

At a glance

Hospital Quarterly: Performance of NSW public hospitals

January to March 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 January to March 2011.

Detailed information for more than 80 hospitals is available in the Performance Profiles on the Bureau's website www.bhi.nsw.gov.au

This report looks at local and state-wide trends in the number of elective surgery procedures performed over five years, how long patients wait for surgery and whether they were treated on time. It shows that hospital ED and elective surgery performance varies across NSW.

In this latest *Hospital Quarterly*, the Bureau has included more detailed information on elective surgery waiting times in order to account for differences in the way hospitals record patients on the elective surgery waiting list. This has been done to enable fairer comparisons between NSW hospitals.

From January to March 2011 ...	Same period last year ...	The difference ...
There were 395,903 admitted patient episodes	382,937 episodes	12,966 (+3%)
Acute admitted patients stayed an average length of 3.4 days	3.4 days	unchanged
17,886 babies were born	17,388 babies	498 (+3%)
46,498 elective surgical procedures were performed	45,603 procedures	895 (+2%)
Of the elective surgical procedures performed, 3,548 were 'staged' procedures	3,846 procedures	-298 (-8%)
The proportion of elective surgery patients treated on time was 90%	86%	4 percentage point increase
There were 526,005 visits to NSW emergency departments	508,174 visits	17,831 (+4%)
124,729 people travelled to the emergency department by ambulance	122,268 people	2,461 (+2%)
66% of people arriving by ambulance were transferred into the care of emergency department staff within the 30-minute target	71%	5 percentage point decrease
There were 117,071 admissions to hospital from emergency departments	106,323 admissions	10,748 (+10%)
64% of people admitted from the emergency department arrived on the ward within the target of eight hours of being triaged	68%	4 percentage point decrease

In NSW public hospitals during January to March 2011, on average for each day...

5,656 people attended an emergency department

1,259 people were admitted to hospital from an emergency department

500 people had elective surgery

192 babies were born

Elective surgery

Surgery performed

The amount of elective surgery conducted each quarter changes depending on the time of year. There was a decrease in the number of procedures during January to March 2011 when compared with the previous quarter, which is typical for this time of year. Elective surgery procedures generally fall sharply across all urgency categories in December and, to a greater extent, January. Compared to a year ago, however, more elective surgery was performed.

During the quarter, there were 46,498 elective procedures. This represents fewer procedures overall than last quarter (down 9%) but more procedures than the same period last year (2% increase) and 9% more than two years ago.

This pattern also applies across each of the urgency categories. Compared with the same time one year ago, more surgery was performed in the urgent, semi-urgent and non-urgent categories, with the latter category seeing the greatest rise (5%).

On-time admissions

Most patients continued to receive their elective surgery on time during the quarter, with 90% of patients admitted to hospital within the time frame recommended by their surgeon. This is slightly lower than the previous quarter (91%) but higher than the same time last year (86%).

Performance across urgency categories remained high, with 92% of patients in the urgent category; 87% of those considered semi-urgent and 92% of patients in the non-urgent category being admitted on time (Figure 1A).

Median waiting times were 11 days for urgent surgery, 50 days for semi-urgent surgery and 217 days for non-urgent surgery (Figure 1B).

During the January to March 2011 quarter, there was an increase in the median number of days non-urgent surgery patients waited (217 days compared with 207 days last year and 149 days in 2009). Wait times for patients needing urgent and semi-urgent surgery were relatively unchanged compared to the previous quarter or last year (Figure 1B).

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

This issue of *Hospital Quarterly* changes the way waiting times are calculated for patients undergoing 'staged' surgery. For medical reasons, some elective surgery cannot be completed before a certain date – this is called a staged procedure. Because these patients are not actually waiting for care, including them in performance measurements can make wait times appear shorter than they really are.

Figure 1A: NSW elective surgery on-time performance, by urgency category, January 2009 to March 2011

	Jan-Mar 2009	Apr-Jun 2009	Jul-Sep 2009	Oct-Dec 2009	Jan-Mar 2010	Apr-Jun 2010	Jul-Sep 2010	Oct-Dec 2010	Jan-Mar 2011
All categories	91%	89%	89%	88%	86%	87%	91%	91%	90%
Urgent ¹	92%	91%	91%	93%	93%	91%	92%	93%	92%
Semi-urgent ¹	86%	87%	86%	84%	80%	86%	90%	90%	87%
Non-urgent (new method) ²	93%	90%	91%	88%	87%	85%	90%	91%	92%
Non-urgent (historic method) ³	94%	91%	92%	89%	88%	86%	91%	92%	92%

Figure 1B: NSW elective surgery median waiting time (days), by urgency category, January 2009 to March 2011

	Jan-Mar 2009	Apr-Jun 2009	Jul-Sep 2009	Oct-Dec 2009	Jan-Mar 2010	Apr-Jun 2010	Jul-Sep 2010	Oct-Dec 2010	Jan-Mar 2011
Urgent ¹	10	10	10	10	9	11	10	11	11
Semi-urgent ¹	48	48	46	47	54	49	48	46	50
Non-urgent (new method) ²	149	167	162	183	207	231	203	205	217
Non-urgent (historic method) ³	122	136	135	146	175	205	174	168	183

1. Excluding staged procedures.

2. Excluding staged procedures and non-urgent cystoscopy.

3. Including 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 *Hospital Quarterly* reports and in the NSW Department of Health's *Quarterly Hospital Performance Report*. Total surgical procedures may differ slightly due to differences in when data were extracted.

