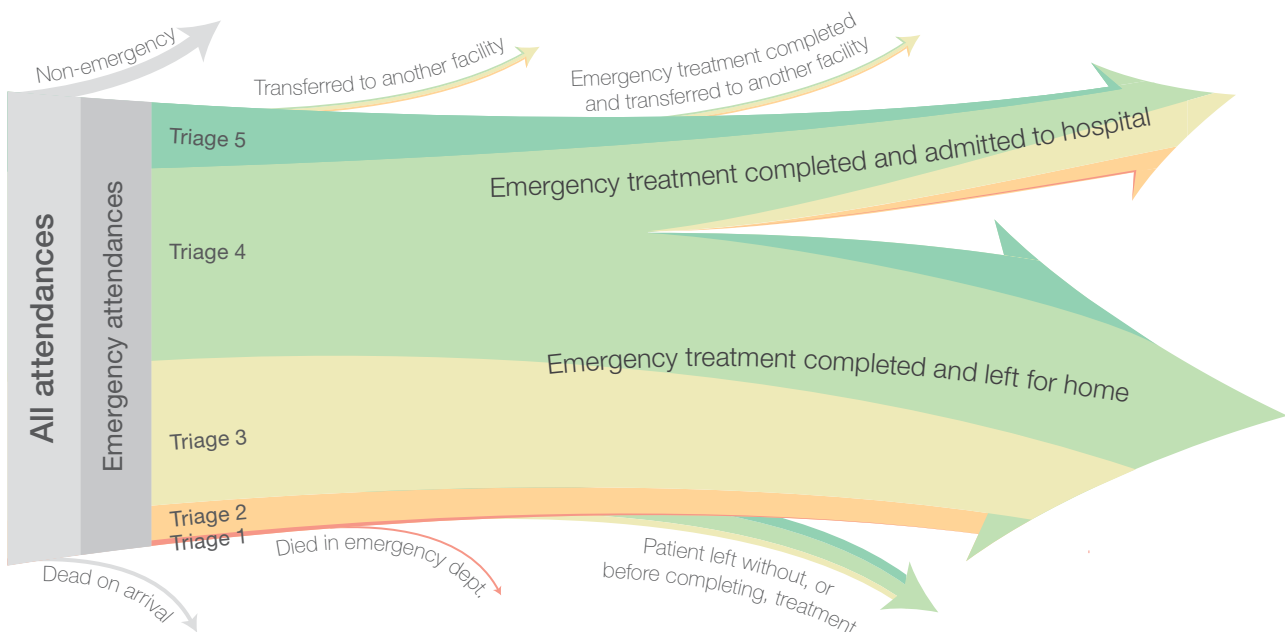
What happens next depends on the clinical needs of the patients. Patients from the most urgent triage categories (triage categories 1 and 2) are given priority and care typically begins immediately upon arrival. Patients from the less urgent triage categories (3 to 5) typically complete triage and administrative processes before treatment begins.

The majority of patients leave the ED after their treatment is complete or when they are admitted to hospital. Some patients are transferred to other hospitals or choose not to wait to begin or complete treatment. The journeys of all these patients during the October to December 2012 quarter are presented in this report and are summarised in [Figure 1](#).

Figure 1: Summary of patients' journeys through NSW emergency departments

The thickness of each arrow is approximately proportional to the number of NSW emergency department patients in each category. The arrows are coloured by triage level.

- Triage 1 Resuscitation
- Triage 2 Emergency
- Triage 3 Urgent
- Triage 4 Semi-urgent
- Triage 5 Non-urgent



# Arriving at the emergency department

## Emergency attendances this quarter

There were more than half a million attendances at NSW EDs during October to December 2012 (Figure 2). While almost all (97%) of these visits were considered ‘*emergency attendances*’, 18,762 patients attended for non-emergency reasons, such as planned return visits, attending some types of outpatient clinics or prearranged admissions to hospital. The percentage of patients attending NSW EDs for non-emergency reasons is similar to the same quarter last year.

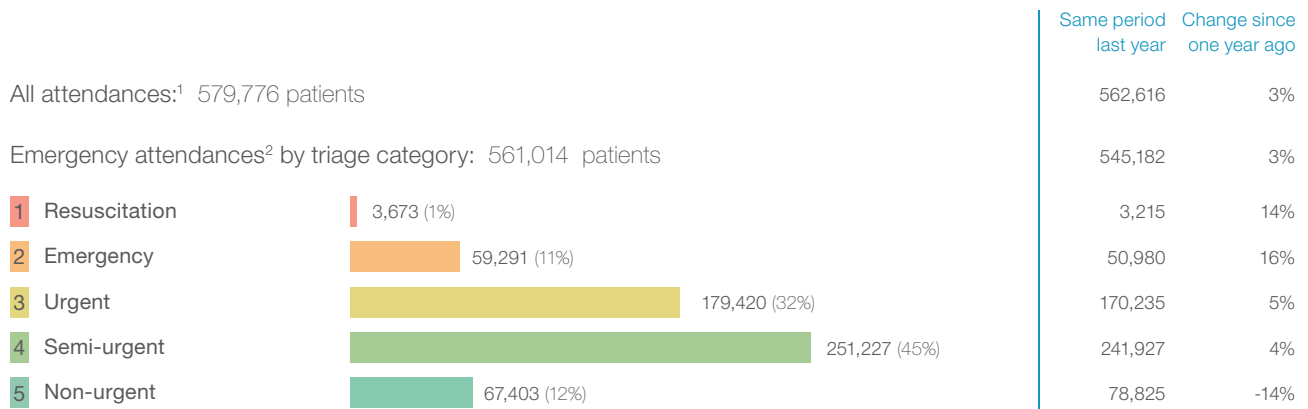
A breakdown of emergency attendance figures shows that 45% were categorised as semi-urgent (triage 4), 32% were categorised as

urgent (triage 3), 12% were non-urgent (triage 5) and 11% were in the emergency category (triage 2). Patients in the resuscitation category (triage 1) accounted for less than 1% of all people triaged in NSW EDs.

The greatest increase was seen in the emergency category (triage 2), with presentations 16% higher than the same quarter last year.

**Note:** The Bureau has simplified its descriptions of the triage categories 1 to 5. For example, replacing the triage 2 description of ‘*imminently life-threatening*’ with ‘*emergency*’. This change reflects descriptions used by other organisations including the Australian Institute of Health and Welfare and the NSW Ministry of Health.

Figure 2: Attendances at NSW emergency departments, October to December 2012



1. All emergency and non-emergency attendances at the emergency department (ED).

2. All attendances that have a triage category and are coded as emergency presentations or unplanned return visits.

Note: All percentages rounded to whole numbers and therefore percentages may not add to 100%.

Note: Emergency department activity includes 96 facilities for which electronic data are reported. This covers approximately 87% of NSW emergency department activity.

Source: Health Information Exchange, NSW Health. Data extracted on 25 January 2013.

## Emergency attendances and admissions over time

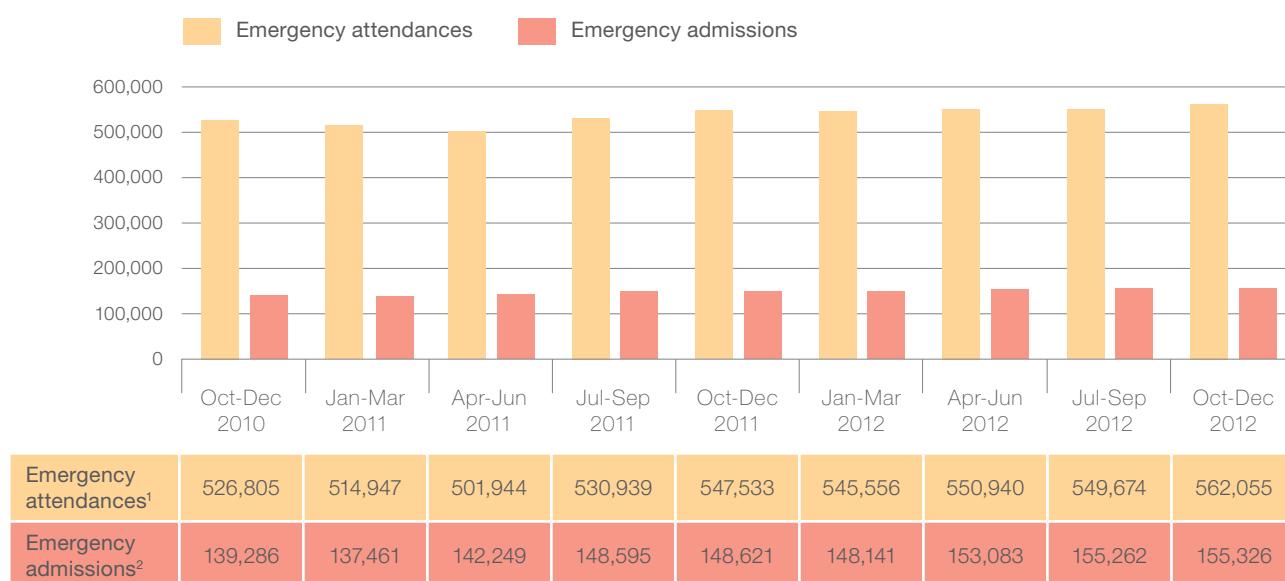
There tend to be seasonal trends in ED attendances throughout the year. The typical annual pattern sees ED attendances lower in the first half of the year and higher in the second half. This year, however, we did not see the usual decrease in ED attendances in the first half of the year.

In the October to December 2012 quarter there were 562,055 emergency attendances. This is 3% higher than the same quarter one year ago (547,533) (Figure 3).

The number of emergency admissions from the ED has also been increasing. This quarter there were 155,326 admissions. This is 5% higher than the same quarter one year ago (148,621).

Over time, additional EDs have been included in *Hospital Quarterly* as electronic data become available. Comparisons of attendances and admissions with the same quarter two years ago may include the effect of the additional EDs being reported. Further detail can be found in the *Hospital Quarterly Technical Supplement: Emergency department measures, October to December 2012* available on the Bureau's website at [www.bhi.nsw.gov.au](http://www.bhi.nsw.gov.au)

Figure 3: Emergency attendances at, and admissions from, NSW emergency departments, October 2010 to December 2012



1. Emergency attendances are ED visits for emergencies, unplanned return visits or disaster.

2. Admissions refers to emergency attendances that were admitted through the emergency department.

**Note:** Attendance and admission counts in this table are based on increasing numbers of EDs over time, so changes in trend in this table over time should be interpreted with caution. For more information, see the Bureau's *Technical Supplement: Emergency department measures, October to December 2012*.

**Note:** Emergency department activity includes 96 facilities for which electronic data are reported. This covers approximately 87% of NSW emergency department activity.

**Note:** Numbers may differ from those previously reported due to differences in when data were extracted from the emergency department information system and in definitions of patient cohorts.

**Source:** Health Information Exchange, NSW Health. Data extracted on 25 January 2013.

## Arrivals by ambulance and off-stretcher time this quarter

When a patient arrives at the ED by ambulance, the ambulance crew waits with them until ED staff can accept that patient into their care. In NSW, the time taken for this to occur is called off-stretcher time. The NSW target requires 90% of patients arriving at hospital by ambulance to be transferred into the care of ED staff within 30 minutes.

In the October to December 2012 quarter, almost one-quarter (24%) of all people who attended NSW EDs arrived by ambulance, a total of 140,362 patients (Figure 4). This quarter, 64% of these patients were transferred into the care of ED staff within 30 minutes.

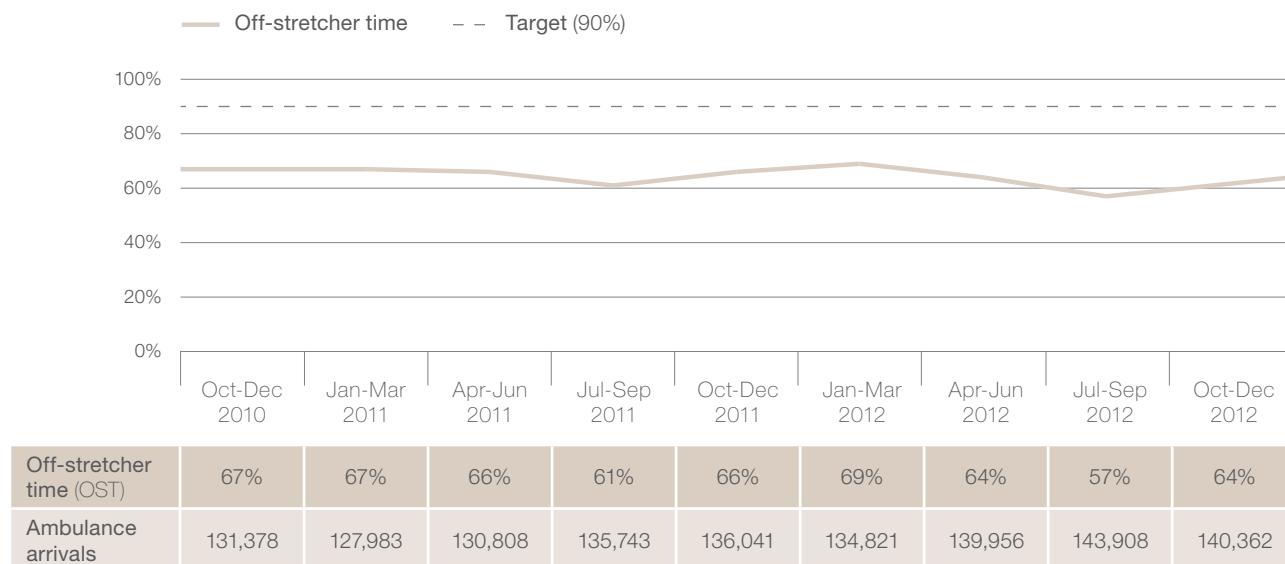
## Arrivals by ambulance and off-stretcher time over time

The number of ambulance arrivals has increased compared with the same quarter one year ago, by 3%. This is comparable to the increase in emergency attendances (up 3%).

The percentage of patients transferred into the care of ED staff within 30 minutes was lower than the same quarter one year ago (66%).

The off-stretcher ambulance target has not been met at a state-wide level in any quarter over the past two years (Figure 4).

Figure 4: Ambulance arrivals and percentage of patients accepted into the care of NSW emergency departments from an ambulance within 30 minutes of arrival, October 2010 to December 2012



Source: Data provided by NSW Ambulance Service on 24 January 2013.

