



Technical Supplement

Emergency department measures

Hospital Quarterly: October to December 2012

Summary

This supplement describes the methods and technical terms used to calculate descriptive statistics and performance indicators reported in *Hospital Quarterly*.

The emergency department (ED) module of *Hospital Quarterly* is based on analyses of ED attendance data extracted from a centralised data warehouse administered by the NSW Ministry of Health called the Health Information Exchange (HIE).

There are more than 180 EDs in NSW. The activity and performance measures reported in *Hospital Quarterly* are currently based on 96 hospital EDs which have had an electronic records system in place and reliable data in the HIE for five or more quarters. These 96 EDs comprise the '*NSW totals*' reported in *Hospital Quarterly* and account for approximately 87% of all ED attendances in NSW.

The Bureau reports individual performance for 73 of these EDs in *Hospital Quarterly*. EDs are reported individually if they are part of hospitals in the principal referral, major or district peer groups (peer groups A1, A2, A3, B, C1 and C2).

Inclusion of additional EDs in *Hospital Quarterly*

When five quarters of reliable electronic data become available in the HIE, additional EDs are included in *Hospital Quarterly*. When a new ED is added, its data for preceding quarters are also included in the report.

The tables in [Appendix 1](#) show the quarters when new EDs were added, and the effect on attendances and performance measures.

Reporting of additional EDs began in:

- *Hospital Quarterly, October to December 2011* (Bega District Hospital)
- *Hospital Quarterly, July to September 2012* (Ballina District Hospital, Bateman's Bay District Hospital, Casino and District Memorial Hospital, Maclean District Hospital and Moruya District Hospital).

Inclusion of additional EDs increases total attendances reported in *Hospital Quarterly* and may affect performance measures. The inclusion of the above EDs increased the number of emergency attendances in NSW by about 3.5% each quarter, starting from *Hospital Quarterly, July to September 2012*. There was little change at the NSW level on measures of time to treatment, time to leaving the ED or on the percentage meeting the National Emergency Access Target (NEAT).

The EDs added are part of Northern NSW Local Health District (NNSWLHD) and Southern NSW Local Health District (SNSWLHD) and have an effect on results at a district level. In the October to December 2012 quarter, for example, inclusion of the additional EDs in NNSWLHD increased attendances reported in *Hospital Quarterly* by 37% and increased the percent meeting NEAT by 4%. The additional EDs in SNSWLHD increased attendances reported in *Hospital Quarterly* by 235% and increased the percent meeting NEAT by 5%.

Comparisons in *Hospital Quarterly* with the same quarter in the previous year or more recent quarters will be based on the same number of EDs.

Comparisons of attendances and admissions over longer intervals, such as the same quarter two years ago, may include the effect of additional EDs being reported. Therefore caution is needed for any comparison which spans more than five quarters.

Changeover to a new records system

Progressively, EDs in NSW have replaced historic information systems with more contemporary electronic records systems. During the changeover to a new system, there may have been an impact on the completeness and reliability of data input or extraction from local systems to the HIE and more than one quarter may be affected.

At a facility level during a changeover period, the only information from the HIE reported by the Bureau is for *'total attendances'*. For aggregated NSW reporting (for example, for NSW, local health district and peer group), data from affected hospitals are included in total counts but are excluded from calculation of all other performance measures. Data received from the Ambulance Service of NSW are not affected and are reported as usual.

