

# At a glance

# **Hospital Quarterly:**

Performance of NSW public hospitals

## January to March 2012

The Bureau of Health Information's latest *Hospital Quarterly* report adds to the evolving picture of hospital performance and patient use of hospitals in NSW. In three separate modules, it reports on admitted patients, those who attended emergency departments and those who underwent elective surgery during January to March 2012.

This issue of *Hospital Quarterly* sees the introduction of the National Emergency Access Target (NEAT) to reporting of emergency department (ED) performance in NSW. This measure reports the percentage of patients who left the ED within four hours of presentation against progressively increasing targets until 2015. The NSW 2012 target is 69%.

To provide a more comprehensive picture of the variation in times that patients spend in EDs, the Bureau also reports the median and 95th percentile times by which all patients left the ED in addition to the percentage of patients who left the ED within four hours of presentation (NEAT).

Detailed information on elective surgery performance for more than 80 hospitals and emergency department care in more than 60 hospitals is available in the Performance Profiles on the Bureau's website www.bhi.nsw.gov.au

During the quarter	Jan-Mar 2012	Jan-Mar 2011	The difference	
Admitted patient episodes	<b>412,526</b> episodes	<b>396,806</b> episodes	+15,720 (+4%)	
Total bed days for acute admitted patients	1,336,912 days	1,295,717 days	+41,195 (+3%)	
Elective surgical procedures performed	48,131 procedures	46,488 procedures	+1,643 (+4%)	
Elective surgery patients treated on time	91% on time	90% on time	+1 percentage point	
Median waiting time for non-urgent surgery	233 days	217 days	+16 (+7%)	
Visits to NSW emergency departments	540,301 visits	526,608 visits	+13,693 (+3%)	
People travelling to NSW EDs by ambulance	131,942 people	125,246 people	+6,696 (+5%)	
Emergency attendances that were categorised as triage 2	49,413 attendances	42,435 attendances	+6,978 (+16%)	
95th percentile time to start treatment for triage 2 patients	32 minutes	36 minutes	-4 minutes	
People leaving the ED within four hours of presentation (NEAT)	59% in 4 hours	59% in 4 hours	unchanged	

#### In NSW public hospitals during January to March 2012, on average for each day ...

4,533 people were admitted to hospital

529 people had elective surgery

5,937 people attended an ED

1,613 people were admitted to hospital as emergency admissions

# **Elective surgery**

### Number of procedures performed

During the quarter, more than 48,100 elective surgery procedures were performed. This is 6% lower than the 51,429 conducted in the previous quarter (in line with the usual seasonal pattern) but up 4% from the 46,488 surgical procedures completed in the same quarter last year. Due to 2012 being a leap year, part of the increase in procedures this quarter, compared to the same quarter last year, could be explained by the additional day in February.

Compared with the same quarter one year ago, less surgery was performed in the urgent category (less than 1% decrease) but more surgery was performed in the semi-urgent (up 8%) and non-urgent (up 4%) categories. Staged surgery decreased by 8%.

Urgent procedures made up 24% of all completed elective surgery for this quarter; semi-urgent made up 31%; non-urgent made up 38%; and staged procedures made up 7% of all completed elective surgery.

#### Elective surgery guidelines Category 1 Admission within 30 days desirable for a condition that has the potential to deteriorate Urgent quickly to the point that it may become an emergency Category 2 Admission within 90 days desirable for a condition which is not likely to deteriorate quickly Semi-urgent or become an emergency Category 3 Admission within 365 days acceptable for a condition which is unlikely to deteriorate quickly Non-urgent and which has little potential to become an emergency

#### On-time admissions

Most patients continued to receive their elective surgery on time during the quarter, with 91% of patients admitted to hospital within the time frame recommended by their surgeon. This is similar to the previous quarter (92%) and the same quarter in 2011 (90%).

Performance across urgency categories remained high, with 94% of patients in the urgent category; 88% of those considered semi-urgent and 91% of patients in the non-urgent category being admitted on time (Figure 1).

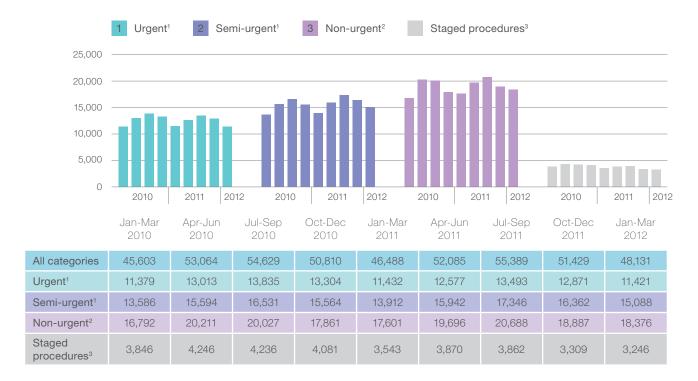
### Surgery waiting times

During the January to March 2012 quarter, median waiting times were 11 days for urgent surgery, 51 days for semi-urgent surgery and 233 days for non-urgent surgery (Figure 2).