# Time to treatment performance

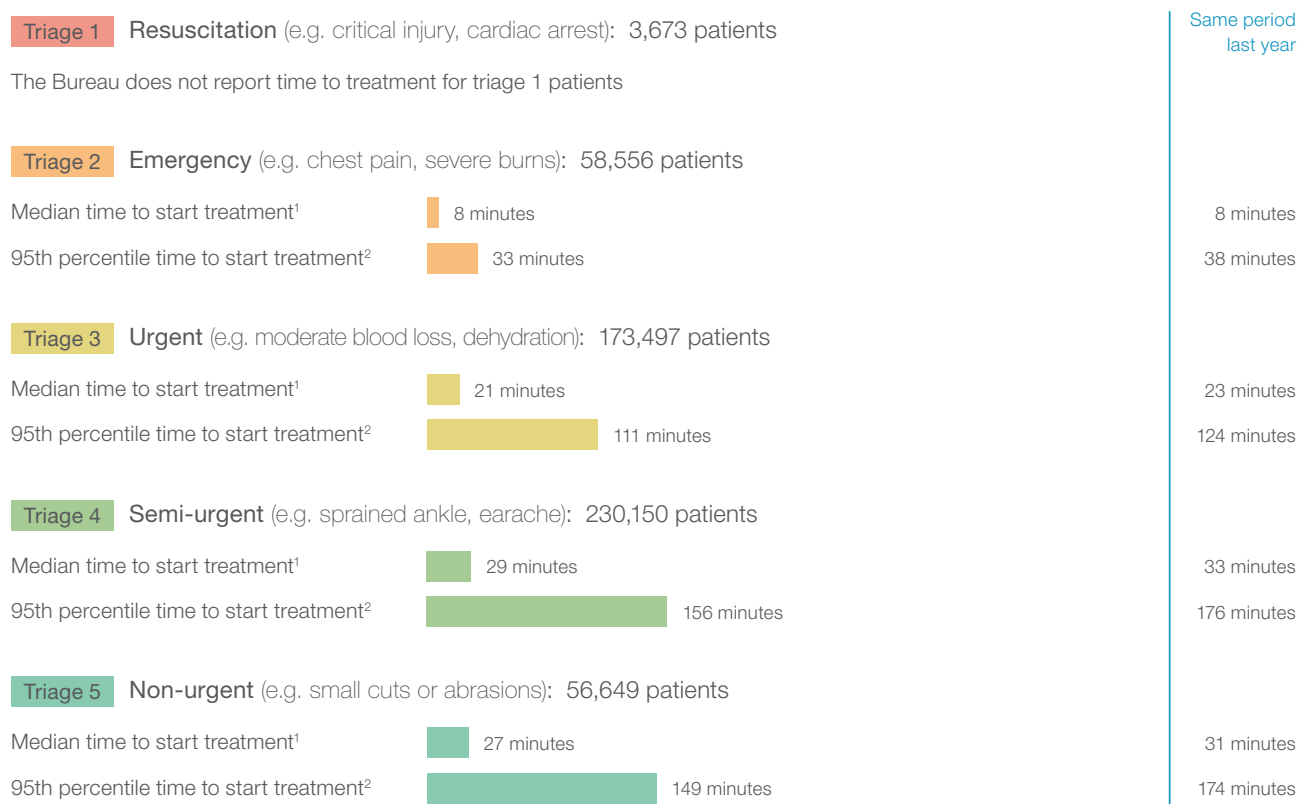
## Time to treatment this quarter

In October to December 2012, the median times to start treatment were unchanged or slightly shorter compared to the same quarter in 2011 (Figure 5). The median time to start treatment for the emergency category (triage 2) remains unchanged at 8 minutes, the urgent category (triage 3) two minutes less at 21 minutes, the semi-urgent category (triage 4) four minutes less at 29 minutes and the non-urgent category (triage 5) four minutes less at 27 minutes.

The 95th percentile times to start treatment were lower in each triage category. This quarter, 95% of patients began treatment within:

- 33 minutes, five minutes shorter than one year ago (triage 2)
- 111 minutes, 13 minutes shorter than one year ago (triage 3)
- 156 minutes, 20 minutes shorter than one year ago (triage 4)
- 149 minutes, 25 minutes shorter than one year ago (triage 5).

Figure 5: Waiting times for treatment in NSW emergency departments, October to December 2012



1. The median is the time by which half of patients started treatment. The other half of patients took equal to or longer than this time.
2. The 95th percentile is the time by which 95% of patients started treatment. The final 5% of patients took equal to or longer than this time.

Note: Treatment time is the earliest time recorded when a healthcare professional gives medical care for the patient's presenting problems.

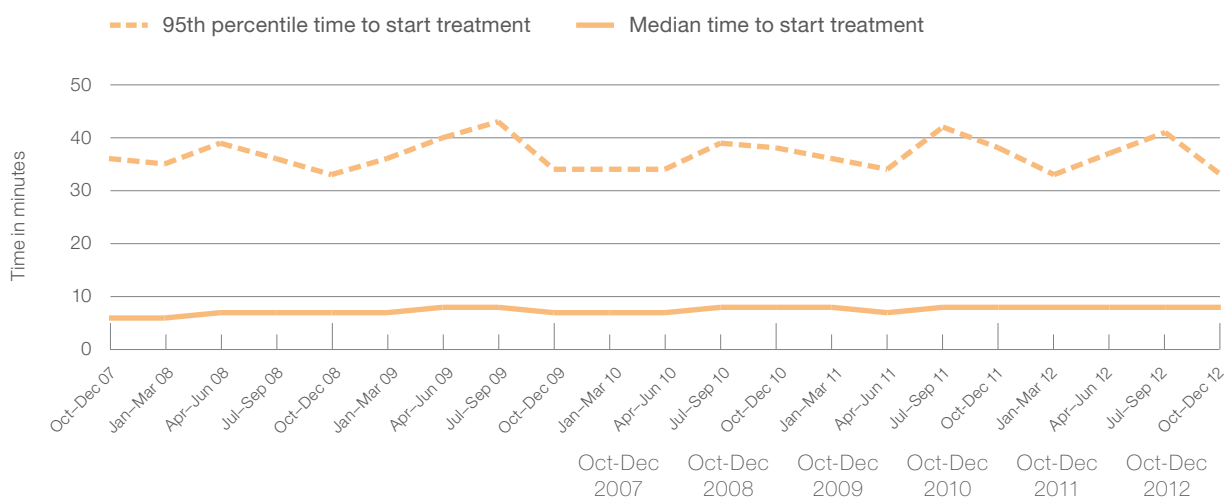
Source: Health Information Exchange, NSW Health. Data extracted on 25 January 2013.

## Time to treatment over time

The time from presentation until treatment fluctuates throughout the year. At a state level, the time appears to be reasonably steady, however, the trend is affected by progressive implementation of new information systems.

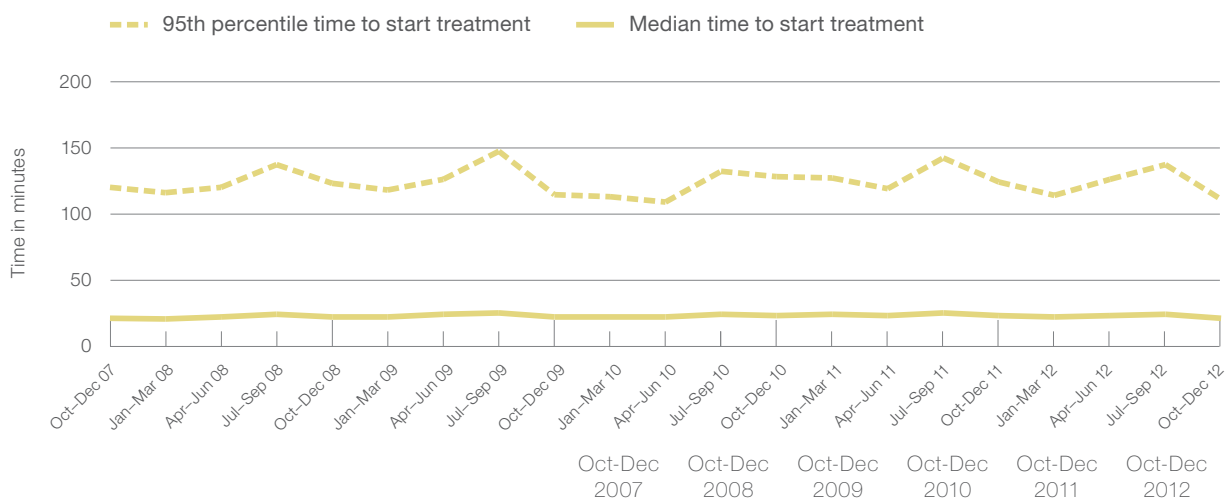
Figures 6a-d show for triage categories 2 to 5, the median and 95th percentile times to start treatment. Data are reported according to triage category. The Bureau does not report time to treatment for patients with conditions triaged as resuscitation (triage 1).

Figure 6a: **Triage 2 - Median and 95th percentile times to start treatment (minutes) in NSW emergency departments, October 2007 to December 2012**



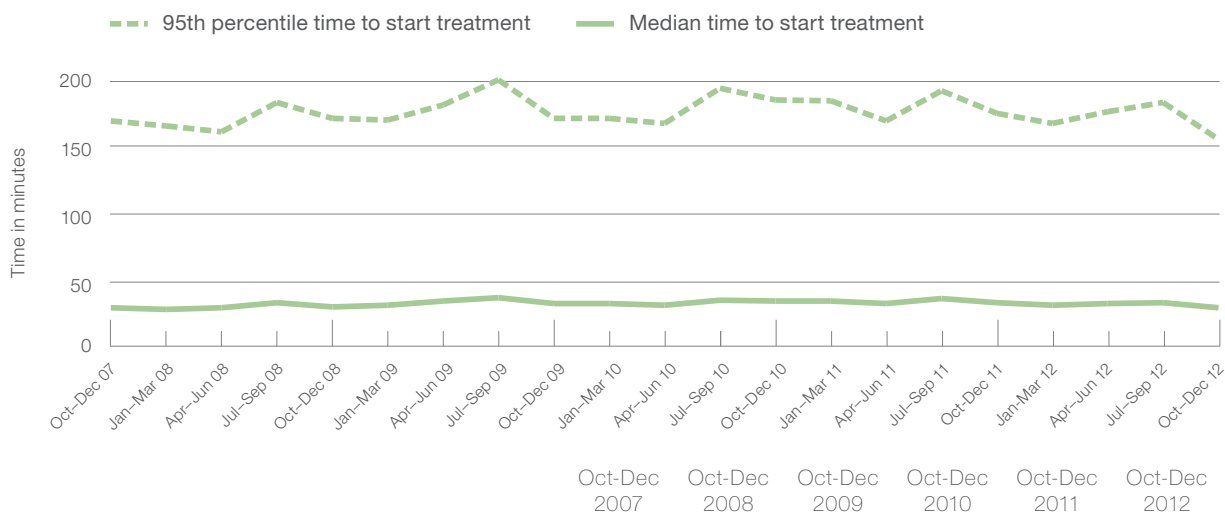
Median time to start treatment <sup>1</sup> (minutes)	6	7	7	8	8	8
95th percentile time to start treatment <sup>2</sup> (minutes)	36	33	34	38	38	33

Figure 6b: **Triage 3 - Median and 95th percentile times to start treatment (minutes) in NSW emergency departments, October 2007 to December 2012**



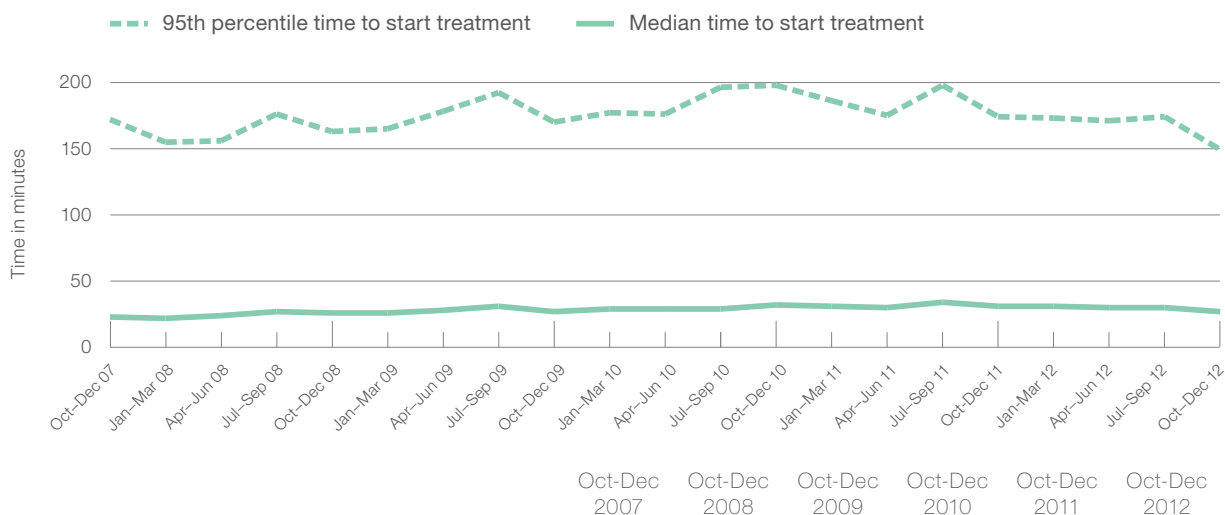
Median time to start treatment <sup>1</sup> (minutes)	21	22	22	23	23	21
95th percentile time to start treatment <sup>2</sup> (minutes)	120	123	115	128	124	111

Figure 6c: **Triage 4** - Median and 95th percentile times to start treatment (minutes) in NSW emergency departments, October 2007 to December 2012



	Oct-Dec 2007	Oct-Dec 2008	Oct-Dec 2009	Oct-Dec 2010	Oct-Dec 2011	Oct-Dec 2012
Median time to start treatment <sup>1</sup> (minutes)	29	30	32	34	33	29
95th percentile time to start treatment <sup>2</sup> (minutes)	170	172	172	186	176	156

Figure 6d: **Triage 5** - Median and 95th percentile times to start treatment (minutes) in NSW emergency departments, October 2007 to December 2012



	Oct-Dec 2007	Oct-Dec 2008	Oct-Dec 2009	Oct-Dec 2010	Oct-Dec 2011	Oct-Dec 2012
Median time to start treatment <sup>1</sup> (minutes)	23	26	27	32	31	27
95th percentile time to start treatment <sup>2</sup> (minutes)	172	163	170	198	174	149

1. The median is the time by which half of patients started treatment. The other half of patients took equal to or longer than this time.
2. The 95th percentile is the time by which 95% of patients started treatment. The final 5% of patients took equal to or longer than this time.