Changes introduced in *Hospital Quarterly*, January to March 2012

The Bureau has made a number of changes to reporting measures of ED activity and performance reported in *Hospital Quarterly, January to March 2012*. Further information on the rationale for the changes can be found in the *Hospital Quarterly Background Paper: Approaches to reporting time measures of emergency department performance, Addendum June 2012* at www.bhi.nsw.gov.au

The changes introduced in that issue are:

- **The time that patients spend in EDs is measured starting from presentation time.** Presentation time is defined as the earlier of arrival or triage time. Previously, presentation time was defined as the earlier of arrival, triage or treatment time. The change was introduced to be consistent with definitions being used for national and interstate reporting. The change has had a minimal effect on results based on presentation time, since only a small number of records have a treatment time recorded which is earlier than the times recorded for arrival and triage. In the January to March 2012 quarter, 0.1% of records were affected for NSW, and the highest per cent for a single hospital was 1%. Bureau measures of time to treatment were not affected by the change of definition. For time to leaving the ED, the change has had no effect on the median or 95th percentile times. For individual hospitals, the median time to leaving the ED did not change for most hospitals, and all differences were less than one minute. Similarly, the 95th percentile time to leaving the ED did not change for most hospitals, and all differences were two minutes or less.
- **The labelling of the median and 95th percentile times (to start treatment or to leaving the ED) changed, however the methods of calculation did not change.** *Hospital Quarterly* refers to the *'median time'*, replacing *'half of patients (50%)'*; and the *'95th percentile time'*, replacing *'most patients (95%)'*.

- **The median time to leaving the ED and the 95th percentile time to leaving the ED are reported for all patients.** Previously, the cohort for leaving the ED only included admitted patients. This change is consistent with the definition of the cohort for the new national performance benchmark, the National Emergency Access Target (NEAT).² Broadening the cohort to include all patients has had a substantial effect on the results. Therefore, times for leaving the ED in previous reports cannot be compared with times for leaving the ED from *Hospital Quarterly, January to March 2012* onwards. Individual performance profiles include results for this new cohort for the current quarter, over the past five years and as a cumulative graph and table together with results for other mode of separation cohorts.
- **The percentage of patients who leave the ED within four hours of presentation.** This is the new national performance benchmark (NEAT) that NSW will be assessed against under the National Health Reform Agreement.²

Activity and performance indicators

This section contains the definitions used for calculating measures of ED activity and performance reported in *Hospital Quarterly*.

In the following definitions, numbers in brackets indicate the HIE database field code used to identify records by ED visit type or mode of separation (as appropriate). The arrival date and time field is used to select records from the HIE for each quarter. Unless explicitly stated, records with incomplete information in the fields required for a calculation are excluded.

All attendances

All attendances is the count of every record in the ED visit database of the HIE. This count includes attendances of all ED visit types including emergency presentations, planned return visits, pre-arranged admissions, some outpatient visits, private referrals, persons pronounced dead on arrival and patients in transit. Records are assigned to quarters of the year using the arrival date and time field.

Emergency attendances

Emergency attendances are records in the ED visit database of the HIE with an ED visit type of emergency (1) or an unplanned return visit for a continuing condition (3) or disaster (11). Emergency attendances in *Hospital Quarterly* are reported by triage category.

Records with missing or invalid information for triage category are excluded from reported counts of emergency attendances.

Emergency attendances by quarter

The time series graphs in *Hospital Quarterly* present the number of emergency attendances to an ED during each quarter for the past 21 quarters.

Emergency admissions by quarter

The time series graphs in *Hospital Quarterly* present the number of emergency admissions to an ED during each quarter for the past 21 quarters. Emergency admissions are emergency attendances with modes of separation: admitted to a ward / inpatient unit (1), admitted and discharged as an inpatient within ED (2), admitted and died in ED (3), admitted to a critical care ward (10), admitted via an operating theatre (11), or admitted: left at own risk (13).

All attendances by mode of separation

Emergency attendances are reported based on the mode of separation field: treated and discharged, treated and admitted to hospital, patients left without or before completing treatment, patients transferred to another hospital and other modes. Records with missing mode of separation are included in the 'other' cohort.