Source: Waiting List Collection On-line System, NSW Health. Data extracted for the January to March 2011 quarter on 18 April 2011. Data extracted for all previous quarters on 15 April 2011.

A Bureau analysis begun last year found differences in the way hospitals record patients due for staged surgery on waiting lists. We have published wait-time calculations that exclude these patients in order to present fairer and more equitable wait-time performance comparisons between hospitals (Figures 1A, 1B).

The Bureau's new approach to reporting elective surgery wait times has resulted in some hospitals having published wait times that are longer than previously recorded. Some of this increase may

be due to a change in performance but some may be the result of changing the method of calculating wait times. To interpret changes in wait-time performance, it is important to compare across time using the same method.

The Bureau has provided data for the past two years using the new and historic method to allow fair comparisons to be made across time (Figures 1A, 1B).

Emergency departments

Ambulance arrivals

More than half a million patients attended public hospital EDs during January to March: 4% more than during the same quarter last year and 8% more than two years ago. Attendances were slightly lower than the previous quarter, when more patients attended NSW EDs than at the peak of the 2009 swine flu pandemic.

Despite this small drop, attendances were still 8,000 higher than the swine flu peak, suggesting a six-month trend of higher patient numbers compared with the past two years.

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. The time taken for this to occur is called transfer time or off-stretcher time.

During January to March 2011, 66% of ambulance patients, rather than the target of 90%, were transferred into the care of the ED within 30 minutes of arrival. This compares with 66% in the last quarter and 71% a year ago (Figure 2). Almost a quarter of all attendances (24%) arrived by ambulance; 124,729 patients this quarter (Figure 3), compared with 122,268 patients in the same quarter last year.

From triage to treatment

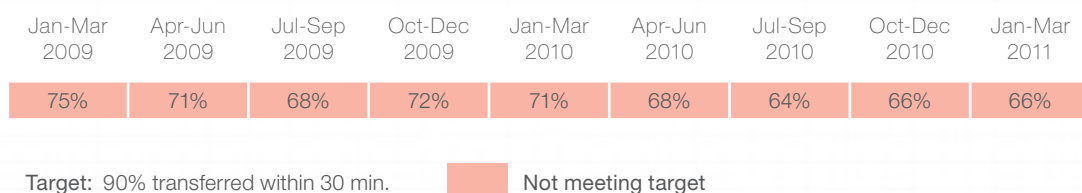
There are also targets that specify how long patients should wait from the time they are first triaged until they start treatment. These targets are based on five triage categories ranging from most to least urgent.

Results for this quarter show that patients were seen within recommended time frames for all triage categories, except patients with potentially life-threatening conditions (triage 3), where 71%, rather than the recommended 75%, were seen within the target time of 30 minutes. This is unchanged from last quarter and compares with 73% a year ago (Figure 3).

All patients with conditions triaged as immediately life threatening were treated within the target time of two minutes. The percentage of patients seen within the target time was 84% of patients in the triage 2 category, 73% of patients in triage 4 and 88% of patients in triage 5.

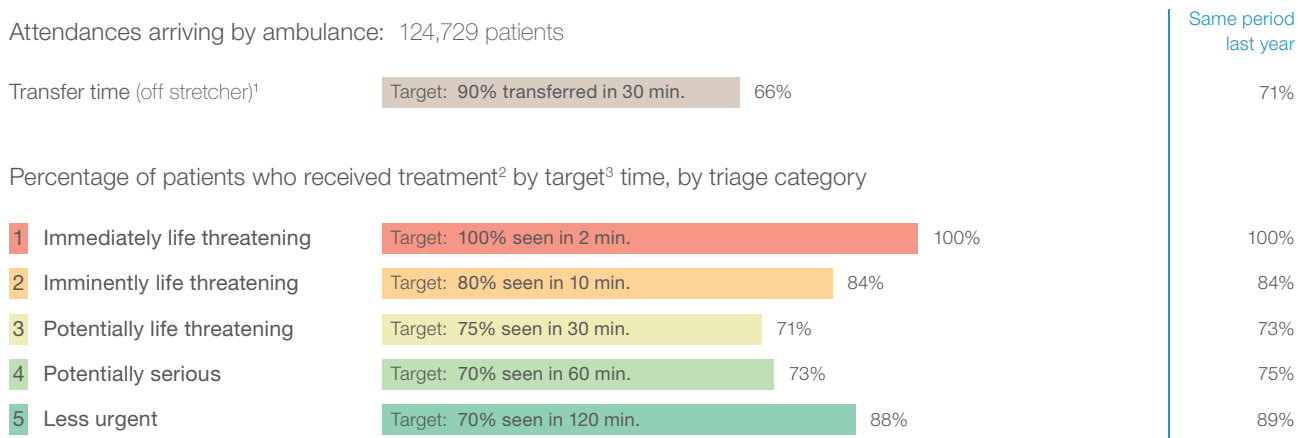
Compared with the same time last year, triage 3, 4 and 5 performance has dropped 1-2 percentage points. Triage 1 and 2 are the same. See Figure 6 for these trends over the past nine quarters.