**Note:** Hospitals transitioning to one of the major information systems are excluded from this data during the quarter(s) of implementation (For more information see *Hospital Quarterly Background Paper: Approaches to reporting time measures of emergency department performance, Addendum June 2012*).

**Source:** Health Information Exchange, NSW Health. Data extracted on 25 January 2013.



# Leaving the emergency department

## Time from presentation until leaving the ED this quarter

In the October to December 2012 quarter, the median time to leaving the ED was three hours and 6 minutes after presentation. The 95th percentile time to leaving the ED was 11 hours and 13 minutes after presentation (Figure 7).

There are different ways that a patient can leave the ED. The majority of patients leave the ED after their treatment is complete or when they are

admitted to hospital. Some patients choose not to wait to begin or complete treatment or are transferred to other hospitals. The way a patient leaves the ED is referred to as the mode of separation. The time that it takes for patients to leave the ED varies by the mode of separation.

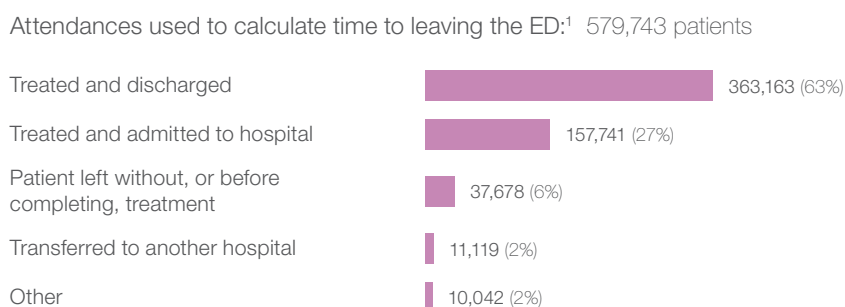
Figure 8 shows attendances at NSW EDs by mode of separation for the October to December 2012 quarter. Figure 9 shows the times in which patients left the ED by mode of separation for the October to December 2012 quarter.

Figure 7: Time from presentation until leaving the emergency department, October to December 2012



1. All emergency and non-emergency attendances at the emergency department (ED).
  2. All attendances that have a departure time.
  3. The median is the time by which half of patients left the ED. The other half of patients took equal to or longer than this time.
  4. The 95th percentile is the time by which 95% of patients left the ED. The final 5% of patients took equal to or longer than this time.
- Source: Health Information Exchange, NSW Health. Data extracted on 25 January 2013.

Figure 8: Leaving the emergency department by mode of separation, October to December 2012

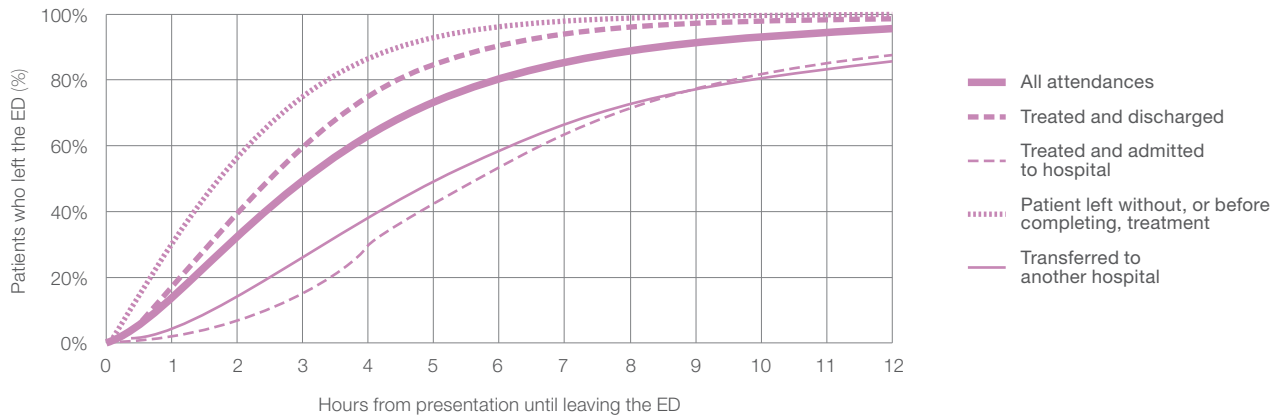


1. All attendances that have a departure time.
- Source: Health Information Exchange, NSW Health. Data extracted on 25 January 2013.

In the October to December 2012 quarter:

- Most patients (63%) received treatment in the ED and were discharged home (Figure 8). On average, these patients spent less time in the ED than other patients (Figure 9).
- About a quarter of patients (27%) received treatment in the ED and were subsequently admitted to a ward, a critical care unit or via an operating suite in the hospital (Figure 8). On average, these patients spent the most time in the ED (Figure 9).
- A small group of patients (2%) received treatment in the ED and were transferred to another hospital (Figure 8). On average, these patients also spent longer in the ED than patients who were discharged (Figure 9).
- Some patients (6%) left the ED without, or before completing, treatment (Figure 8). On average, these patients spent the shortest time in the ED (Figure 9).

Figure 9: Percentage of patients who left the emergency department, by time and mode of separation, October to December 2012



1 hour    2 hours    3 hours    4 hours    6 hours    8 hours    10 hours    12 hours

	1 hour	2 hours	3 hours	4 hours	6 hours	8 hours	10 hours	12 hours
Treated and discharged	17%	40%	60%	76%	91%	96%	98%	99%
Treated and admitted to hospital	2%	7%	16%	30%	53%	71%	82%	87%
Patient left without, or before completing treatment	30%	56%	75%	87%	96%	99%	99%	100%
Transferred to another hospital	4%	14%	26%	38%	59%	73%	81%	86%
All attendances	14%	32%	49%	64%	80%	89%	94%	96%

Note: Time from presentation to the emergency department (ED) until recorded as leaving the ED.  
 Source: Health Information Exchange, NSW Health. Data extracted on 25 January 2013.

## Time from presentation until leaving the ED over time

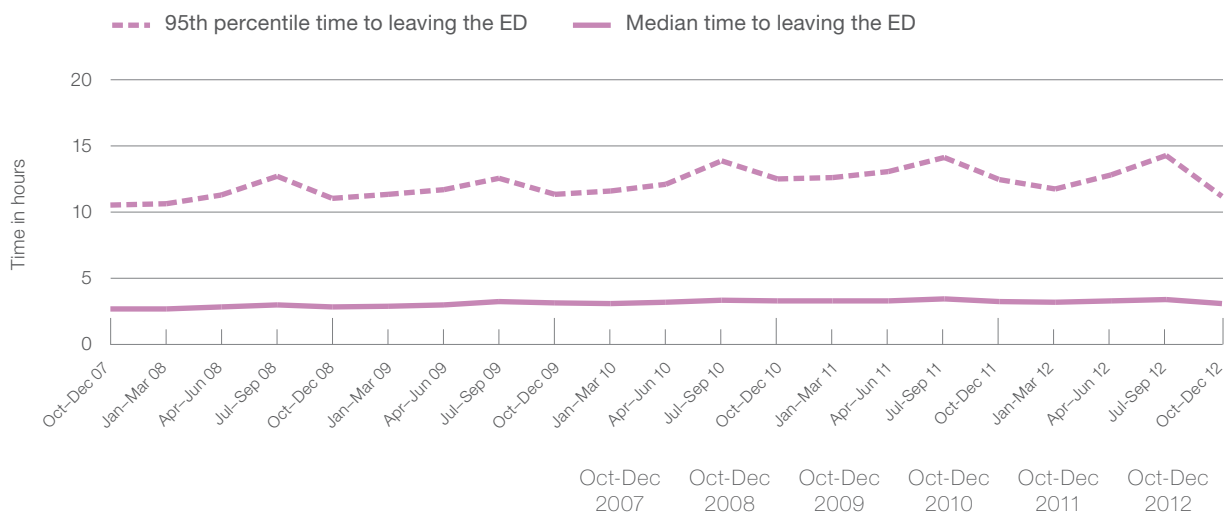
Figure 10 shows the median and 95th percentile time from presentation until leaving the ED by quarter over five years. During October to December 2012, the median time to leaving the ED was three hours and 6 minutes of presentation.

This is shorter than the same quarter in 2011 when the median time to leaving the ED was three hours and 16 minutes (Figure 10).

During the October to December 2012 quarter, the 95th percentile time to leaving the ED was 11 hours and 13 minutes after arriving in the ED.

This is shorter than the same quarter in 2011 when the 95th percentile time to leaving the ED was 12 hours and 28 minutes.

Figure 10: Time from presentation until leaving the emergency department by quarter, October 2007 to December 2012



	Oct-Dec 2007	Oct-Dec 2008	Oct-Dec 2009	Oct-Dec 2010	Oct-Dec 2011	Oct-Dec 2012
Median time to leaving the ED <sup>1</sup> (hours, minutes)	2h 42m	2h 50m	3h 9m	3h 18m	3h 16m	3h 6m
95th percentile time to leaving the ED <sup>2</sup> (hours, minutes)	10h 31m	11h 3m	11h 21m	12h 30m	12h 28m	11h 13m

1. The median is the time by which half of patients left the emergency department (ED). The other half of patients took equal to or longer than this time.
2. The 95th percentile is the time by which 95% of patients left the ED. The final 5% of patients took equal to or longer than this time.

**Note:** Time from presentation to the ED until recorded as leaving the ED.

**Note:** Hospitals transitioning to one of the major information systems are excluded from this data during the quarter(s) of implementation.

**Source:** Health Information Exchange, NSW Health. Data extracted on 25 January 2013.

## The National Emergency Access Target (NEAT)

The NEAT aims to have as many patients as possible physically leaving the ED within four hours, whether for admission to hospital, referral to another hospital for treatment, or discharge.

Commencing from 2012, this target is being phased in over four years with annual interim targets set with the aim of achieving the 90% target by 2015.

### Performance against the NEAT

The NSW 2012 target requires that 69% of all patients who present to an ED leave the ED within four hours.

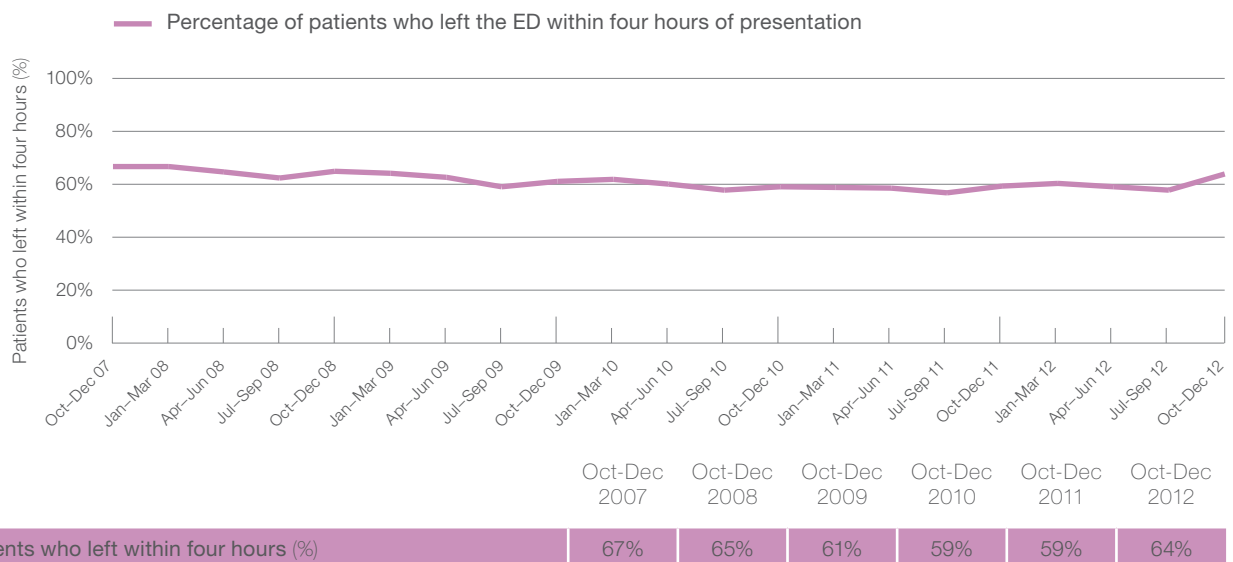
In the October to December 2012 quarter, 64% of patients left the ED within four hours of presentation and 80% of patients had left the ED by six hours (Figure 9). For the October to December 2012 quarter, NSW did not achieve its state target for the NEAT.

For the 2012 calendar year, 60% of patients left the ED within four hours of presentation.

### Performance against the NEAT over time

During this quarter the percentage of patients who left the ED within four hours of presentation was 64%. This is higher than the same quarter one year ago (59%) and the same quarter two years ago (59%) (Figure 11).

Figure 11: Percentage of patients who left the emergency department within four hours of presentation, by quarter, October 2007 to December 2012



**Note:** Time from presentation to the emergency department (ED) until recorded as leaving the ED.

**Note:** Hospitals transitioning to one of the major information systems are excluded from this data during the quarter(s) of implementation.

**Source:** Health Information Exchange, NSW Health. Data extracted on 25 January 2013.

# Differences in performance between hospitals

## Time to treatment in NSW EDs

[Appendix table 1](#) presents the median and 95th percentile times to start treatment for patients in each triage category (categories 2, 3, 4 and 5) for individual EDs.

There is variation between hospitals when comparing time to treatment by triage category. For example, among principal referral and major hospitals (Peer groups A1 and B) using one of the two predominant information systems, the highest and lowest results for triage 2 and 4 in the October to December 2012 quarter are compared below:

- The median time to start treatment for all patients with conditions triaged as emergency (triage 2) was five minutes at Hornsby and Ku-Ring-Gai Hospital, compared with 12 minutes at Royal Prince Alfred Hospital
- The 95th percentile time to start treatment for patients with conditions triaged as emergency (triage 2) was 10 minutes at Hornsby and Ku-Ring-Gai Hospital, compared with 62 minutes at Westmead Hospital
- The median time to start treatment for all patients with conditions triaged as semi-urgent (triage 4) was 18 minutes at Manly and Nepean hospitals, compared with 54 minutes at Lismore Hospital
- The 95th percentile time to start treatment for patients with conditions triaged as semi-urgent (triage 4) was 95 minutes at Sutherland Hospital, compared with 209 minutes at Westmead Hospital.

