

# At a glance

# **Hospital Quarterly:**

Performance of **NSW** Public Hospitals

### October to December 2010

The Bureau of Health Information's third Hospital Quarterly report looks at patients admitted to hospital, those who attended emergency departments and those who underwent elective surgery during October to December 2010.

Extra detail on elective surgery performance for more than 80 individual hospitals and emergency department care in more than 60 hospitals is provided in the Performance Profiles, available on the Bureau website www.bhi.nsw.gov.au

The report examines trends in the number of elective surgery procedures performed over a five-year period, how long patients waited for surgery and whether they were treated on time.

It reports on time taken for patients to move from ambulance to emergency department care, and three emergency department time intervals: waiting times for treatment, time from arrival to discharge and time from arrival to admission.

| From October to December 2010  | For the same period last year | The difference                                |  |
|--|-------------------------------|---|--|
| There were 410,232 admitted patient episodes   | <b>401,640</b> episodes       | 8,592 (+2%)                                   |  |
| Acute admitted patients stayed an average length of 3.4 days   | 3.4 days unchanged            |   |  |
| 17,345 babies were born  | 17,660                        | 315 (-2%)                                     |  |
| 50,717 elective surgical procedures were performed   | 48,136                        | 2,581 (+5%)                                   |  |
| The proportion of elective surgery patients treated on time was 92%  | 89%                           | 3% increase                                   |  |
| Median waiting time for elective surgery was 11 days for urgent surgery, 46 days for semi-urgent surgery and 169 days for non-urgent surgery | 10, 47, 146 days              | 10% increase,<br>2% decrease,<br>16% increase |  |
| There were 535,790 visits to NSW emergency departments   | 515,185                       | 20,605 (+4%)                                  |  |
| 128,151 people travelled to the emergency department by ambulance  | 125,821                       | 2,330 (+2%)                                   |  |
| 66% of people arriving by ambulance were transferred into the care of emergency department staff within the 30-minute target                 | 72%                           | 6% decrease                                   |  |
| There were 118,394 admissions to hospital from emergency departments   | 110,548                       | 7,846 (+7%)                                   |  |
| 65% of people admitted from the emergency department arrived on the ward within the target of 8 hours of being triaged                       | 70%                           | 5% decrease                                   |  |

# In NSW public hospitals during October, November and December 2010,

5,824 people attended an emergency department

1,287 people were admitted to hospital from an emergency department

551 people had elective surgery

189 babies were born

### **Elective surgery**

### Surgery performed

Strong seasonal patterns affect elective surgery and there was a drop in the number of procedures during the October to December quarter with most of the decrease occurring during December, typical for this time of year. Compared to a year ago however, more elective surgery was performed.

During the quarter, there were 50,717 elective procedures. This is 3863 fewer procedures than last quarter (down 7%) but 2581 more procedures than the same period last year - a 5% increase.

In each elective surgery urgency category there has also been growth over the past year. This quarter, 13,568 patients received urgent surgery (up 3%), 15,992 patients received semi-urgent surgery (up 9%) and 21,157 patients received non-urgent surgery (up 4%).

The comparisons to last quarter give a different picture. There was a 4% decrease for urgent surgery, 6% decrease for semi-urgent, and a drop of nearly 10% for non-urgent surgery.

| 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<br>Semi-urgent  | Admission within 90 days desirable for a condition which is not likely to deteriorate quickly or become an emergency                                |  |  |  |  |  |  |  |
| Category 3<br>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

Most patients continue to receive their elective surgery on time. During the quarter, 92% of patients were admitted to hospital within the time frame recommended by their surgeon, an improvement from 89% in the same quarter last year. Performance across all urgency categories remained high, with 93% of patients in the most urgent category, 90% of patients in the semi-urgent category, and 92% of patients in the non-urgent category being admitted on time (see Figure 1).

Median waiting times were 11 days for urgent surgery, 46 days for semi-urgent surgery and 169 days for non-urgent surgery (see Figure 2).