There was an increase in the median number of days non-urgent surgery patients waited (233 days) compared with the same quarter last year (217 days) and compared to the same quarter in 2010 (207 days). Wait times for patients needing urgent and semi-urgent surgery were relatively unchanged compared to the previous quarter or last year (Figure 2).



Figure 1: Total number of elective surgery procedures conducted, by urgency category, January 2010 to March 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 2011, October to December 2011, and January to March 2012 on 16 April 2012. Data extracted for all previous quarters on 15 July 2011.

Figure 2: NSW elective surgery median waiting time (days), by urgency category, January 2010 to March 2012

	Jan-Mar 2010	Apr-Jun 2010	Jul-Sep 2010	Oct-Dec 2010	Jan-Mar 2011	Apr-Jun 2011	Jul-Sep 2011	Oct-Dec 2011	Jan-Mar 2012
Urgent <sup>1</sup>	9	11	10	11	11	11	11	11	11
Semi-urgent <sup>1</sup>	54	49	48	46	50	48	47	47	51
Non-urgent <sup>2</sup>	207	231	203	205	217	221	212	211	233

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

Note: Patients recorded as 'deferred' when they received their surgery are allocated to 'ready for care' urgency categories as appropriate.

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 2011, October to December 2011, and January to March 2012 on 16 April 2012. Data extracted for all previous quarters on 15 July 2011.

# **Emergency departments**

#### What we have changed

This issue of *Hospital Quarterly* sees the introduction of the National Emergency Access Target (NEAT) to reporting of ED performance in NSW. This measure reports the percentage of patients who left the ED within four hours of presentation against progressively increasing targets until 2015. The NSW 2012 target is 69%.

The Bureau has changed how it reports the time from presentation until leaving the ED. The NEAT defines presentation as the earlier of arrival or triage time. As a result, the Bureau now reports the time patients spent in the ED from the earlier of arrival or triage time rather than the earliest of arrival, triage or treatment time.

The Bureau now reports the median and 95th percentile times by which all patients left the ED, rather than just admitted patients.

Further detail on the findings of this analysis can be found in the Bureau's *Technical Supplement:* Emergency department measures, January to March 2012 and Hospital Quarterly Background Paper: Approaches to reporting time measures of emergency department performance, Addendum June 2012, available on the Bureau's website at www.bhi.nsw.gov.au

### Arriving at the ED

More than half a million patients attended NSW public hospital EDs during January to March 2012, 3% more than during the same quarter last year. The greatest increase was seen in the imminently life threatening category (triage 2).

The number of ambulance arrivals has increased by 5% compared with the same quarter one year ago, and was disproportionately larger than the increase in emergency attendances (up 3%).

During the quarter, 69% of ambulance patients were transferred into the care of the ED within 30 minutes of arrival. This compares with 65% in the last quarter and 66% in the same quarter last year (Figure 3). The target is 90%.

#### Time to treatment

In January to March 2012, the median times to start treatment were unchanged or slightly shorter compared to the same quarter in 2011 (Figure 4). This quarter, the median time to start treatment was:

- 8 minutes, the same as one year ago (triage 2)
- 22 minutes, two minutes shorter than one year ago (triage 3)
- 31 minutes, three minutes shorter than one year ago (triage 4)
- 30 minutes, one minute shorter than one year ago (triage 5).

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

- 32 minutes, four minutes shorter than one year ago (triage 2)
- 114 minutes, 13 minutes shorter than one year ago (triage 3)
- 167 minutes, 18 minutes shorter than one year ago (triage 4)
- 172 minutes, 14 minutes shorter than one year ago (triage 5).

Figure 3: Ambulance arrivals and percentage of patients accepted into the care of NSW emergency departments from an ambulance within 30 minutes of arrival, January 2010 to March 2012

	Jan-Mar 2010	Apr-Jun 2010	Jul-Sep 2010	Oct-Dec 2010	Jan-Mar 2011	Apr-Jun 2011	Jul-Sep 2011	Oct-Dec 2011	Jan-Mar 2012
Off-stretcher time (OST)	72%	68%	64%	67%	66%	65%	61%	65%	69%
Ambulance arrivals	122,707	122,648	126,628	128,655	125,246	128,011	132,947	133,158	131,942

Source: Data provided by NSW Ambulance Service on 20 April 2012.