Figure 2: Percentage of patients accepted into the care of the emergency department from an ambulance (off-stretcher performance) in NSW, January 2009 to March 2011



Source: Data provided by NSW Ambulance Service on 15 April 2011.

Figure 3: Ambulance attendances and on-time performance, by triage category, in NSW emergency departments, January to March 2011



1. Transfer time refers to the time between arrival and transfer to the care of the emergency department.
2. All emergency attendances excluding those without a recorded triage category, triage time, treatment time or with a mode of separation of 'transferred prior to treatment', 'dead on arrival' or 'did not wait for treatment'.
3. Targets for triage levels are recommended by the Australasian College for Emergency Medicine.

Source: Health Information Exchange, NSW Health. Data extracted on 18 April 2011. Ambulance patient numbers and off-stretcher time data provided by the NSW Ambulance Service on 15 April 2011.

Leaving the emergency department

Almost seven in 10 patients (67%) who attended an ED during January to March 2011 received treatment there but were not subsequently admitted to that hospital. *Hospital Quarterly* measures the length of time between triage and leaving the ED. In the January to March quarter, 38% of these patients had left within two hours, 71% within four hours and 87% within six hours. The less urgent the triage category, the sooner the patient was discharged. There is no target for this measure (Figure 4A).

When doctors decide to admit an ED patient to hospital, the target is for 80% of patients to be admitted within eight hours of first arriving. This target is a measure of what is called Emergency Admission Performance (EAP).

During the quarter, 64% of patients were admitted in the eight-hour target time, compared with 65% in the previous quarter and 68% one year ago (Figures 4B and 6).

Find out how **your local hospital**
PERFORMS

Detailed information
about the
emergency department and
elective surgery performance
of more than
80 NSW hospitals
is available at

www.bhi.nsw.gov.au

Figure 4A: Percentage of patients discharged or transferred from NSW emergency departments, by triage level and time interval¹, January to March 2011

	2 hours	4 hours	6 hours	8 hours	10 hours	12 hours	14 hours
Triage 1: Immediately life threatening	15%	50%	75%	88%	92%	96%	97%
Triage 2: Imminently life threatening	17%	51%	74%	86%	93%	96%	97%
Triage 3: Potentially life threatening	25%	58%	80%	90%	95%	97%	98%
Triage 4: Potentially serious	40%	73%	89%	95%	98%	99%	99%
Triage 5: Less urgent	56%	85%	95%	98%	99%	100%	100%
All triage categories	38%	71%	87%	94%	97%	98%	99%

Figure 4B: Percentage of patients admitted to hospital from NSW emergency departments, by triage level and time interval¹, January to March 2011

	2 hours	4 hours	6 hours	8 hours (EAP)	10 hours	12 hours	14 hours
Triage 1: Immediately life threatening	16%	42%	66%	79%	85%	89%	92%
Triage 2: Imminently life threatening	6%	24%	48%	69%	79%	85%	89%
Triage 3: Potentially life threatening	4%	19%	41%	63%	74%	82%	87%
Triage 4: Potentially serious	6%	20%	41%	63%	75%	83%	88%
Triage 5: Less urgent	15%	36%	56%	73%	83%	88%	92%
All triage categories	6%	21%	43%	64%	76%	83%	88%

1. Time from triage (or arrival in the emergency department if triage time missing) until discharge or transfer from the emergency department, or until arrival on the ward for those admitted from the emergency department.

Source: Health Information Exchange, NSW Health. Data extracted on 18 April 2011.