## Time to leaving the ED

[Appendix table 2](#) presents number of attendances, off-stretcher time, the median and 95th percentile times to leaving the ED as well as the percentage of patients that left the ED within four hours, for individual EDs.

There is variation between hospitals when comparing the time to leaving the ED. For example, among principal referral and major hospitals (Peer groups A1 and B) using one of the two predominant information systems, the highest and lowest times in the October to December 2012 quarter are compared below:

- The median time to leaving the ED ranged from two hours and 36 minutes at Manning Base Hospital to five hours and 17 minutes at Blacktown Hospital
- The 95th percentile time to leaving the ED ranged from six hours and 35 minutes at Manning Base Hospital to 24 hours and 52 minutes at Blacktown Hospital
- The percentage of patients who left the ED within four hours from presentation ranged from 82% at Manly District Hospital to 38% at Blacktown Hospital.

See the [Appendices](#) section of this report ([page 17](#)) for more detailed emergency department performance information about each public hospital.

# How to interpret our information

Last year, the Bureau introduced a new approach to measuring the times patients spend in the ED and subsequently changes have been made to how this information is presented to further improve understanding.

## Different ways of measuring the times patients spend in EDs

The Bureau presents information on the times by which patients start their treatment, and the times by which patients leave the ED. We report this information using medians and 95th percentiles. This is a common international approach to measuring wait times. It gives insight into the range of times that different patients spend in the ED.

**The median times** are the times by which half of patients started treatment or left the ED.

If you look at how long each patient in an ED waits for treatment and then list all of these patients in order of how long they waited, the median is the time the patient in the middle of the list waited.

For example, if the median time to start treatment is 23 minutes, this means half of patients started treatment between 0 and 23 minutes after arriving at the ED. The other half waited 23 minutes or longer for treatment.

**The 95th percentile times** are the times by which 95% of patients started treatment or left the ED. We use these values to indicate the longest times that patients waited for treatment or to leave the ED.

For example, if the 95th percentile time to treatment is 125 minutes, this means 95% of patients were seen between 0 and 125 minutes after arriving at the ED. The last 5% of patients (or 1 in 20) waited 125 minutes or longer for treatment.

The Bureau now also reports on the percentages of patients who leave the ED within four hours of presentation (performance against the National Emergency Access Target). We report on this benchmark as part of a national initiative to introduce consistent performance reporting of hospital services.

It is important to understand that the median and 95th percentile times are not the same as performance against a benchmark. The medians and 95th percentiles report *time*. The *percentage of patients* reports the performance achieved against the benchmark. Time cannot be compared directly against a percentage of patients.

## Assessing ED performance

There are a number of ways to assess a hospital's performance. One way is to compare results to a target or benchmark. Other ways are to compare:

- Own performance over time (especially the same quarter in previous years as there are strong seasonal trends in EDs)
- Performance against NSW as a whole
- Performance against other hospitals of similar size and patient mix (known as 'peer group').

Figure 12: Time from presentation to treatment

**Triage 2 Emergency** (e.g. chest pain, severe burns): 178 patients

Median time to start treatment 8 minutes  
 95th percentile time to start treatment 35 minutes

Same period last year	NSW (this period)
170	
6 minutes	8 minutes
38 minutes	32 minutes

The Bureau presents information to support comparisons of ED performance. For example, the table (Figure 12) shows the median and 95th percentile time from presentation to treatment for triage 2 patients. It also shows comparable information for the same period last year and against NSW as a whole.

### Other ways of presenting the times patients spend in EDs

*Hospital Quarterly* also presents information about the time patients spent in the ED by using cumulative graphs (Figure 13) and trend graphs (Figure 14).

#### Cumulative graphs

The Bureau uses cumulative graphs for time to treatment and time to leaving the ED. Cumulative graphs show the range of times during a single quarter. These graphs show the variation in times patients experience.

Here are some examples of how you can interpret this graph.

#### Example 1. What proportion of patients were seen within one hour?

To understand the proportion of patients who were seen within a given timeframe, begin at the axis labelled 'time' on Figure 13. Find the 60 minute point (A) along this axis and follow the line up until it meets the curve, then straight to the left to see the percentage of patients. In this example, we can see that more than 80% of patients started treatment within one hour of arriving at the ED.

#### Example 2. How long did it take for 40% of patients to be seen?

To understand how long a percentage of patients waited to be seen, begin at the axis labelled 'patients' on Figure 13. Find the 40% point (B) along this axis and follow the line across until it meets the curve, then straight down to see the time in minutes. We can see that 40% of patients started treatment between 0 and less than 20 minutes of arriving at the ED. This means 60% of patients waited longer than this time for treatment to start.

Figure 13: Percentage of patients who received treatment by time

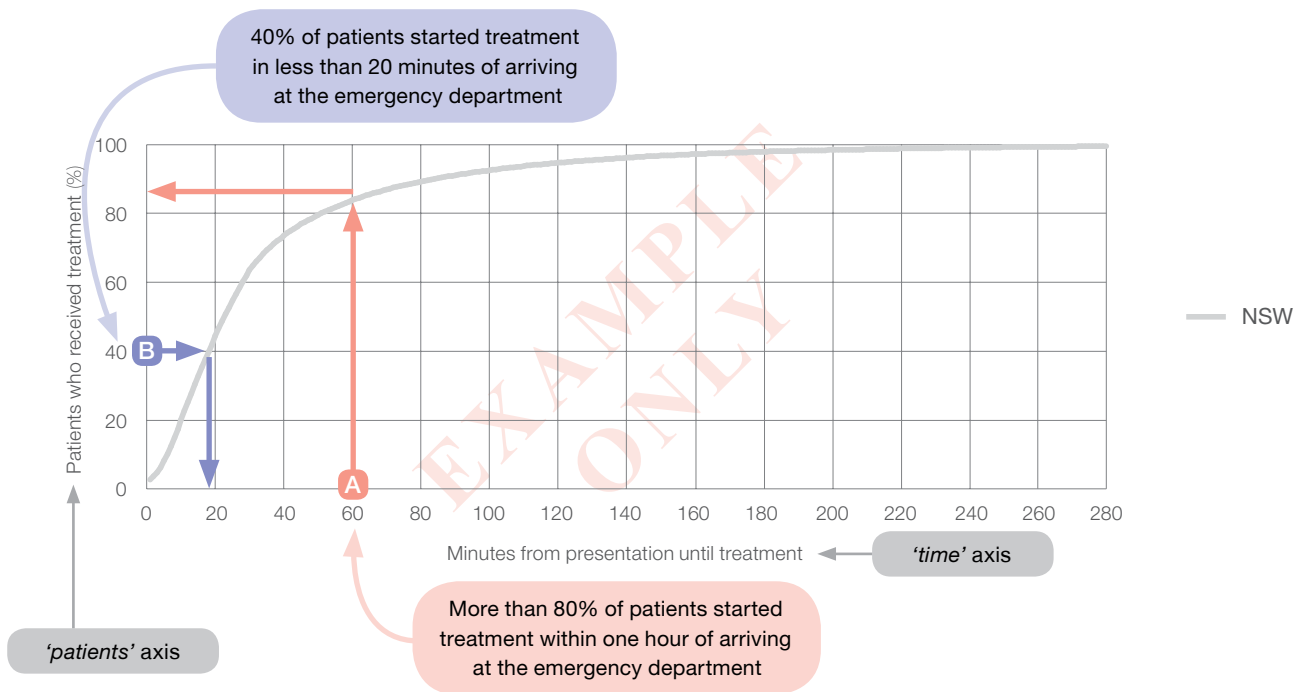
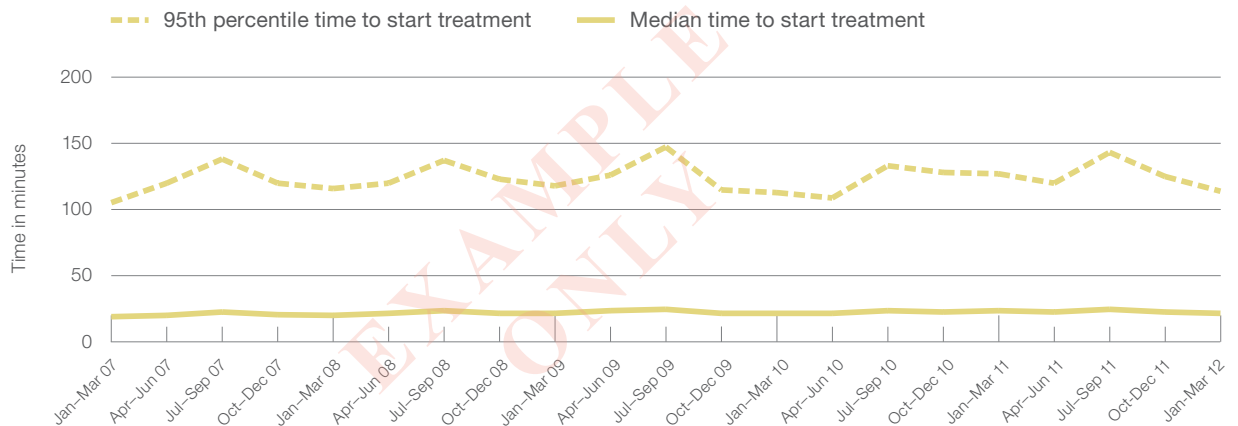


Figure 14: Median and 95th percentile times to start treatment (minutes) in NSW emergency departments, over five years



### Trend graphs

Trend graphs show the way times in EDs have varied over the last few years.

For example, the trend graph (Figure 14) presents the time to start treatment for patients in each quarter of the last five years.

The solid line shows the median time to treatment for patients in NSW EDs and the dashed line shows the 95th percentile.

In this graph you can see the seasonal patterns, with the longest times to treatment (as shown by the 95th percentile line) occurring during the July to September quarter each year.



## Appendix: ED time performance measures

## Download our reports

The report, *Hospital Quarterly: Performance of NSW public hospitals, October to December 2012* and related reports are available at [www.bhi.nsw.gov.au](http://www.bhi.nsw.gov.au)

The suite of products includes:

- *At a Glance* summarising the three core modules
- Three core modules titled *Admitted Patients, Elective Surgery and Emergency Departments*
- Activity and performance profiles about emergency department care and elective surgery for more than 60 hospitals and NSW as a whole
- *Background Paper*
- *Technical Supplements*



## About the Bureau

The Bureau of Health Information provides the community, healthcare professionals and the NSW Parliament with timely, accurate and comparable information on the performance of the NSW public health system in ways that enhance the system's accountability and inform efforts to increase its beneficial impact on the health and wellbeing of the people of NSW.

The Bureau is an independent, board-governed statutory health corporation. The conclusions in this report are those of the Bureau 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.

### To contact the Bureau

**Telephone:** +61 2 8644 2100

**Fax:** +61 2 8644 2119

**Email:** [enquiries@bhi.nsw.gov.au](mailto:enquiries@bhi.nsw.gov.au)

**Postal address:**

PO Box 1770

Chatswood

New South Wales 2057

Australia

**Web:** [www.bhi.nsw.gov.au](http://www.bhi.nsw.gov.au)

Copyright Bureau of Health Information 2013

State Health Publication Number: (BHI) 130006  
ISSN 1838-3238

Suggested citation: Bureau of Health Information  
*Hospital Quarterly: Performance of NSW public hospitals, October to December 2012. Emergency Departments*  
3(4). Sydney (NSW); 2013.

Published March 2013

Please note that there is the potential for minor revisions of data in this report. Please check the online version at [www.bhi.nsw.gov.au](http://www.bhi.nsw.gov.au) for any amendments.

# Admitted Patients

## Hospital Quarterly:

Performance of  
NSW public hospitals

### October to December 2012

People are admitted to hospital for a variety of reasons, such as surgery, illness or childbirth. When a person is admitted to hospital, they begin what is termed an *'episode of care'*.

This covers a single type of care such as acute care, rehabilitation or palliative care. Sometimes, a change in the medical needs of a person can require that they start a second or third episode during the same period of stay in hospital.

Healthcare professionals monitor episodes to better understand local clinical needs and to allow planning for hospital beds, waiting lists and staffing.

The report shows there were 440,144 admitted patient episodes during October to December 2012, 18,907 (4%) more than the same quarter in 2011 and 28,615 (7%) more than the same quarter two years ago. The number of admitted patient

episodes in this quarter is slightly lower when compared with the July to September quarter, which is typical for this time of year.

Patients admitted for acute care or maternity and birth comprised 96% of all admitted episodes. More than half of these patients (55%) were admitted for one night or more (overnight admissions) and this percentage is largely unchanged over the past nine quarters. Patients stayed a total of 1,343,269 bed days during the quarter and, on average, each episode of care was 3.2 days. There were 18,199 babies born, up 4% from the same quarter one year ago.

This is one of three *Hospital Quarterly* modules. For the Emergency Departments and Elective Surgery modules visit [www.bhi.nsw.gov.au](http://www.bhi.nsw.gov.au)

Find out how **your local** hospital

## PERFORMS

Results for more than  
**80 NSW hospitals**  
available at

[www.bhi.nsw.gov.au](http://www.bhi.nsw.gov.au)

During the quarter	Oct-Dec 2012	Oct-Dec 2011	The difference
Admitted patient episodes	440,144 episodes	421,237 episodes	+18,907 (+4%)
Admitted patient episodes considered to be planned	42% planned	42% planned	unchanged
Babies born	18,199 babies	17,493 babies	+706 (+4%)
Admitted patient episodes considered to be acute	96% acute	97% acute	-1 percentage point
Acute episodes that were overnight admissions	55% overnight	55% overnight	unchanged
Total bed days for acute admitted patient episodes	1,343,269 days	1,341,833 days	unchanged
Average length of stay for acute admitted patient episodes	3.2 days	3.3 days	-0.1 days (-3%)

## Number of admitted patient episodes

In the October to December 2012 quarter, there were 440,144 admitted patient episodes of care in NSW public hospitals, slightly lower than the previous quarter. Each year there is a seasonal peak in the number of admitted patient episodes during the July to September quarter. The lowest number of admitted patient episodes usually occurs during the January to March quarter. These seasonal patterns are illustrated in [Figure 1](#).