Figure 4: Waiting times for treatment in NSW emergency departments, January to March 2012

	Same period last year				
Triage 1 Immediately life threatening (e.g. critical injury, cardiac arrest): 2,947 patients					
The Bureau does not report time to treatment for triage 1 patients					
Triage 2 Imminently life threatening (e.g. chest pain, severe burns): 48,229 patients					
Median time to start treatment <sup>1</sup> 8 minutes	8 minutes				
95th percentile time to start treatment <sup>2</sup> 32 minutes	36 minutes				
Triage 3 Potentially life threatening (e.g. moderate blood loss, dehydration): 156,390 patients	145,612				
Median time to start treatment <sup>1</sup> 22 minutes	24 minutes				
95th percentile time to start treatment <sup>2</sup> 114 minutes	127 minutes				
Triage 4 Potentially serious (e.g. minor head injury): 208,633 patients					
Median time to start treatment <sup>1</sup> 31 minutes	34 minutes				
95th percentile time to start treatment <sup>2</sup> 167 minutes	185 minutes				
Triage 5 Less urgent (e.g. small cuts or abrasions): 59,484 patients					
Median time to start treatment <sup>1</sup> 30 minutes	31 minutes				
95th percentile time to start treatment <sup>2</sup> 172 minutes	186 minutes				

- 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 20 April 2012.

### Leaving the emergency department

In the January to March 2012 quarter, the median time to leaving the ED was one minute more at three hours and 19 minutes, compared to the same quarter in 2011. The 95th percentile time to leaving the ED was 41 minutes less at 11 hours and 55 minutes (Figure 5).

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 6 shows attendances at NSW EDs by mode of separation for the January to March 2012 quarter. Figure 7 shows the times in which patients left the ED by mode of separation for the January to March 2012 quarter.

Figure 5: Time from presentation until leaving the ED, January to March 2012

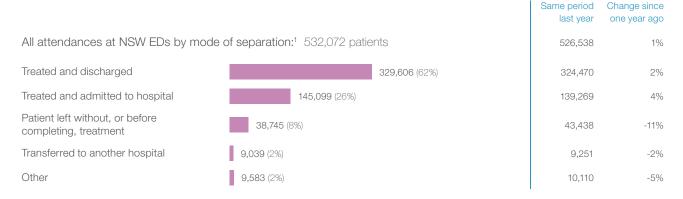
All attendances at the emergency department: 540,301 patients 526,608

Attendances used to calculate time to leaving the ED: 532,072 patients 526,538

Median time to leaving the ED<sup>3</sup> 3 hours and 19 minutes 3 hours and 18 minutes 95th percentile time to leaving the ED<sup>4</sup> 11 hours and 55 minutes 12 hours and 36 minutes

- 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 20 April 2012.

Figure 6: Leaving the ED by mode of separation, January to March 2012



All attendances that have a departure time.

 All attendances that have a departure time.

 All attendances that have a departure time.

Source: Health Information Exchange, NSW Health. Data extracted on 20 April 2012.

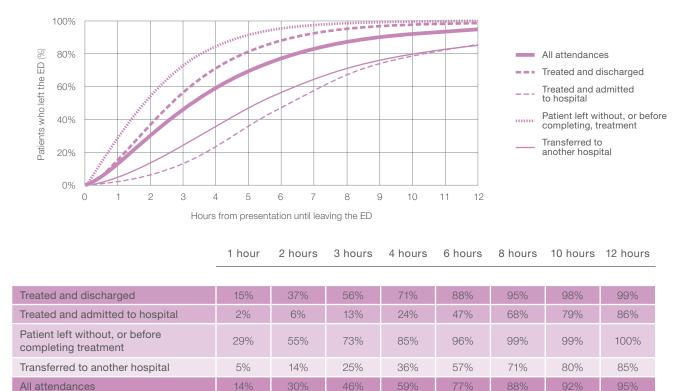
Same period

In the January to March 2012 quarter:

- Most patients (62%) received treatment in the ED and were discharged home (Figure 6). On average, these patients spent less time in the ED than other patients (Figure 7).
- About a quarter of patients (26%)
  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 6). On average,
  these patients spent the most time in
  the ED (Figure 7).
- A small group of patients (2%) received treatment in the ED and were transferred to another hospital (Figure 6).
   On average, these patients also spent longer in the ED than patients who were discharged (Figure 7).
- Some patients (8%) left the ED without, or before completing, treatment (Figure 6).
   On average, these patients spent the shortest time in the ED (Figure 7).

The NEAT for NSW in 2012 is for 69% of all patients to leave EDs within four hours. In this quarter, 59% of patients left the ED within four hours of presentation (Figure 7).

Figure 7: Percentage of emergency department patients who left the ED, by time interval and mode of separation, January to March 2012



 $\textbf{Note:} \quad \text{Time from presentation to the emergency department (ED) until recorded as leaving the ED.}$ 

Source: Health Information Exchange, NSW Health. Data extracted on 20 April 2012.

# **Download our reports**

The report, Hospital Quarterly: Performance of NSW public hospitals, January to March 2012 and related reports are available at www.bhi.nsw.gov.au

The suite of products includes:

- Three core modules on Admitted Patients, Elective Surgery and Emergency Departments
- Performance Profiles: Elective surgery
   (performance and activity reports for more than 80 hospitals and NSW as a whole)
- Performance Profiles: Emergency department care (activity reports for EDs in more than 60 hospitals and NSW as a whole)
- Data Quality Assessments



### **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 Ministry of Health, the NSW Department of Health or any other NSW public health organisation is intended or should be inferred.

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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 for any amendments.