During October to December, there was a drop in the median number of days non-urgent surgery patients waited compared to the previous quarter (169 days compared to 175 days). This is the second consecutive quarter where category 3 wait times have dropped, after a four-quarter trend of increasing wait times for these patients. Future Bureau reports may shed more light on whether or not this is the beginning of a new downward trend in waits for non-urgent surgery.

Wait times for patients needing urgent and semi-urgent surgery did not change significantly compared to last quarter or the same time last year.

### Elective surgery waits

Information on patients waiting for surgery is contained in reports released by the NSW Department 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, October 2008 to December 2010

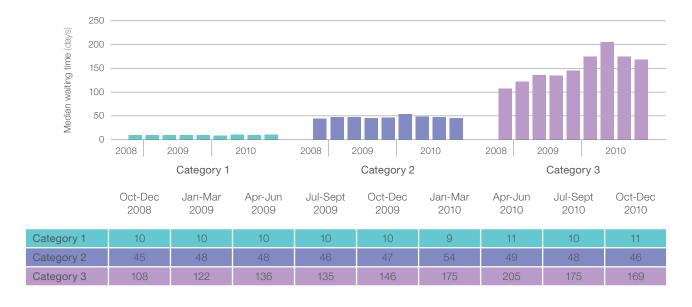
|                | Oct-Dec<br>2008 | Jan-Mar<br>2009 | Apr-Jun<br>2009 | Jul-Sept<br>2009 | Oct-Dec<br>2009 | Jan-Mar<br>2010 | Apr-Jun<br>2010 | Jul-Sept<br>2010 | Oct-Dec<br>2010 |
|----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|------------------|-----------------|
| All categories | 91%             | 91%             | 90%             | 90%              | 89%             | 87%             | 87%             | 91%              | 92%             |
| Category 1     | 93%             | 92%             | 91%             | 91%              | 93%             | 93%             | 91%             | 92%              | 93%             |
| Category 2     | 84%             | 86%             | 86%             | 86%              | 85%             | 80%             | 86%             | 90%              | 90%             |
| Category 3     | 95%             | 94%             | 91%             | 92%              | 89%             | 88%             | 86%             | 91%              | 92%             |

Note: Patients treated on time refers to the percentage of patients admitted for elective surgery in the time frame recommended by their surgeon.

Note: Percentages might differ slightly from those reported 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.

Source: Waiting List Collection On-line System, NSW Health. Data extracted for October to December 2010 and July to September 2010 quarters on 18 January 2011. Data extracted for all previous quarters on 30 September 2010.

Figure 2: NSW elective surgery median waiting time (days), by urgency category, October 2008 to December 2010



Note: Median waiting time is the number of days it took for half of the patients who received elective surgery during the period to be admitted and receive their surgery. The other half took longer than the median to be admitted for surgery.

Note: Percentages might differ slightly from those reported 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.

Source: Waiting List Collection On-line System, NSW Health. Data extracted for October to December 2010 and July to September 2010 quarters on 18 January 2011. Data extracted for all previous quarters on 30 September 2010.

## **Emergency departments**

#### **Ambulance arrivals**

Public hospital emergency departments typically experience a "Christmas rush", with more patients presenting for care than at other times. The recent Christmas rush was particularly busy, with 535,790 attendances during October to December 2010. This is 27,945 more patients than in the previous quarter, 20,605 more than the same time the previous year, and 17,932 more than at the height of the 2009 swine flu pandemic.

An ambulance crew needs to wait with a patient until emergency department staff can accept the patient into their care. During the quarter 66% of ambulance patients, rather than the target of 90%, were transferred into the care of the emergency department within 30 minutes of arrival. This is 2% higher than last quarter but 6% lower than a year ago (see Figure 3).

### Waiting time to treatment

Targets specify how long patients should wait from the time they are first assessed until they start treatment. These targets are based on five triage categories ranging from most to least urgent. This quarter, a slightly lower percentage of patients were seen within target times compared to one year ago (except for triage 1).