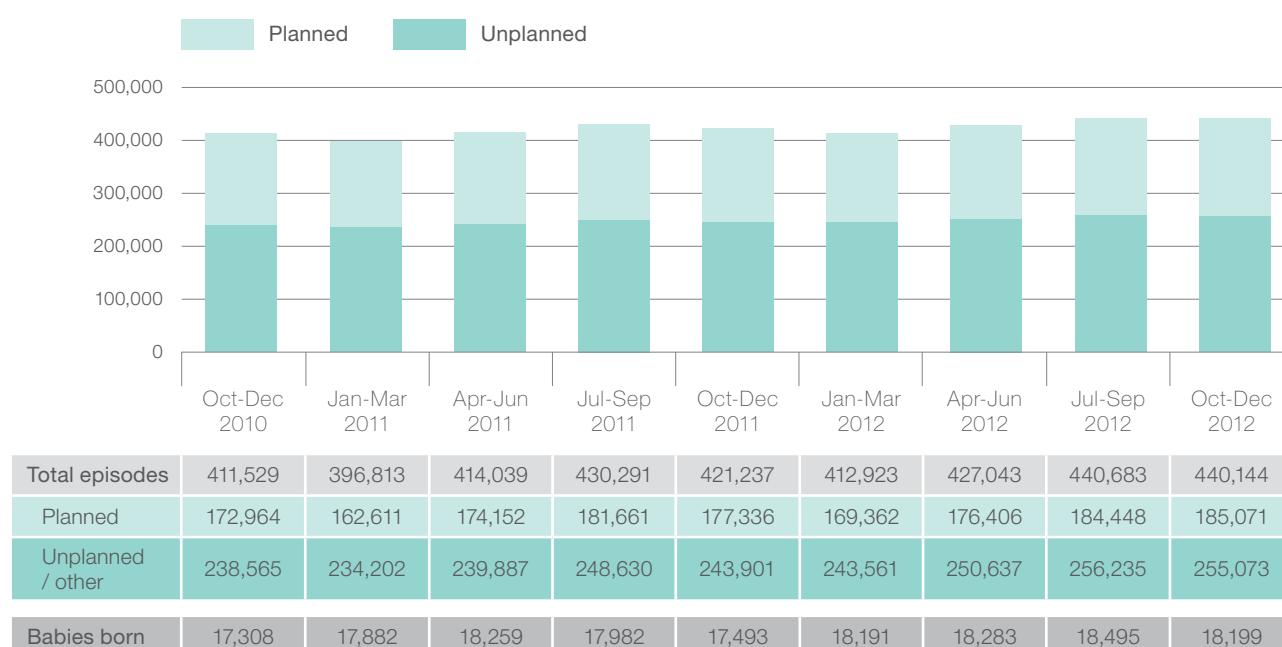
The number of admitted patient episodes in NSW public hospitals has increased over time, up from 421,237 episodes in the same quarter one year ago (4%) and from 411,529 episodes two years ago (7%).

Admitted patient episodes can be either *'planned'* (arranged in advance so the hospital can organise what care is needed) or *'unplanned / other'* (which include emergency admissions or unplanned surgical patients).

During the quarter there were 185,071 planned admitted patient episodes and 255,073 were unplanned ([Figure 1](#)). Planned episodes accounted for 42% of all admitted patient episodes.

An admission for childbirth is considered *'unplanned'* and approximately one in every 14 unplanned episodes was for childbirth. During the quarter, there were 18,199 babies born in NSW public hospitals, up 4% from the same time one year ago.

Figure 1: Planned and unplanned admitted patient episodes in NSW public hospitals, October 2010 to December 2012



Note: Only babies born in NSW public hospitals and multi-purpose services are included in this count.

Note: Numbers might differ slightly from those reported in previous *Hospital Quarterly* reports and in the NSW Ministry of Health's *Quarterly Hospital Performance Report* due to differences in when data were extracted.

Source: Admitted Patient Data Collection. Health Information Exchange, NSW Health. Data extracted on 25 January 2013.

## Number of acute patient episodes

Admitted patient episodes may be for acute care or subacute care (such as rehabilitation or palliative care). This section focuses on acute care, which is typically a short-term admission for immediate care. For this report, maternal and newborn admissions are also included under the category of acute episodes. Examples of acute care include hip replacement surgery and medical care following a heart attack. Acute episode activity is presented in [Figure 2](#).

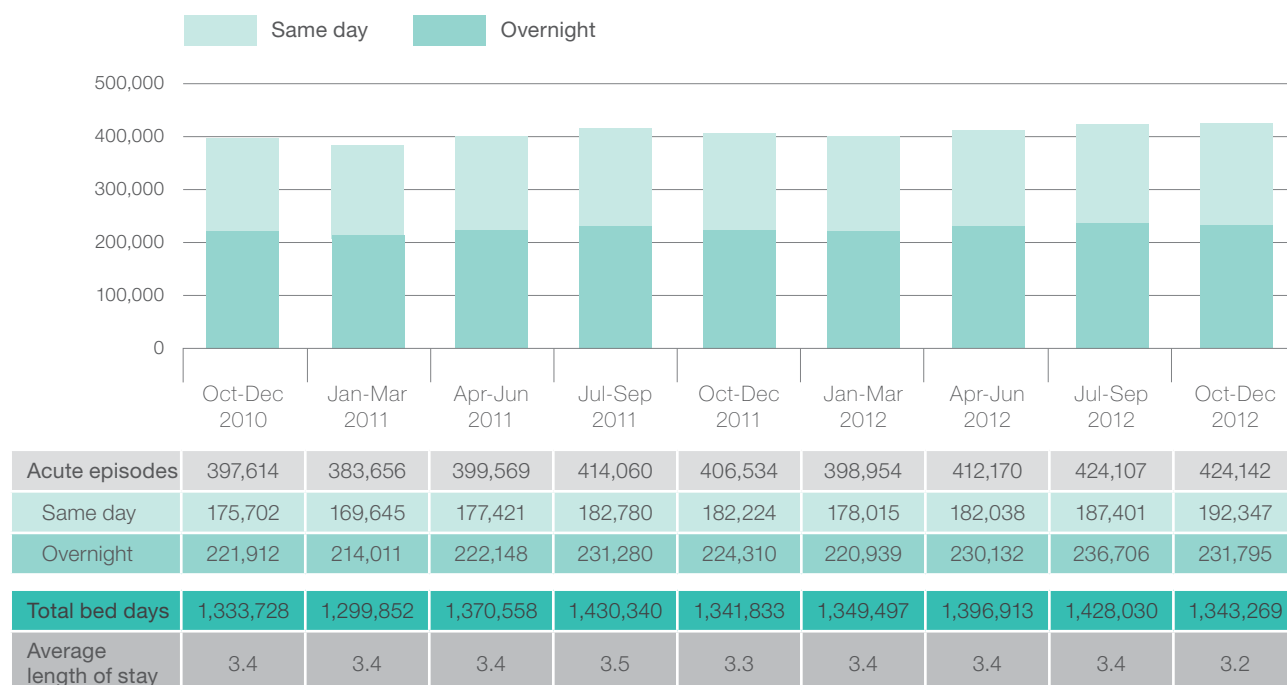
In the October to December 2012 quarter, acute admitted patient episodes were stable at 424,142 episodes (424,107 episodes in the previous quarter).

The number of acute episodes in NSW public hospitals has been increasing for comparable quarters, up from 406,534 episodes (4%) in the same quarter one year ago and from 397,614 episodes (7%) two years ago.

Acute admitted patient episodes can be either **same day** (admitted for a single day or part of a day to have a test, to receive surgery or another procedure) or **overnight** (admitted for one or more nights in hospital).

During October to December, there were 192,347 same day episodes (45% of acute admitted episodes) and 231,795 overnight episodes (representing 55%) as shown in [Figure 2](#).

**Figure 2: Same day and overnight acute admitted patient episodes in NSW public hospitals, October 2010 to December 2012**



**Note:** Numbers might differ slightly from those reported in previous *Hospital Quarterly* reports and in the NSW Ministry of Health's *Quarterly Hospital Performance Report* due to differences in when data were extracted.

**Source:** Admitted Patient Data Collection. Health Information Exchange, NSW Health. Data extracted on 25 January 2013.

## Hospital bed use for acute patients

Total acute bed days is the sum of all the lengths of time acute patients stayed in NSW hospitals. The number of acute bed days in NSW public hospitals has generally been increasing. This quarter there were 1,343,269 total acute bed days. This is similar to the same quarter one year ago (1,341,833) but 1% higher than the same quarter two years ago (1,333,728).

Average length of stay is influenced by the different types of patients that a hospital provides care for.

The average length of stay for acute admitted patient episodes (including same day patients) decreased to 3.2 days during the October to December 2012 quarter, from 3.3 days in the same quarter a year ago and 3.4 days two years ago (Figure 2).

## Appendix table 1a: Activity by hospital and local health district

Appendix table 1a presents the admitted patient episode activity for public hospitals in NSW. Data are presented by local health district for all principal referral, paediatric specialist, ungrouped acute – tertiary referral, major and district groups 1 and 2 hospitals. Information from smaller hospitals is presented for each local health district under the ‘*other*’ category.

## Appendix table 1b: Activity by hospital and peer group

Appendix table 1b presents the admitted patient episode activity for public hospitals in NSW. Data are presented by peer group for all principal referral, paediatric specialist, ungrouped acute – tertiary referral, major and district groups 1 and 2 hospitals. Information from smaller hospitals is presented under the ‘*other*’ category.

## Download our reports

The report, *Hospital Quarterly: Performance of NSW public hospitals, October to December 2012* and related reports are available at [www.bhi.nsw.gov.au](http://www.bhi.nsw.gov.au)

The suite of products includes:

- *At a Glance* summarising the three core modules
- Three core modules titled *Admitted Patients*, *Elective Surgery* and *Emergency Departments*
- Activity and performance profiles about emergency department care and elective surgery for more than 60 hospitals and NSW as a whole
- *Data Quality Assessments* and *Data Completeness Reports*
- *Technical Supplements*



## About the Bureau

The Bureau of Health Information provides the community, healthcare professionals and the NSW Parliament with timely, accurate and comparable information on the performance of the NSW public health system in ways that enhance the system's accountability and inform efforts to increase its beneficial impact on the health and wellbeing of the people of NSW.

The Bureau is an independent, board-governed statutory health corporation. The conclusions in this report are those of the Bureau 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.

### To contact the Bureau

**Telephone:** +61 2 8644 2100

**Fax:** +61 2 8644 2119

**Email:** [enquiries@bhi.nsw.gov.au](mailto:enquiries@bhi.nsw.gov.au)

**Postal address:**

PO Box 1770

Chatswood

New South Wales 2057

Australia

**Web:** [www.bhi.nsw.gov.au](http://www.bhi.nsw.gov.au)

Copyright Bureau of Health Information 2013

State Health Publication Number: (BHI) 130006  
ISSN 1838-3238

Suggested citation: Bureau of Health Information. *Hospital Quarterly: Performance of NSW public hospitals, October to December 2012. Admitted Patients*. 3(4). Sydney (NSW); 2013.

Published March 2013

Please note that there is the potential for minor revisions of data in this report. Please check the online version at [www.bhi.nsw.gov.au](http://www.bhi.nsw.gov.au) for any amendments.

# Elective Surgery

## Hospital Quarterly:

Performance of  
NSW public hospitals

### October to December 2012

Elective, or planned, surgery is surgery that a patient's doctor considers necessary but that can be delayed by at least 24 hours. Hip replacement, cataract extraction and ligament repairs are examples of elective surgery.

Compared with the same quarter one year ago, 4% more elective surgery was conducted in NSW. Non-urgent surgery increased by 6%, semi-urgent by 4% and urgent by 2%. Staged surgery decreased by 1% compared with last year.

Most patients (93%) continued to receive their surgery on time in NSW. Compared to the same quarter one year ago, the percentage of urgent patients receiving surgery on time improved

by two percentage points. The percentage of semi-urgent and non-urgent patients receiving surgery on time remained largely unchanged.

The July to September 2012 issue of *Hospital Quarterly* saw the introduction of enhanced reporting on elective surgery. *Hospital Quarterly* now reports on patients who are waiting to have their surgery by the specialty of the surgeon, by the most common procedures and by urgency category. See page 2 for more detail about these enhancements.

This is one of three *Hospital Quarterly* modules. For the Emergency Departments and Admitted Patients modules visit [www.bhi.nsw.gov.au](http://www.bhi.nsw.gov.au)



During the quarter	Oct-Dec 2012	Oct-Dec 2011	The difference
Elective surgical procedures performed	52,133 procedures	50,173 procedures	1,960 procedures (+4%)
Elective surgery patients treated on time	93% on time	92% on time	+1 percentage point
Urgent elective surgery patients treated on time	96% on time	94% on time	+2 percentage points
Semi-urgent elective surgery patients treated on time	92% on time	91% on time	+1 percentage point
Non-urgent elective surgery patients treated on time	92% on time	92% on time	unchanged
Median waiting time for orthopaedic surgery	110 days	96 days	+14 days (+15%)
Median waiting time for total knee replacement	291 days	302 days	-11 days (-4%)

\* Median waiting time: time by which half of patients received surgery. The other half of patients took equal to or longer than this time.



# Our approach to elective surgery reporting

If a person and their surgeon believe surgery is required but can be delayed by at least 24 hours, the surgeon will recommend the patient is placed on the waiting list for the procedure and assigns them to one of three urgency categories. Each category has its own target, which specifies the desired maximum time (in days) the patient should wait for their procedure. These are outlined in the box below:

Urgency categories: Elective surgery guidelines	
<b>Category 1</b> Urgent	Admission <b>within 30 days</b> desirable for a condition that has the potential to deteriorate quickly and become an emergency
<b>Category 2</b> Semi-urgent	Admission <b>within 90 days</b> desirable for a condition not likely to deteriorate quickly
<b>Category 3</b> Non-urgent	Admission <b>within 365 days</b> acceptable for a condition unlikely to deteriorate quickly

## Explaining staged procedures

There are times when surgery is deemed necessary but should not, or cannot, take place until a clinically appropriate time interval has passed. This is called staged surgery and is an essential concept in managing elective surgery. It allows surgeons to place patients on the surgery booking system but prevents them from being admitted to hospital before it is clinically appropriate. Surgeons use clinical judgement to decide whether a procedure should be categorised as staged or not. The Bureau excludes staged and non-urgent cystoscopy procedures from performance measures.

## What we have changed

In the July to September 2012 issue of *Hospital Quarterly*, the Bureau enhanced how it reports on elective surgery waiting times.