Figure 5: Emergency admission performance (EAP) in NSW emergency departments, January to March 2011

Jan-Mar 2009	Apr-Jun 2009	Jul-Sep 2009	Oct-Dec 2009	Jan-Mar 2010	Apr-Jun 2010	Jul-Sep 2010	Oct-Dec 2010	Jan-Mar 2011
70%	68%	65%	70%	68%	67%	61%	65%	64%

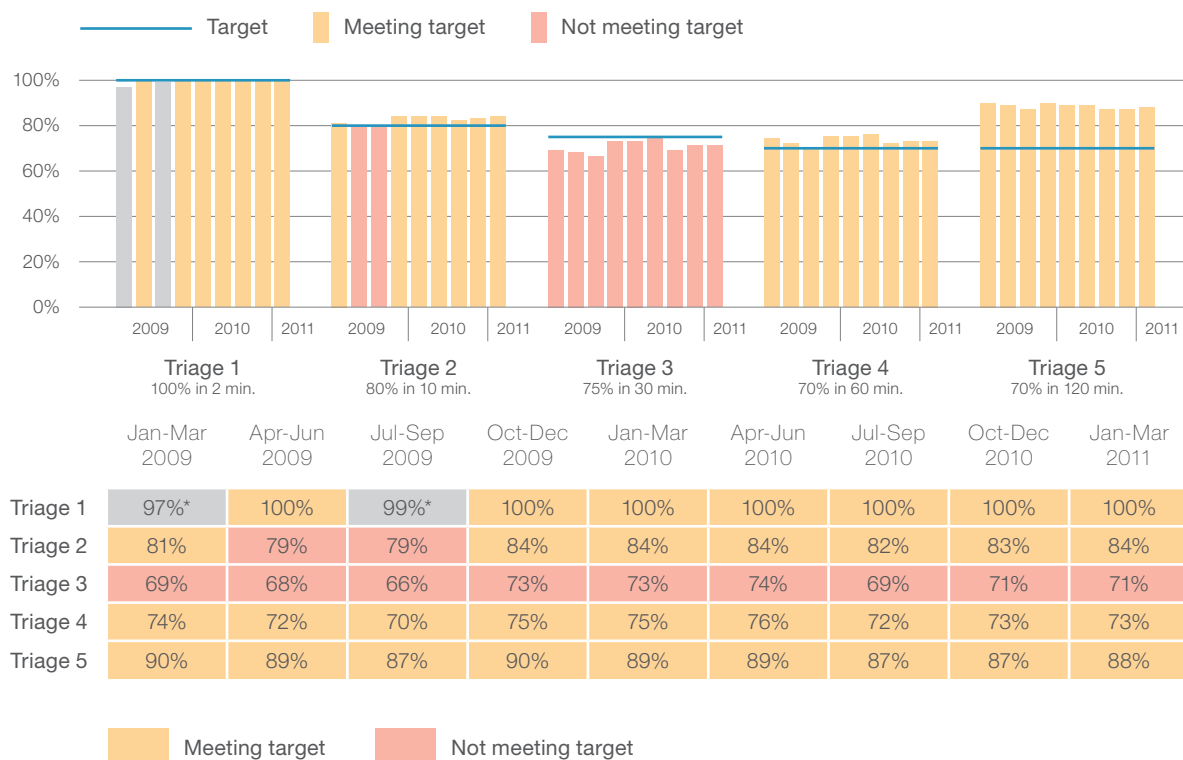
Target: 80% transferred within 8 hours

Not meeting target

Note: Percentages might differ slightly from those in previous *Hospital Quarterly* reports and in the NSW Department of Health's *Quarterly Hospital Performance Report* due to differences in when data were extracted from the emergency department information systems and because of changes in the calculation of the measure.

Source: Health Information Exchange, NSW Health. Data extracted on 18 April 2011.

Figure 6: Arrival to treatment targets in NSW emergency departments, January to March 2011



(*) Emergency department electronic records show these periods as having below 100% triage 1 performance (i.e. started to receive treatment within two minutes of being triaged). An investigation by the NSW Department of Health concluded that these electronic patient records contained data entry errors and all patients received treatment within two minutes of being triaged. The Bureau has reported the performance using electronic data available in the NSW Health Information Exchange on 18 April 2011.

Note: Percentages might differ slightly from those in previous *Hospital Quarterly* reports and in the NSW Department of Health's *Quarterly Hospital Performance Report* due to differences in when data were extracted from emergency department information systems and because of changes in the calculation of these measures.

Source: Health Information Exchange, NSW Health. Data extracted on 18 April 2011.

Download our reports

The report, *Hospital Quarterly: Performance of NSW public hospitals, January to March 2011* and related reports are available at www.bhi.nsw.gov.au

The suite of products includes:

- *Hospital Quarterly: Performance of NSW public hospitals, January to March 2011*
- *Performance Profiles: Elective surgery* (performance and activity reports for more than 80 hospitals and NSW as a whole)
- *Performance Profiles: Emergency department care* (performance and activity reports for EDs in more than 60 hospitals and NSW as a whole)
- *Data Quality Assessments*
- *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 Department of Health or any other NSW statutory health corporation is intended or should be inferred.

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