This drop has occurred within a landscape of increased patient attendances. State-wide, hospitals are still seeing patients within recommended time frames for all categories except triage 3. In this category 71% of patients were seen within 30 minutes (rather than the 75% target). This is 2% higher than the previous quarter but lower than the same time last year. To view these trends over time, see Figure 8.

# Arrival to departure time in the emergency department

More than 60% of patients who attended an emergency department received treatment but were not admitted to hospital. The Bureau's *Hospital Quarterly* measures the time taken to leave the emergency department after triage. In the October to December quarter, 38% of patients had left within two hours and 71% within four hours. There is no target for this measure (see Figure 5).

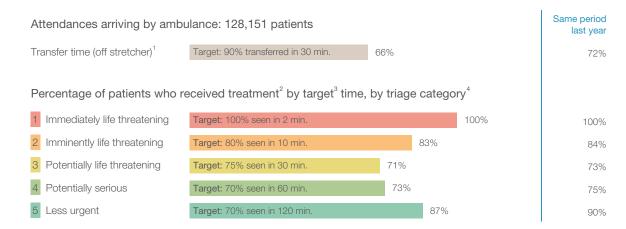
When doctors decide to admit an emergency department patient to hospital, the target is for 80% of patients to be admitted within eight hours of arriving. This target is a measure of Emergency Admission Performance (EAP). During October to December, 65% of patients were seen within eight hours, up 4% compared to the previous quarter and down 5% from a year ago (see Figure 6 and 7).

Figure 3: Percentage of patients accepted into the care of the emergency department from an ambulance (off stretcher performance) in NSW, October 2008 to December 2010



Source: Data provided by NSW Ambulance Service on 24 January 2011.

Figure 4: Waiting times in NSW emergency departments, October to December 2010



- 1. Transfer time refers to the time between arrival and transfer to the care of the emergency department.
- 2. All unplanned and prearranged medical attendances excluding those without a recorded triage category, triage time, or treatment time.
- 3. Targets for triage levels are recommended by the Australasian College for Emergency Medicine.
- 4. At the start of the 2010-11 financial year, NSW modified the definition of triage performance. Patients who did not wait for care are excluded from this measure and arrival time is used if triage time is missing. Additional detail on the effect of this can be found in the Bureau's *Technical supplement: measures of emergency department patient activity and performance, July to September 2010.*

Note: Numbers and percentages differ slightly from those previously reported by the NSW Department of Health's *Quarterly Hospital Performance Report* due to differences in when data were extracted from the emergency department information system. The Bureau also used a different approach to calculating performance information from hospitals transitioning to the new emergency department information system (see page 38 for more information).

Source: Health Information Exchange, NSW Health. Data extracted on 18 January 2011. Ambulance patient numbers and off-stretcher time data provided by the NSW Ambulance Service on 24 January 2011.

Figure 5: Percentage of patients discharged or transferred from the emergency department, by triage level and time interval, October to December 2010

|  | 2 hours | 4 hours | 6 hours | 8 hours | 10 hours | 12 hours | 14 hours |
|--|---------|---------|---------|---------|----------|----------|----------|
|  |         |         |         |         |          |          |          |
| Triage 1: Immediately life threatening | 15%     | 48%     | 73%     | 87%     | 92%      | 95%      | 96%      |
| Triage 2: Imminently life threatening  | 17%     | 52%     | 74%     | 86%     | 93%      | 96%      | 97%      |
| Triage 3: Potentially life threatening | 25%     | 59%     | 80%     | 90%     | 95%      | 97%      | 98%      |
| Triage 4: Potentially serious          | 40%     | 73%     | 89%     | 95%     | 98%      | 99%      | 99%      |
| Triage 5: Less urgent                  | 55%     | 83%     | 94%     | 98%     | 99%      | 99%      | 100%     |
| All triage categories                  | 38%     | 71%     | 87%     | 94%     | 97%      | 98%      | 99%      |

1. Time from triage (or arrival in the emergency department if triage time missing) until discharge or transfer from the emergency department.