To provide a more comprehensive picture of the variation in times that patients waited for surgery, the Bureau now reports the 90th percentile time by which patients received surgery in addition to the median wait time by urgency category. The median waiting time for patients who received surgery is now also presented by the specialty of the surgeon and by common procedures.

The Bureau now reports on patients who are on the waiting list to have their surgery. For these patients, the Bureau reports by urgency category, specialty of the surgeon and most common procedures. The number of patients who have been waiting for more than 12 months is reported for each hospital and by the specialty of the surgeon for NSW.

The Bureau is committed to providing clarity on surgical waiting times in NSW. Further detail on our methods can be found in the Bureau's *Hospital Quarterly Technical Supplement: Elective surgery measures, October to December 2012* available on the Bureau's website at [www.bhi.nsw.gov.au](http://www.bhi.nsw.gov.au)

See the **Appendices** section of this report (pages 14 to 15) for more detailed performance information about each public hospital providing elective surgery in NSW. This includes Hawkesbury Private Hospital, which is contracted to supply surgery for public patients.

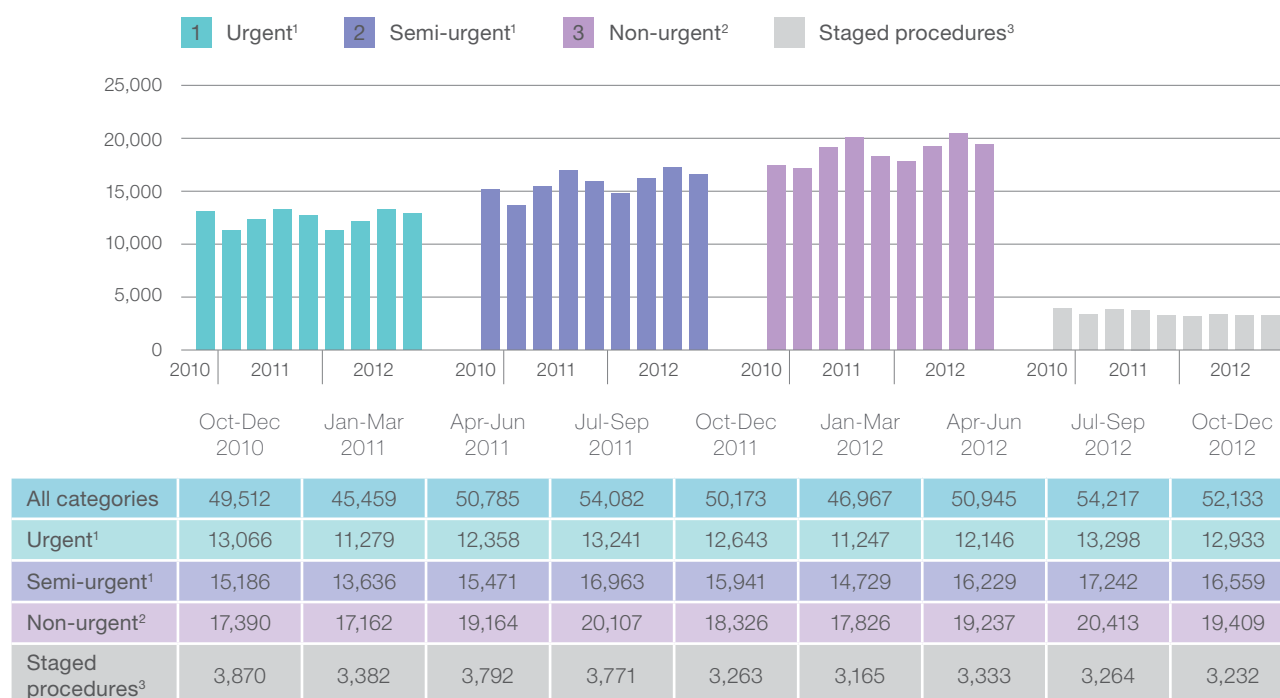
# Number of elective surgery procedures performed

During October to December 2012, the Waiting List Collection On-line System (WLCOS) recorded that 52,133 patients were admitted from the waiting list to receive an elective surgery procedure in NSW public hospitals or facilities contracted by NSW hospitals. This is 4% lower than the 54,217 conducted in the previous quarter (in line with the usual seasonal pattern) but 4% higher than the 50,173 surgical procedures completed in the same quarter last year (Figure 1).

In this report, results and figures exclude staged patients and non-urgent cystoscopy, unless otherwise stated.

**Note:** Due to a major upgrade to the information system at The Children's Hospital at Westmead, results from this hospital have been excluded from NSW current and previous quarters to enable comparisons over time. This hospital accounts for approximately 3% of elective surgery activity but its removal does not have a large effect on waiting times for NSW. Further detail about this analysis can be found in the Bureau's *Hospital Quarterly Technical Supplement: Elective surgery measures, October to December 2012*, available at [www.bhi.nsw.gov.au](http://www.bhi.nsw.gov.au)

Figure 1: Total number of elective surgery procedures conducted, by urgency category, October 2010 to December 2012



1. Excluding staged procedures.
2. Excluding staged procedures and non-urgent cystoscopy.
3. Including non-urgent cystoscopy.

**Note:** Because of changes in methods and reporting, numbers of surgical procedures by urgency category will differ from those reported in previous NSW Ministry of Health's *Quarterly Hospital Performance Reports* and Bureau *Hospital Quarterly* reports published prior to May 2011.

**Source:** Waiting List Collection On-line System, NSW Health. Data extracted for July to September 2012 and October to December 2012 on 31 January 2013. Data extracted for July to September 2011, October to December 2011, January to March 2012 and April to June 2012 on 19 October 2012. Data extracted for all previous quarters on 15 July 2011.

Only one procedure is recorded in the waiting list and counted in this report for each admission, although some patients have more than one procedure during a single admission. A patient can be admitted more than once in a quarter for elective procedures and each admission is counted.

**Urgent surgery:** There were 12,933 procedures completed, up 2% compared with one year ago. Urgent procedures made up 25% of all completed elective surgery.

**Semi-urgent surgery:** There were 16,559 procedures completed, up 4% compared with one year ago. Semi-urgent procedures made up 32% of all completed elective surgery.

**Non-urgent surgery:** There were 19,409 procedures completed, up 6% compared with one year ago. Non-urgent procedures made up 37% of all completed elective surgery.

**Staged surgery:** There were 3,232 procedures, down 1% compared with one year ago. Staged procedures made up 6% of all completed elective surgery.

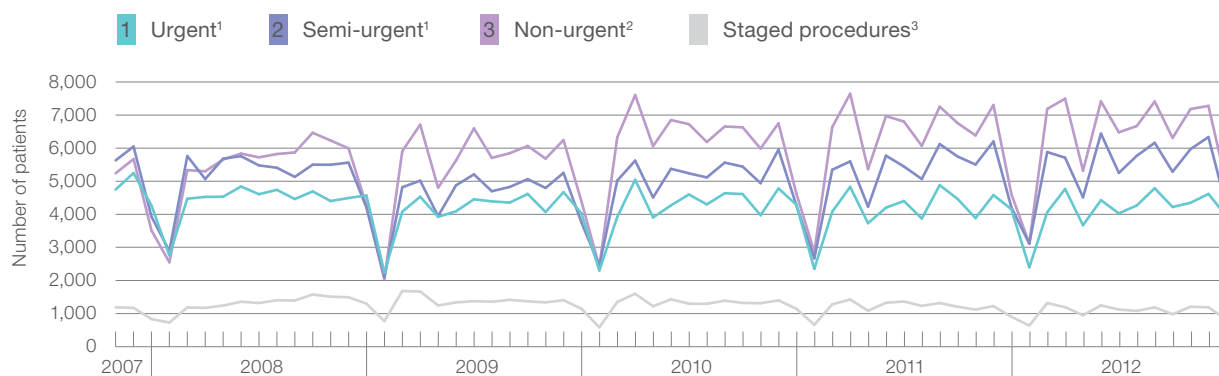
## Change over five years

The composition of surgical procedures completed by urgency category has changed over the past five years (Figure 2). Most of this shift in surgical composition occurred during 2008 and early 2009.

Comparing the proportions that the surgical categories make up of all completed procedures, urgent surgery has decreased from 29% of all surgical procedures in November 2007 to 24% in November 2012.

Over the same period, non-urgent procedures have increased from 31% of all surgical procedures to 37%.

Figure 2: Patients who received elective surgery, by urgency category, by month, October 2007 to December 2012



1. Excluding staged procedures.
2. Excluding staged procedures and non-urgent cystoscopy.
3. Including non-urgent cystoscopy.

**Note:** Because of changes in methods and reporting, numbers of surgical procedures by urgency category will differ from those reported in previous NSW Ministry of Health's *Quarterly Hospital Performance Reports* and Bureau Hospital *Quarterly reports* published prior to May 2011.

**Source:** Waiting List Collection On-line System, NSW Health. Data extracted for July to September 2012 and October to December 2012 on 31 January 2013. Data extracted for July to September 2011, October to December 2011, January to March 2012 and April to June 2012 on 19 October 2012. Data extracted for all previous quarters on 15 July 2011.

# Patients admitted on time for elective surgery

In the October to December 2012 quarter, 93% of all patients who were admitted to a public hospital for elective surgery were admitted within the time frame recommended by their surgeon (Figure 3), similar to the preceding quarter (93%) and the same quarter in 2011 (92%).

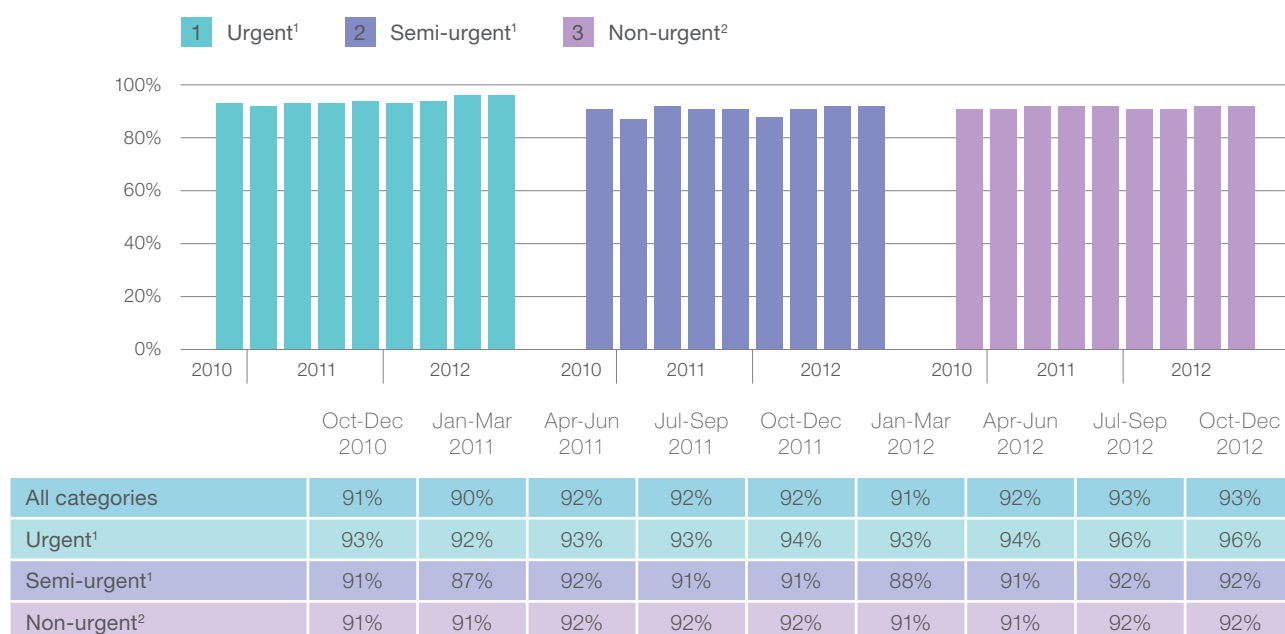
Figure 3 presents the percentage of patients in each surgical category who received their surgery on time for the most recent nine quarters. These results exclude staged patients and non-urgent cystoscopy procedures.

**Urgent surgery:** 96% of patients were admitted within the recommended 30 days, the same as the last quarter and up two percentage points compared with the same quarter in 2011.

**Semi-urgent surgery:** 92% of patients were admitted within 90 days, the same as last quarter and up one percentage point compared with the same quarter in 2011.

**Non-urgent surgery:** 92% of patients admitted within 365 days, the same as last quarter and the same quarter in 2011.

Figure 3: Percentage of elective surgery patients treated within recommended waiting time, by urgency category, October 2010 to December 2012



1. Excluding staged procedures.

2. Excluding staged procedures and non-urgent cystoscopy.

**Note:** Because of changes in methods and reporting, numbers of surgical procedures by urgency category will differ from those reported in previous NSW Ministry of Health's *Quarterly Hospital Performance Reports* and *Bureau Hospital Quarterly reports* published prior to May 2011.

**Source:** Waiting List Collection On-line System, NSW Health. Data extracted for July to September 2012 and October to December 2012 on 31 January 2013. Data extracted for July to September 2011, October to December 2011, January to March 2012 and April to June 2012 on 19 October 2012. Data extracted for all previous quarters on 15 July 2011.

# Median waiting times for elective surgery

Median wait time is the number of days by which half of patients received surgery. The other half took equal to or longer than the median.

Figure 4 presents the median waiting time to be admitted for surgery for the current quarter and the eight quarters prior to this. These results exclude staged patients and non-urgent cystoscopy procedures.

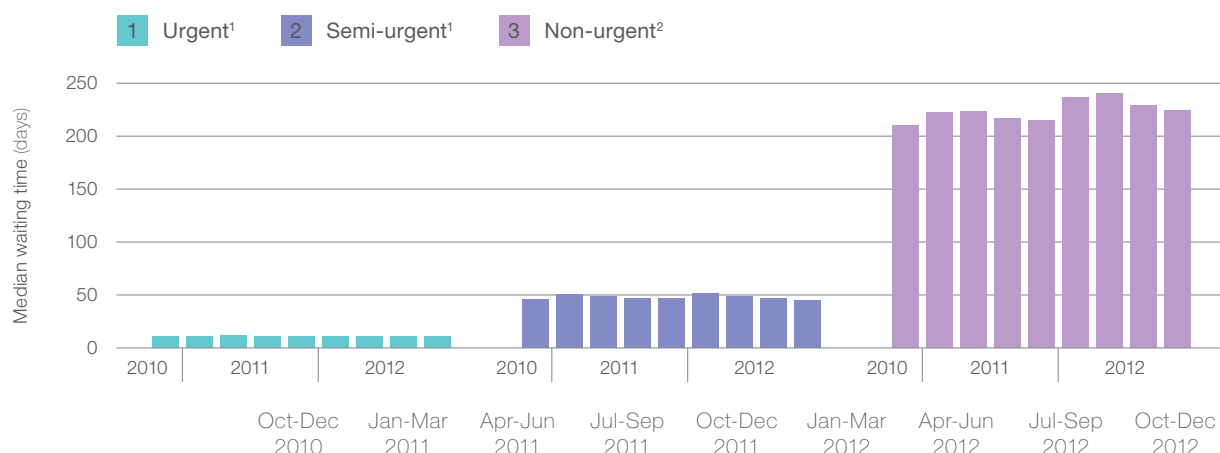
**Urgent surgery:** The median wait was 11 days – largely unchanged over the past two years, when the median wait time ranged from 11 to 12 days.

