

At a glance

Hospital Quarterly:

Performance of NSW public hospitals

July to September 2011

The Bureau of Health Information's latest *Hospital Quarterly* report adds to the evolving picture of hospital performance in NSW. In three separate modules, it reports on admitted patients, those who attended emergency departments (EDs) and those who underwent elective surgery during July to September 2011. Detailed information for more than 80 hospitals is available in the Performance Profiles on the Bureau's website www.bhi.nsw.gov.au

In this latest issue of *Hospital Quarterly*, the Bureau has established a new approach to reporting time measures of the performance of NSW EDs. These changes in reporting methods provide a richer picture of ED activity and times and enable fairer comparisons between hospitals.

Hospital Quarterly now includes the times 50% and 95% of patients began treatment within and the times 50% and 95% of admitted patients left the ED within.

The Bureau now reports the time patients spent in NSW EDs from the earliest recorded time rather than when they were triaged. It reports the length of time in NSW EDs for each quarter of the past five years, so people can identify areas to improve and whether any improvements have been sustained.

From July to September 2011	Same period last year	The difference
There were 426,086 admitted patient episodes	415,901 episodes	10,185 (+2%)
Acute patients stayed a total of 1,409,531 bed days in hospital	1,400,733 bed days	8,798 bed days (+1%)
17,795 babies were born	18,043 babies	-248 (-1%)
55,400 elective surgical procedures were performed	54,629 procedures	+771 (+1%)
The percentage of elective surgery patients treated on time was 92%	91%	1 percentage point increase
The median waiting time for non-urgent surgery was 212 days	203 days	+9 days (+4%)
There were 518,409 visits to NSW emergency departments	506,942 visits	11,467 (+2%)
132,452 people travelled to the emergency department by ambulance	126,177 people	6,275 (+5%)
There were 144,327 admissions to hospital from emergency departments	138,636 admissions	5,691 (+4%)
Half of all admitted patients left the emergency department within 7 hours and 3 minutes of presentation	6 hours and 54 minutes	9 minutes longer

In NSW public hospitals during July to September 2011, on average for each day...

5,635 people attended an emergency department

1,569 people were admitted to hospital as emergency admissions

602 people had elective surgery

193 babies were born

Elective surgery

Number of procedures performed

The amount of elective surgery conducted each quarter changes depending on the time of year. Elective surgery procedures generally dip during the summer months and peak in July-September.

During the quarter, there were 55,400 elective procedures. This represents more procedures overall than last quarter (up 6%), more procedures than the same period last year (up 1%) and more than two years ago (up 8%).

Compared with the same time one year ago, less surgery was performed in the urgent category (down 2%) but more surgery was performed in the semi-urgent (up 5%) and non-urgent (up 3%) categories.

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

On-time admissions

In the July to September 2011 quarter, 92% of all patients admitted to a public hospital for elective surgery were admitted within the time frame recommended by their surgeon, unchanged

from the preceding quarter. A slight increase is evident when comparing this quarter with the same quarter in 2010, up one percentage point from 91%.

Performance across urgency categories remained high, with 93% of patients in the urgent category; 90% of those considered semi-urgent and 92% of patients in the non-urgent category being admitted on time (Figure 1).

Surgery waiting times

During the July to September 2011 quarter, median waiting times were 11 days for urgent surgery, 47 days for semi-urgent surgery and 212 days for non-urgent surgery (Figure 2).

There was an increase in the median number of days non-urgent surgery patients waited (212 days) compared with last year (203 days) and compared to the same quarter in 2009 (162 days). Wait times for patients needing urgent and semi-urgent surgery were relatively unchanged compared to the previous quarter or last year (Figure 2).

Surgical performance measures in *Hospital Quarterly* exclude patients who underwent 'staged' surgery and non-urgent cystoscopy.

Elective surgery waits

Information on patients waiting for surgery is contained in reports released by the NSW Ministry of Health, *Current Waiting Times and Waiting Times Register by Specialty for NSW Hospitals* (available at www.health.nsw.gov.au).