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

Figure 6: Percentage of patients admitted to the ward from the emergency department, by triage level and time interval, October to December 2010

|  | 2 hours | 4 hours | 6 hours | 8 hours<br>(EAP) | 10 hours | 12 hours | 14 hours |
|--|---------|---------|---------|------------------|----------|----------|----------|
|  |         |         |         |                  |          |          |          |
| Triage 1: Immediately life threatening | 18%     | 44%     | 67%     | 80%              | 87%      | 92%      | 94%      |
| Triage 2: Imminently life threatening  | 6%      | 25%     | 50%     | 69%              | 79%      | 86%      | 90%      |
| Triage 3: Potentially life threatening | 5%      | 20%     | 42%     | 63%              | 75%      | 82%      | 87%      |
| Triage 4: Potentially serious          | 7%      | 21%     | 42%     | 63%              | 76%      | 84%      | 89%      |
| Triage 5: Less urgent                  | 16%     | 38%     | 58%     | 74%              | 83%      | 88%      | 92%      |
| All triage categories                  | 6%      | 22%     | 45%     | 65%              | 77%      | 84%      | 88%      |

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

Note: At the start of the 2010-11 financial year, NSW modified the definition of EAP. Patients who died in the emergency department or were admitted and discharged from the emergency department are now included in this measure. In addition, the period now begins from the time of triage (or arrival time, if triage time missing) rather than the start of treatment. Pre-arranged admissions have also been excluded. Additional detail on the effect of this can be found in the Bureau's Technical supplement: measures of emergency department patient activity and performance, July to September 2010.

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

Figure 7: Emergency admission performance (EAP) in NSW emergency departments, October 2008 to December 2010

| Oct-Dec | Jan-Mar | Apr-Jun | Jul-Sept | Oct-Dec | Jan-Mar | Apr-Jun | Jul-Sep | Oct-Dec |
|---------|---------|---------|----------|---------|---------|---------|---------|---------|
| 2008    | 2009    | 2009    | 2009     | 2009    | 2010    | 2010    | 2010    | 2010    |
| 72%     | 70%     | 68%     | 65%      | 70%     | 68%     | 67%     | 61%     | 65%     |

Target: 80% admitted 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. The Bureau also used a different approach to calculating performance information from hospitals transitioning to the new emergency department information system (see page 38 for more information).

Note: At the start of the 2010-11 financial year, NSW modified the definition of EAP. Patients who died in the emergency department or were admitted and discharged from the emergency department are now included in this measure. In addition, the period now begins from the time of triage (or arrival time, if triage time missing) rather than the start of treatment. Pre-arranged admissions have also been excluded. Additional detail on the effect of this can be found in the Bureau's *Technical supplement: measures of emergency department patient activity and performance, July to September 2010.* 

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

### Learn more about the performance of your local hospital

Detailed information about the emergency department and elective surgery performance of individual hospitals across NSW for the July to September 2010 quarter is available on the Bureau of Health Information website www.bhi.nsw.gov.au

Figure 8: Arrival to treatment targets in NSW emergency departments, October 2008 to December 2010



Note: At the start of the 2010-11 financial year, NSW modified the definition of triage performance. Patients who did not wait for care are excluded from this measure and arrival time is used if triage time is missing. Additional detail on the effect of this can be found in the Bureau's Technical supplement: measures of emergency department patient activity and performance, July to September 2010.

(\*) 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 January 2011.

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

## **Download our reports**

The report, Hospital Quarterly: Performance of NSW Public Hospitals, October to December 2010 and related reports are available at www.bhi.nsw.gov.au

The suite of products includes:

- Hospital Quarterly: Performance of NSW
   Public Hospitals, October to December 2010
- Performance Profiles: elective surgery (Performance and activity reports for NSW and more than 80 hospitals)
- Performance Profiles: emergency department care (Performance and activity reports for NSW and emergency departments in more than 60 hospitals)
- 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 organisation established by the NSW Government to be the leading source of information on the performance of the public health system in NSW.

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