The mode of separation cohorts are:

- 'Treated and discharged' comprises attendances with mode of separation: departed with treatment complete (4)
- 'Treated and admitted to hospital' comprises attendances with modes of separation: admitted to a ward / inpatient unit (1), admitted and discharged as an inpatient within ED (2), admitted and died in ED (3), admitted to a critical care ward (10), admitted via an operating theatre (11) or admitted: left at own risk (13)

- *'Left without, or before completing, treatment'* comprises those attendances with modes of separation: departed, did not wait (6) and departed: left at their own risk (7). Patients who *'did not wait'* were triaged but left the ED before treatment was commenced. Patients who *'left at their own risk'* were triaged and treatment was begun by a clinician or nurse, but the patient left prior to the completion of their treatment
- *'Transferred to another hospital'* comprises those patients who transferred to another hospital (5) or were admitted and then transferred to another hospital (12)
- *'Other'* includes patients who were dead on arrival (8) or patients who departed for another clinical service location (9). Attendances with missing mode of separation are also included in this cohort.

Presentation time

Presentation time is the earlier of the following fields in the emergency visit database of the HIE:

- **Arrival time:** the date and time on which the person is recorded in the system as presenting for the service
- **Triage time:** the date and time on which the person is recorded in the system as being assessed by a triage nurse.

If triage time is more than 12 hours before arrival time, then the triage time field is considered an error and presentation time is set equal to arrival time.

Treatment time

Treatment time is the earlier of the following fields in the ED visit database of the HIE:

- **First seen by clinician time:** the date and time on which the person is first seen by a medical officer and has a physical examination / treatment performed that is relevant to their presenting problem(s)
- **First seen by nurse time:** the date and time at which the person is first seen by a nurse and has an assessment / treatment performed that is relevant to their presenting problem(s).

If either *'first seen by clinician time'* or *'first seen by nurse time'* is more than 12 hours before presentation time or more than 31 days after presentation time, then that field is considered an error and is excluded from calculations. If both *'first seen by clinician time'* and *'first seen by nurse time'* are more than 12 hours before presentation time or more than 31 days after presentation time, then treatment time for that record is considered an error and excluded from calculations. If treatment time is earlier than presentation time, but 12 hours or less before presentation time, then time from presentation until treatment is set to zero.

Departure time

Departure time is the date and time at which the person leaves the ED as recorded in the actual departure time field in the emergency visit database in the HIE. If departure time is more than 12 hours before presentation time or more than 31 days after presentation time, then that departure time field is considered an error and is excluded from calculation. If departure time is before presentation time by 12 hours or less, then time from presentation until leaving the ED is set to zero.

Time from presentation until treatment

Time from presentation until treatment is the difference between presentation time and treatment time. Time from presentation is reported by triage category for emergency attendances. Records with an ED visit type of emergency (1), unplanned return visit for a continuing condition (3) and disaster (11) are included.

If treatment time is more than 12 hours before presentation time or more than 31 days after presentation time, then that time from presentation until treatment is considered an error and is excluded from calculations. If treatment time is before presentation time by 12 hours or less, then time from presentation until treatment is set to zero.

Time from presentation until leaving

Time from presentation until leaving the ED is the difference between presentation time and departure time. Records that do not have a valid departure time are excluded from calculations.

If departure time is more than 12 hours before presentation time or more than 31 days after presentation time, then that time from presentation until leaving is considered an error and is excluded from calculations. If departure time is before presentation time by 12 hours or less, then time from presentation until leaving is set to zero.

Median

The median is the midpoint of the waiting times distribution. This measure is used in *Hospital Quarterly* to describe time from presentation until treatment and time from presentation until leaving the ED. The median is the time by which half of patients started treatment or left the ED. The other half of patients took equal to or longer than this time. The Bureau uses the data for each patient and the empirical distribution function with averaging to compute the median in SAS^{®3}. Results are rounded to the nearest whole minute for reporting.

95th percentile

The 95th percentile is a statistical measure of the waiting time distribution. It is used in *Hospital Quarterly* to describe time from presentation until treatment, and time from presentation until leaving the ED. The 95th percentile is the time by which 95% of patients started treatment or left the ED. The final 5% of patients took equal to or longer than this time. The Bureau uses the data for each patient and the empirical distribution function with averaging to compute the 95th percentile in SAS^{®3}. Results are rounded to the nearest whole minute for reporting.