Figure 1: Percentage of elective surgery patients treated within recommended waiting time, by urgency category, July 2009 to September 2011

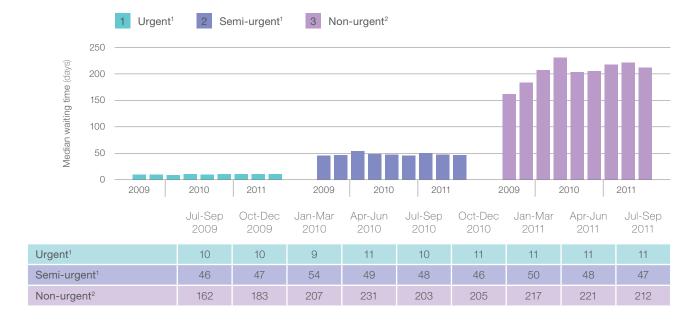
	Jul-Sep 2009	Oct-Dec 2009	Jan-Mar 2010	Apr-Jun 2010	Jul-Sep 2010	Oct-Dec 2010	Jan-Mar 2011	Apr-Jun 2011	Jul-Sep 2011
All categories	89%	88%	86%	87%	91%	91%	90%	92%	92%
Urgent ¹	91%	93%	93%	91%	92%	93%	92%	93%	93%
Semi-urgent ¹	86%	84%	80%	86%	90%	90%	87%	91%	90%
Non-urgent ²	91%	88%	87%	85%	90%	91%	92%	92%	92%

- 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 the five quarters from July to September 2010 until July to September 2011 on 17 October 2011. Data extracted for all previous quarters on 15 July 2011.

Figure 2: NSW elective surgery median waiting time (days), by urgency category, July 2009 to September 2011



- 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 the five quarters from July to September 2010 until July to September 2011 on 17 October 2011. Data extracted for all previous quarters on 15 July 2011.

Emergency departments

A new approach to ED performance reporting

In 2011, the Bureau reviewed its approach to reporting time measures of ED performance, including a detailed analysis of the data and consultation with a wide range of stakeholders with expertise in ED care and electronic information systems. As a result, the Bureau has taken a new approach to reporting to more closely reflect patients' journeys and permit fairer comparisons between hospitals and across time.

For triage 1 patients, the Bureau continues to report the number of cases and the total time in ED, but does not report time to treatment.

For all other patients, when reporting how long they spent in the ED, the Bureau measures from the earliest recorded time for the patient being in the ED (arrival, triage or treatment time) rather than from the recorded triage time.

The Bureau now presents the times 50% and 95% of patients began treatment within. We also show the times 50% and 95% of admitted patients left the ED within. This information is presented for each quarter of the past five years so people can identify areas to improve and whether any improvements have been sustained. Further detail on the findings of this analysis can be found in the Bureau's Background Paper: Approaches to reporting time measures of emergency department performance, December 2011, available on the Bureau's website at www.bhi.nsw.gov.au

Ambulance arrivals

More than half a million patients attended NSW public hospital EDs during July to September 2011, 2% more than during the same quarter last year. The greatest increases were seen in the more urgent triage categories.

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 2%).

During the quarter, 61% of ambulance patients were transferred into the care of the ED within 30 minutes of arrival. This compares with 64% in the last quarter and 68% a year ago. The target is 90% (Figure 3).

Time to treatment

At a state level, the time from presentation until treatment fluctuates and appears to be gradually increasing. Some of this apparent increase relates to progressive implementation of new information systems. For more information see the *Background Paper*.

In the July to September 2011 quarter (Figure 4):

- Half of all patients with conditions triaged as imminently life threatening (triage 2) started treatment within eight minutes of presentation and most (95%) began treatment within 42 minutes
- Half of all patients with conditions triaged as potentially life threatening (triage 3) started treatment within 25 minutes of presentation and most (95%) began treatment within 143 minutes
- Half of all patients with conditions triaged as potentially serious (triage 4) started treatment within 36 minutes of presentation and most (95%) began treatment within 194 minutes
- Half of all patients with conditions triaged as less urgent (triage 5) started treatment within 34 minutes of presentation and most (95%) began treatment within 198 minutes.

Figure 3: Percentage of patients accepted into the care of NSW emergency departments from an ambulance within 30 minutes of arrival, July 2009 to September 2011

	Jul-Sep 2009	Oct-Dec 2009	Jan-Mar 2010	Apr-Jun 2010	Jul-Sep 2010	Oct-Dec 2010	Jan-Mar 2011	Apr-Jun 2011	Jul-Sep 2011
Off-stretcher time (OST)	68%	72%	71%	68%	64%	66%	66%	65%	61%
Ambulance arrivals	127,623	125,821	122,268	122,200	126,177	128,151	124,729	127,486	132,452

Source: Data provided by NSW Ambulance Service on 20 October 2011.