**Semi-urgent surgery:** The median wait time for this category was 45 days, two days less than the same quarter in 2011 (47 days) and one day less than the same quarter in 2010 (46 days).

**Non-urgent surgery:** The median wait time for this category was 224 days, 9 days more than the same quarter in 2011 (215 days).

In part due to the longer wait times, non-urgent median waiting times appear as the most volatile of the three urgency categories. Over the past nine quarters, non-urgent procedure wait times have ranged from 210 days in October to December 2010 to 240 in April to June 2012.

Figure 4: NSW elective surgery median waiting time (days), by urgency category, October 2010 to December 2012



1. Excluding staged procedures.

2. Excluding staged procedures and non-urgent cystoscopy.

**Note:** Because of changes in methods and reporting, numbers of surgical procedures by urgency category will differ from those reported in previous NSW Ministry of Health's *Quarterly Hospital Performance Reports* and Bureau *Hospital Quarterly reports* published prior to May 2011.

**Source:** Waiting List Collection On-line System, NSW Health. Data extracted for July to September 2012 and October to December 2012 on 31 January 2013. Data extracted for July to September 2011, October to December 2011, January to March 2012 and April to June 2012 on 19 October 2012. Data extracted for all previous quarters on 15 July 2011.

# 90th percentile waiting times for elective surgery

The 90th percentile wait time is the number of days by which 90% of patients received surgery. The final 10% took equal to or longer than this time.

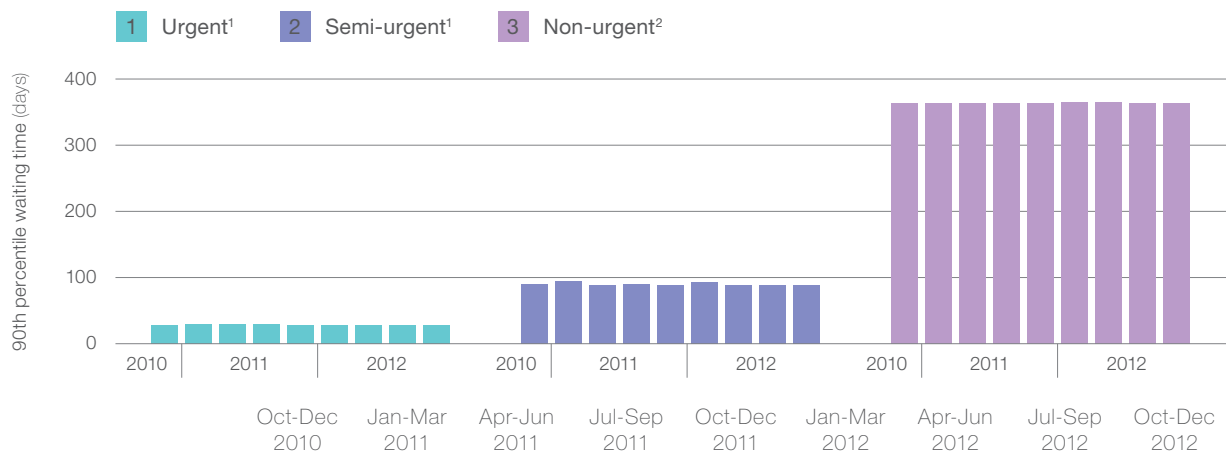
Figure 5 presents the 90th percentile waiting time to be admitted for surgery for the current quarter and the eight quarters prior to this. These results exclude staged patients and non-urgent cystoscopy procedures.

**Urgent surgery:** The 90th percentile wait was 27 days, one day less than the same quarter in 2011 and 2010.

**Semi-urgent surgery:** The 90th percentile wait time for this category was 88 days, one day less than the same quarter in 2011 (89 days) and two days less than the same quarter in 2010 (90 days).

**Non-urgent surgery:** The 90th percentile wait time for this category was 363 days, similar to the same quarter in 2011 (363 days) and the same quarter in 2010 (364 days).

Figure 5: NSW elective surgery 90th percentile waiting time (days), by urgency category, October 2010 to December 2012



	Oct-Dec 2010	Jan-Mar 2011	Apr-Jun 2011	Jul-Sep 2011	Oct-Dec 2011	Jan-Mar 2012	Apr-Jun 2012	Jul-Sep 2012	Oct-Dec 2012
Urgent <sup>1</sup>	28	29	29	29	28	28	28	28	27
Semi-urgent <sup>1</sup>	90	95	89	90	89	93	89	88	88
Non-urgent <sup>2</sup>	364	364	364	363	363	365	365	363	363

1. Excluding staged procedures.

2. Excluding staged procedures and non-urgent cystoscopy.

**Note:** Because of changes in methods and reporting, numbers of surgical procedures by urgency category will differ from those reported in previous NSW Ministry of Health's *Quarterly Hospital Performance Reports* and Bureau *Hospital Quarterly reports* published prior to May 2011.

**Source:** Waiting List Collection On-line System, NSW Health. Data extracted for July to September 2012 and October to December 2012 on 31 January 2013. Data extracted for July to September 2011, October to December 2011, January to March 2012 and April to June 2012 on 19 October 2012. Data extracted for all previous quarters on 15 July 2011.

## Cumulative wait time

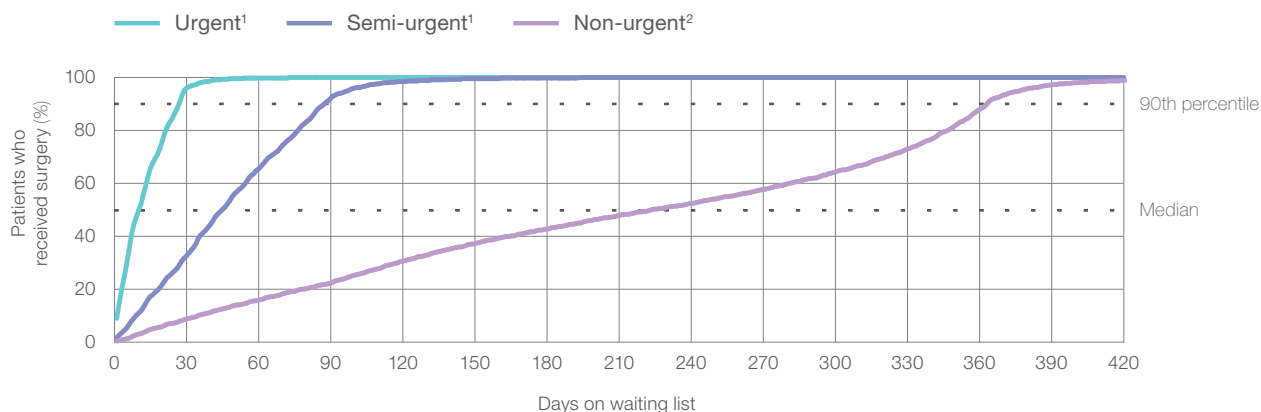
Greater detail on how long people waited to be admitted for their elective surgery during October to December 2012 is presented in [Figure 6](#).

The graph's slopes indicate the rate at which patients were admitted for surgery. A steep slope indicates a high rate of completion of patients'

surgery over the period shown. A flat slope shows a lower rate of completion of patients' surgery over the period.

Urgent patients have the most rapid rate of admission and almost all patients are admitted for surgery within 45 days. Non-urgent patients are admitted at a slower rate with almost all patients admitted within 420 days.

Figure 6: Cumulative percentage of patients who received elective surgery, by waiting time (days), October to December 2012



1. Excluding staged procedures.

2. Excluding staged procedures and non-urgent cystoscopy.

Note: Excludes the total number of days the patient was coded as 'not ready for care'.

Source: Waiting List Collection On-line System, NSW Health. Data extracted on 31 January 2013.

## Small number suppression

Some hospitals conduct few surgical procedures. Small numbers in any group need to be treated cautiously to protect patients' identities. The Bureau suppresses information based on very few patients. If there are fewer than five patients in any group, patient numbers are displayed as <5. For measures reported by urgency category, counts have been pooled with another urgency group. Because the staged procedure category is excluded from performance measure calculations, low counts in this group are not suppressed (Appendix table 1). If there are fewer than 10 patients in any group, on-time performance and median waiting times are suppressed (Appendix tables 2 and 3). If there are fewer than 100 patients in any group, the 90th percentile is suppressed (Appendix table 3).

# Median waiting times by specialty

Figure 7 presents the median waiting times for patients who received elective surgery and the number of patients who received elective surgery, by the specialty of the surgeon. The specialty of the surgeon describes the area of clinical expertise held by the doctor who performed the surgery.

The median waiting time does not include the time waited for the initial appointment with the specialist.

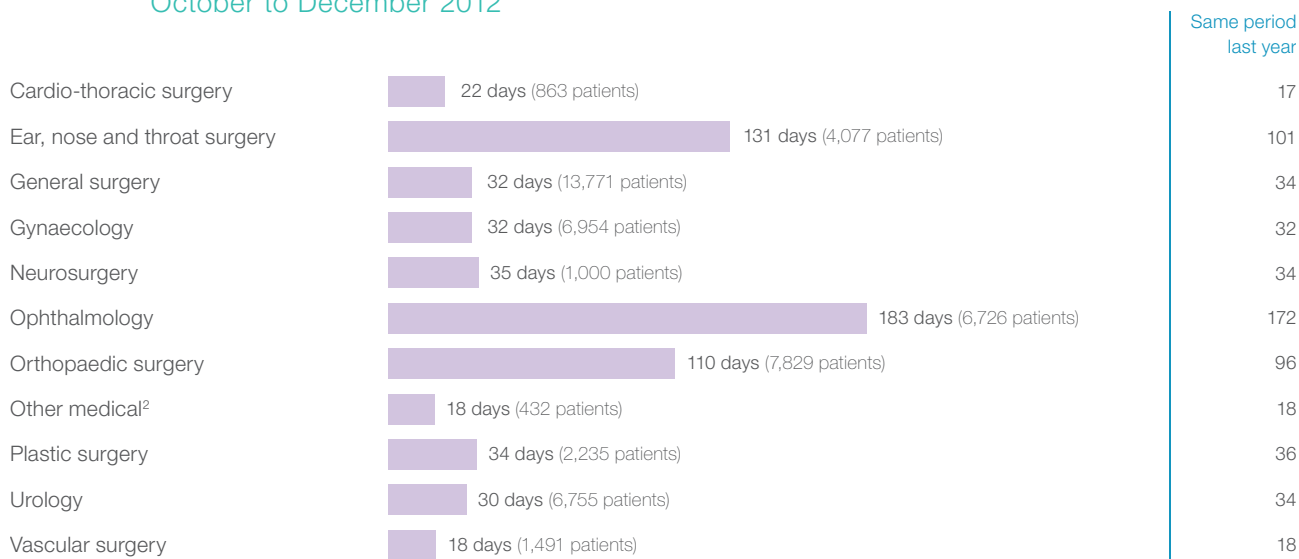
Ophthalmology (183 days), ear, nose and throat surgery (131 days) and orthopaedic surgery (110 days) were the surgical specialties with the longest median waiting times in October to December 2012. These specialties also had the longest median waiting times in the same quarter last year.

Cardio-thoracic surgery (22 days), vascular surgery (18 days) and other medical<sup>2</sup> (18 days) had the shortest median waiting times. These specialties also had the shortest median waiting times in the same quarter last year.

General surgery (13,771 patients), orthopaedic surgery (7,829 patients) and gynaecology (6,954 patients) were the surgical specialties with the highest number of patients receiving elective surgery in the October to December 2012 quarter.

Cardio-thoracic surgery (863 patients) and other medical<sup>2</sup> (432 patients) had the lowest number of patients receiving elective surgery.

Figure 7: Median<sup>1</sup> waiting time (days) for patients who received elective surgery, by specialty, October to December 2012



1. This is the number of days it took for half the patients who received elective surgery during the period to be admitted and receive their surgery. The other half took equal to or longer than the median to be admitted for surgery.
2. Other medical refers to surgery performed by a non-specialist medical practitioner.

Source: Waiting List Collection On-line System, NSW Health. Data extracted for July to September 2012 and October to December 2012 on 31 January 2013. Data extracted for July to September 2011, October to December 2011, January to March 2012 and April to June 2012 on 19 October 2012. Data extracted for all previous quarters on 15 July 2011.