Percentage of patients who left the ED within four hours of presentation by quarter

The time series graph in *Hospital Quarterly* shows the percentage of patients who left the ED within 4 hours of presentation by quarter. Records that do not have a valid departure time are excluded from calculation.

If departure time is more than 12 hours before presentation time or more than 31 days after presentation time, then that time from presentation until leaving is considered an error and is excluded from calculations. If departure time is before presentation time by 12 hours or less, then time from presentation until leaving is set to zero.

Arrivals by ambulance and Off Stretcher Time

Ambulance arrivals is the count of all cases used for calculation of the off stretcher performance measure. It includes all emergency and priority medical patients transported by ambulance and delivered to an ED.

Off Stretcher Time (OST) is the time in minutes between the time of arrival of an emergency patient by ambulance and the time they are transferred to the care of the ED. The OST performance measure is reported as a percentage of all patients arriving by ambulance that are transferred within 30 minutes. The denominator is all off-stretcher cases. The numerator is all patients arriving by ambulance who were transferred to the care of an ED within 30 minutes of arrival at the ED.

Data for these measures is provided by the Ambulance Service of NSW, which records the time of transfer as entered by ambulance officers using a dashboard console.

The NSW target requires 90% of patients arriving by ambulance to be transferred to the care of the ED within 30 minutes of arrival.

Percentage of patients who received treatment by time

The distribution curve in *Hospital Quarterly* shows the cumulative percentage of emergency attendances by minutes from presentation until treatment by triage category. The cumulative percentage is computed by summing the proportions of patients whose treatment started in one minute intervals of time elapsed since presentation within each triage category. Emergency patients who received treatment are patients with visit type = 1, 3 or 11 and mode of separation = 1, 2, 3, 4, 5, 7, 10, 11, 12 and 13. This cohort only includes patients who had a valid triage category and treatment time.

Treatment times which are more than 12 hours before presentation time or more than 31 days after presentation time are considered as errors and are excluded from calculations. If treatment time is 12 hours or less before presentation time then time from presentation until treatment is set to zero.

If the cumulative distribution does not reach 100%, it indicates that some patients in that triage category waited longer than the maximum time shown on the horizontal axis for their treatment to start.

Percentage of patients who left the ED by time

The distribution curve in *Hospital Quarterly* shows the cumulative percentage of attendances by the number of hours from presentation until leaving the ED. The cumulative percentage is computed by summing the proportions of patients left the ED in one minute intervals of time elapsed since presentation. Records that do not have a valid departure time are excluded from calculation. Departure times which are before presentation time or more than 31 days after presentation time are considered as errors and are excluded from calculation.

If departure time is more than 12 hours before presentation time or more than 31 days after presentation time, then that time from presentation until leaving is considered an error and is excluded from calculations. If departure time is before presentation time by 12 hours or less, then time from presentation until leaving is set to zero.

If the cumulative distribution does not reach 100%, it indicates that some patients waited longer than the maximum time shown on the horizontal axis to leave the ED.

Percentage of patients who left ED by time and mode of separation

The distribution curve in *Hospital Quarterly* shows the cumulative percentage of attendances by the number of hours from presentation until leaving the ED by mode of separation. The cumulative percentage is computed by summing the proportions of patients who left the ED in one minute intervals of time elapsed since presentation for each mode of separation. Records that do not have a valid departure time are excluded from calculation. Departure times

which are before presentation time or more than 31 days after presentation time are considered as errors and are excluded from calculation.

If departure time is more than 12 hours before presentation time or more than 31 days after presentation time, then that time from presentation until leaving is considered an error and is excluded from calculations. If departure time is before presentation time by 12 hours or less, then time from presentation until leaving is set to zero.