Figure 4: Waiting times for treatment in NSW emergency departments, July to September 2011



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 21 October 2011.

Treated and discharged home or transferred to another hospital

Most patients (62%) received treatment in the ED and were either discharged home or transferred to another hospital. Overall, more than one-third of these patients (34%) left hospital within two hours of presentation and, by eight hours, 93% of all patients who were not admitted had left the ED.

More than half (52%) of discharged and transferred patients from triage category 5 left within two hours compared with 15% from triage category 1 (Figure 5).



Treated and admitted to hospital

Some patients (29%) received treatment in the ED and were subsequently admitted to a ward, a critical care unit or via an operating suite in the hospital.

In the July to September 2011 quarter, two in 10 (19%) patients admitted to hospital left the ED within four hours of presentation and, by 12 hours, eight in 10 (79%) of all admitted patients had left the ED (Figure 6).

Half of admitted emergency patients left the ED within seven hours and three minutes of presentation. This is longer than in the last quarter when half (50%) of all admitted emergency patients left the ED within six hours and 41 minutes, and longer than in the same quarter in 2010 when half (50%) of all admitted emergency patients left the ED within six hours and 54 minutes (Figure 7).

During the July to September 2011 quarter, most (95%) admitted emergency patients left the ED within 22 hours and five minutes of arriving in the ED.

Figure 5: Percentage of emergency patients who were treated and discharged or transferred from NSW EDs, by triage category and time interval, July to September 2011

	1 hour	2 hours	3 hours	4 hours	6 hours	8 hours	12 hours	24 hours
Triage 1: Immediately life threatening	5%	15%	29%	47%	72%	85%	94%	100%
Triage 2: Imminently life threatening	4%	15%	31%	47%	72%	85%	95%	99%
Triage 3: Potentially life threatening	7%	22%	39%	55%	78%	89%	96%	100%
Triage 4: Potentially serious	15%	37%	56%	70%	87%	94%	98%	100%
Triage 5: Less urgent	27%	52%	70%	82%	94%	98%	99%	100%
All triage categories	14%	34%	52%	67%	85%	93%	98%	100%

Note: Time from presentation to the ED until discharge or transfer from the emergency department. Source: Health Information Exchange, NSW Health. Data extracted on 21 October 2011.

This is longer than last quarter when most (95%) admitted emergency patients left the ED within 20 hours and 52 minutes, and longer than in the same quarter last year when most (95%) admitted emergency patients left the ED within 21 hours and 33 minutes (Figure 7).

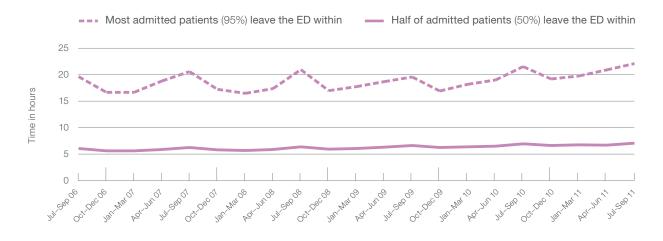
There is a strong seasonal effect on ED attendances, the time to treatment and the time to admission. The typical annual pattern sees attendance numbers highest during the October to December quarter; the longest times to treatment or to admission occur during the July to September quarters.

Figure 6: Percentage of emergency patients who were treated and admitted from NSW EDs, by triage category and time interval, July to September 2011

	1 hour	2 hours	3 hours	4 hours	6 hours	8 hours	12 hours	24 hours
Triage 1: Immediately life threatening	9%	16%	26%	39%	62%	77%	88%	98%
Triage 2: Imminently life threatening	2%	5%	11%	21%	43%	63%	80%	96%
Triage 3: Potentially life threatening	1%	4%	9%	17%	37%	58%	78%	96%
Triage 4: Potentially serious	2%	5%	11%	19%	38%	59%	80%	97%
Triage 5: Less urgent	7%	15%	25%	35%	55%	72%	88%	98%
All triage categories	2%	5%	11%	19%	39%	60%	79%	96%

Note: Time from presentation to the ED until recorded as leaving the emergency department for admitted patients. Source: Health Information Exchange, NSW Health. Data extracted on 21 October 2011.

Figure 7: Times from presentation until leaving the ED by quarter, July 2006 to September 2011



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 21 October 2011.

Download our reports

The report, Hospital Quarterly: Performance of NSW public hospitals, July to September 2011 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 Minister for 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.