## Median waiting times by common procedures

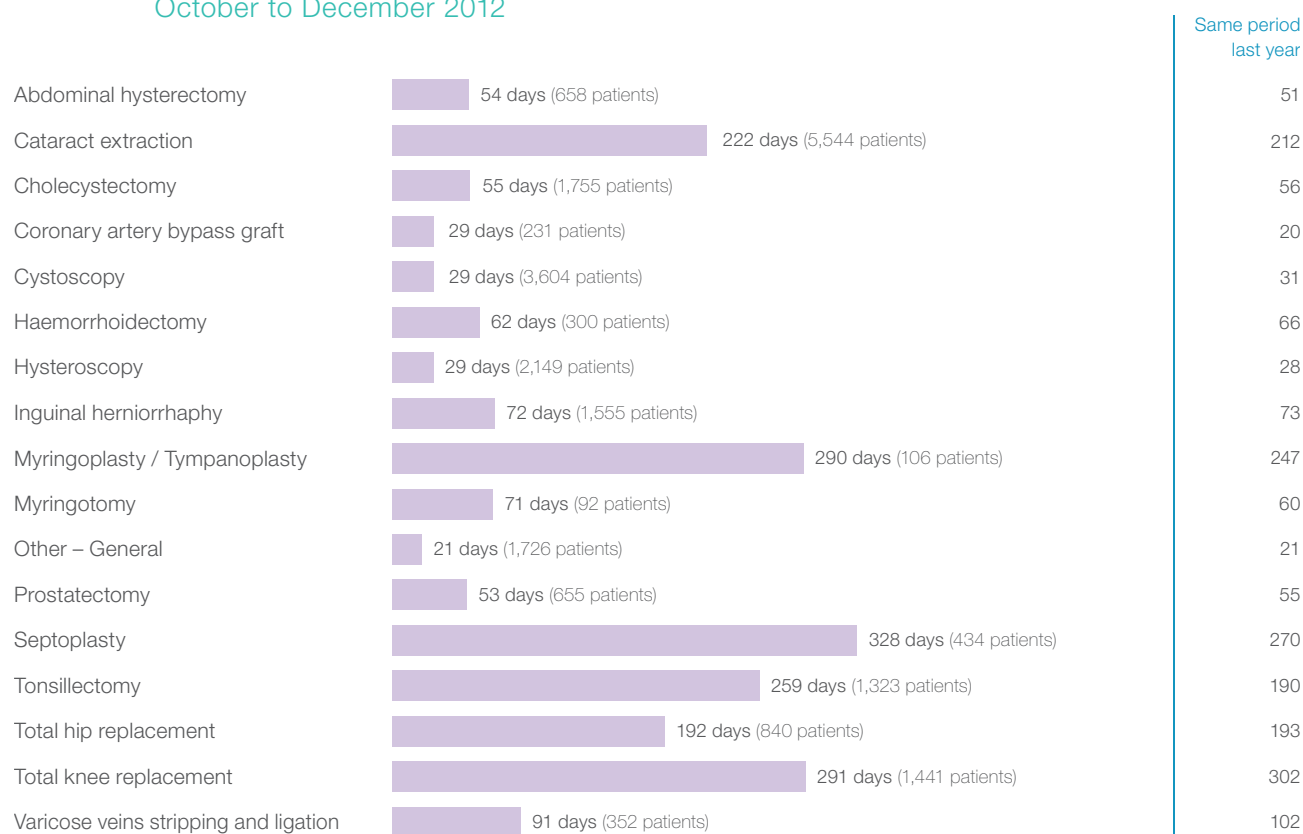
Figure 8 presents the median waiting times for patients who received elective surgery and the number of patients who received elective surgery, by common procedures. The procedure is the treatment the patient receives when admitted to hospital for elective surgery.

The procedures with the longest median waiting times in the October to December 2012 quarter were septoplasty (328 days), total knee replacement (291 days) and myringoplasty/

tympoplasty (290 days). The procedures with the shortest median waiting times were other – general (21 days), coronary artery bypass graft, cystoscopy and hysteroscopy (29 days). These procedures also had the longest and shortest median waiting times in the same quarter last year.

Cataract extraction was the most common procedure (5,544 patients) performed in the October to December 2012 quarter.

Figure 8: Median<sup>1</sup> waiting time (days) for patients who received elective surgery, by procedure,<sup>2</sup> October to December 2012



1. This is the number of days it took for half the patients who received elective surgery during the period to be admitted and receive their surgery. The other half took equal to or longer than the median to be admitted for surgery.

2. For a description of these procedures see *Elective Surgery Glossary of Common Procedures, December 2012*.

Source: Waiting List Collection On-line System, NSW Health. Data extracted for July to September 2012 and October to December 2012 on 31 January 2013. Data extracted for July to September 2011, October to December 2011, January to March 2012 and April to June 2012 on 19 October 2012. Data extracted for all previous quarters on 15 July 2011.

# Elective surgery waiting list

The following three pages are about patients who have not received surgery but are waiting for elective surgery and are ready for surgery.

At the start of the October to December 2012 quarter, there were 67,438 patients waiting for elective surgery at the start of the quarter, up 3% compared with one year ago. During the quarter, patients were added to and removed from the waiting list. Patients can be removed from the waiting list because they received the surgery they were waiting for, or for other reasons such as the surgeon or patient deeming that the surgery is no longer required.

At the end of the October to December 2012 quarter, there were 66,450 patients waiting for elective surgery, up 1% compared with the same quarter last year. A breakdown of patients waiting for elective surgery by urgency category shows that 83% were assigned as non-urgent, 15% as semi-urgent and 1% as urgent. The number of patients waiting for urgent surgery decreased by 13%, semi-urgent remained unchanged and non-urgent increased by 2%.

As at 31 December 2012, there were 12,014 patients not ready for surgery on the waiting list, up 5% compared with the same quarter last year.

Figure 9: Elective surgery waiting list, October to December 2012

	Same period last year	Change since one year ago
Patients ready for surgery on waiting list at start of quarter: 67,438 patients	65,647	3%
Patients ready for surgery on waiting list at end of quarter: 66,450 patients	65,705	1%
Patients not ready for surgery <sup>1</sup> on waiting list at end of quarter: 12,014 patients	11,462	5%

1. Includes staged procedures, non-urgent cystoscopy and patients currently not available for personal reasons.

Source: Waiting List Collection On-line System, NSW Health. Data extracted for July to September 2012 and October to December 2012 on 31 January 2013. Data extracted for July to September 2011, October to December 2011, January to March 2012 and April to June 2012 on 19 October 2012. Data extracted for all previous quarters on 15 July 2011.

Figure 10: Elective surgery waiting list, as at 31 December 2012

	Same period last year	Change since one year ago
Patients ready for surgery on waiting list by urgency category: 66,450 patients		
<b>1</b> Urgent <sup>1</sup>	940 (1%)	1,078 -13%
<b>2</b> Semi-urgent <sup>1</sup>	10,033 (15%)	9,999 0%
<b>3</b> Non-urgent <sup>2</sup>	55,477 (83%)	54,628 2%

1. Excluding staged procedures.

2. Excluding staged procedures and non-urgent cystoscopy.

Source: Waiting List Collection On-line System, NSW Health. Data extracted for July to September 2012 and October to December 2012 on 31 January 2013. Data extracted for July to September 2011, October to December 2011, January to March 2012 and April to June 2012 on 19 October 2012. Data extracted for all previous quarters on 15 July 2011.

# Elective surgery waiting list by specialty

Figure 11 presents the number of patients on the waiting list and those patients who have been waiting more than 12 months, by the specialty of the surgeon. The specialty of the surgeon describes the area of clinical expertise held by the doctor who is to perform the surgery.

The time waiting does not include the time waited for the initial appointment with the specialist.

Orthopaedic surgery (17,185 patients) and ophthalmology (15,404 patients) were the surgical specialties with the highest number of patients waiting for surgery as at 31 December 2012.

Cardio-thoracic surgery (283 patients) and other medical (204 patients) had the lowest number of patients waiting for elective surgery.

Orthopaedic surgery (131 patients) and ear, nose and throat surgery (148 patients) were the surgical specialties with the highest number of patients waiting more than 12 months as at 31 December 2012. Cardio-thoracic surgery, gynaecology, other medical and vascular surgery had less than five patients waiting in NSW more than 12 months.

Figure 11: Patients waiting for elective surgery and patients waiting more than 12 months, by specialty, as at 31 December 2012

	Patients waiting	Patients waiting (same time last year)	Change since one year ago	Patients waiting more than 12 months	Patients waiting more than 12 months (same time last year)
All specialties	66,450	65,705	1%	343	247
Cardio-thoracic surgery	283	288	-2%	< 5	0
Ear, nose and throat surgery	9,355	8,806	6%	148	11
General surgery	11,543	11,857	-3%	18	73
Gynaecology	5,397	5,360	1%	< 5	0
Neurosurgery	1,106	1,163	-5%	11	21
Ophthalmology	15,404	15,243	1%	7	0
Orthopaedic surgery	17,185	17,188	0%	131	137
Other medical <sup>1</sup>	204	238	-14%	< 5	0
Plastic surgery	2,102	1,938	8%	12	< 5
Urology	3,098	2,886	7%	9	< 5
Vascular surgery	773	738	5%	< 5	< 5

1. Other medical refers to surgery performed by a non-specialist medical practitioner.

Source: Waiting List Collection On-line System, NSW Health. Data extracted for July to September 2012 and October to December 2012 on 31 January 2013. Data extracted for July to September 2011, October to December 2011, January to March 2012 and April to June 2012 on 19 October 2012. Data extracted for all previous quarters on 15 July 2011.

# Elective surgery waiting list by common procedures

Figure 12 presents the number of patients on the waiting list by common procedures. The procedure is the treatment the patient will receive when admitted to hospital for elective surgery. Only common procedures are listed.

Cataract extraction was the most common procedure (13,689 patients) that patients were waiting for as at 31 December 2012.

Of the most common procedures, the procedures that had the least number of patients waiting were coronary artery bypass graft (84 patients) and myringotomy (174 patients).

Figure 12: Patients waiting for elective surgery by procedure,<sup>1</sup> as at 31 December 2012

	Patients waiting	Patients waiting (same time last year)	Change since one year ago
Abdominal hysterectomy	721	1,020	-29%
Cataract extraction	13,689	13,627	0%
Cholecystectomy	1,692	1,928	-12%
Coronary artery bypass graft	84	87	-3%
Cystoscopy	921	1,180	-22%
Haemorrhoidectomy	336	392	-14%
Hysteroscopy	1,149	1,107	4%
Inguinal herniorrhaphy	2,112	2,158	-2%
Myringoplasty / Tympanoplasty	336	323	4%
Myringotomy	174	172	1%
Other – General	995	979	2%
Prostatectomy	576	610	-6%
Septoplasty	1,533	1,325	16%
Tonsillectomy	3,421	3,452	-1%
Total hip replacement	1,971	2,025	-3%
Total knee replacement	4,795	4,754	1%
Varicose veins stripping and ligation	570	643	-11%

1. The procedures included in this list are procedures which are high volume; some may be associated with long waiting periods. For a description of these procedures see *Elective Surgery Glossary of Common Procedures, December 2012*.

Source: Waiting List Collection On-line System, NSW Health. Data extracted for July to September 2012 and October to December 2012 on 31 January 2013. Data extracted for July to September 2011, October to December 2011, January to March 2012 and April to June 2012 on 19 October 2012. Data extracted for all previous quarters on 15 July 2011.

## Appendix: activity by hospital and local health district

**Appendix table 1a** presents elective surgery activity for major hospitals in NSW. The table is ordered by local health district and includes all principal referral (A1), paediatric specialist (A2), ungrouped acute – tertiary referral (A3), major (B) and district groups 1 (C1) and 2 (C2) hospitals that conduct elective surgery. These hospitals account for 98% of all elective surgery recorded as complete in the NSW booking system. Surgery information from smaller hospitals is presented for each local health district under the *'other'* category.

**Appendix table 3a** presents the median and 90th percentile waiting times (in days) of elective surgery admissions for each urgency category for this quarter. The table is ordered by local health district and includes all principal referral (A1), paediatric specialist (A2), ungrouped acute – tertiary referral (A3), major (B) and district groups 1 (C1) and 2 (C2) hospitals that conduct elective surgery. Surgery information from smaller hospitals is presented for each local health district under the *'other'* category.

**Appendix table 2a** presents the percentages of elective surgery admissions within the clinically recommended time for each urgency category for October to December 2012. The table is ordered by local health district and includes all principal referral (A1), paediatric specialist (A2), ungrouped acute – tertiary referral (A3), major (B) and district groups 1 (C1) and 2 (C2) hospitals that conduct elective surgery. Surgery information from smaller hospitals is presented for each local health district under the *'other'* category.

## Appendix: activity by hospital and peer group

**Appendix table 1b** presents elective surgery activity for major hospitals in NSW. The table is ordered by peer group and includes all principal referral (A1), paediatric specialist (A2), ungrouped acute – tertiary referral (A3), major (B) and district groups 1 (C1) and 2 (C2) hospitals that conduct elective surgery. These hospitals account for 98% of all elective surgery recorded as complete in the NSW booking system. Surgery information from smaller hospitals is presented for each peer group under the *'other'* category.

**Appendix table 3b** presents the median and 90th percentile waiting times (in days) of elective surgery admissions for each urgency category for this quarter. The table is ordered by peer group and includes all principal referral (A1), paediatric specialist (A2), ungrouped acute – tertiary referral (A3), major (B) and district groups 1 (C1) and 2 (C2) hospitals that conduct elective surgery. Surgery information from smaller hospitals is presented for each peer group under the *'other'* category.

**Appendix table 2b** presents the percentages of elective surgery admissions within the clinically recommended time for each urgency category for October to December 2012. The table is ordered by peer group and includes all principal referral (A1), paediatric specialist (A2), ungrouped acute – tertiary referral (A3), major (B) and district groups 1 (C1) and 2 (C2) hospitals that conduct elective surgery. Surgery information from smaller hospitals is presented for each peer group under the *'other'* category.

## Download our reports

The report, *Hospital Quarterly: Performance of NSW public hospitals, October to December 2012* and related reports are available at [www.bhi.nsw.gov.au](http://www.bhi.nsw.gov.au)

The suite of products includes:

- *At a Glance* summarising the three core modules
- Three core modules titled *Admitted Patients, Elective Surgery and Emergency Departments*
- Activity and performance profiles about emergency department care and elective surgery for more than 60 hospitals and NSW as a whole
- *Data Quality Assessments and Data Completeness Reports*
- *Technical Supplements*



## About the Bureau

The Bureau of Health Information provides the community, healthcare professionals and the NSW Parliament with timely, accurate and comparable information on the performance of the NSW public health system in ways that enhance the system's accountability and inform efforts to increase its beneficial impact on the health and wellbeing of the people of NSW.

The Bureau is an independent, board-governed statutory health corporation. The conclusions in this report are those of the Bureau 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.

### To contact the Bureau

**Telephone:** +61 2 8644 2100

**Fax:** +61 2 8644 2119

**Email:** [enquiries@bhi.nsw.gov.au](mailto:enquiries@bhi.nsw.gov.au)

**Postal address:**

PO Box 1770

Chatswood

New South Wales 2057

Australia

**Web:** [www.bhi.nsw.gov.au](http://www.bhi.nsw.gov.au)

Copyright Bureau of Health Information 2013

State Health Publication Number: (BHI) 130006  
ISSN 1838-3238

Suggested citation: Bureau of Health Information.  
*Hospital Quarterly: Performance of NSW public hospitals, October to December 2012. Elective Surgery.* 3(4). Sydney (NSW); 2013.

Published March 2013

Please note that there is the potential for minor revisions of data in this report. Please check the online version at [www.bhi.nsw.gov.au](http://www.bhi.nsw.gov.au) for any amendments.