If the cumulative distribution does not reach 100%, it indicates that some patients in that mode of separation waited longer than the maximum time shown on the horizontal axis of the graph to leave the ED.

Time from presentation until treatment by quarter

The time series graph in *Hospital Quarterly* shows the median and 95th percentile of minutes from presentation until treatment for emergency patients who received treatment by quarter for each triage category. Emergency patients who received treatment are patients with visit type = 1, 3 or 11 and mode of separation = 1, 2, 3, 4, 5, 7, 10, 11, 12 and 13. This cohort only includes patients who had a valid triage category and treatment time.

Treatment times which are more than 12 hours before presentation or more than 31 days after presentation are considered as errors and are excluded from calculations. If treatment time is 12 hours or less before presentation time then time from presentation until treatment is set to zero.

Time from presentation until leaving the ED by quarter

The time series graph in *Hospital Quarterly* shows the median and 95th percentile of hours from presentation until leaving the ED by quarter. Records that do not have a valid departure time are excluded from calculations.

If departure time is more than 12 hours before presentation time or more than 31 days after presentation time, then that time from presentation until leaving is considered an error and is excluded from calculations. If departure time is before presentation time by 12 hours or less, then time from presentation until leaving is set to zero.

Appendix

Appendix table 1: Emergency departments added to *Hospital Quarterly* since October to December 2007

First included in <i>Hospital Quarterly</i>	First quarter of data starts	Emergency department	Local health district	Peer group
October to December 2011	October to December 2010	Bega District Hospital*	Southern NSW	C1
July to September 2012	July to September 2011	Ballina District Hospital	Northern NSW	C2
July to September 2012	July to September 2011	Casino and District Memorial Hospital	Northern NSW	C2
July to September 2012	July to September 2011	Maclean District Hospital	Northern NSW	C2
July to September 2012	July to September 2011	Bateman's Bay District Hospital	Southern NSW	C2
July to September 2012	July to September 2011	Moruya District Hospital	Southern NSW	C2

(*) Bega District ED underwent a reporting system change during July to September 2010. Starting with *Hospital Quarterly, October to December 2011*, attendance counts are included in activity measures for NSW, Peer group C1 and SNSWLHD from July to September 2010, and times are included in performance measures for NSW, Peer group C1 and SNSWLHD from October to December 2010.

Appendix table 2: Effect on attendances of including additional emergency departments in *Hospital Quarterly* since October to December 2007, by local health district

	Total EDs included	Attendances		
		Total emergency attendances	Attendances for additional EDs	Change in total attendances (%)
New South Wales				
October to December 2007	90	484,660		
January to March 2008	90	479,601		
April to June 2008	90	464,369		
July to September 2008	90	482,213		
October to December 2008	90	481,954		
January to March 2009	90	473,998		
April to June 2009	90	489,521		
July to September 2009	90	505,199		
October to December 2009	90	502,351		
January to March 2010	90	496,051		
April to June 2010	90	484,252		
July to September 2010	91	498,726	2,817	0.6%
October to December 2010	91	526,706	3,032	0.6%
January to March 2011	91	514,847	3,402	0.7%
April to June 2011	91	501,582	3,944	0.8%
July to September 2011	96	529,124	18,095	3.5%
October to December 2011	96	545,182	19,278	3.7%
January to March 2012	96	544,469	19,135	3.6%
April to June 2012	96	549,972	18,586	3.5%
July to September 2012	96	548,551	18,441	3.5%
October to December 2012	96	561,014	19,596	3.6%
Northern New South Wales Local Health District (NNSWLHD)				
October to December 2007	6	27,574		
January to March 2008	6	26,833		
April to June 2008	6	25,315		
July to September 2008	6	26,743		
October to December 2008	6	26,970		
January to March 2009	6	26,067		
April to June 2009	6	25,021		
July to September 2009	6	28,133		
October to December 2009	6	27,497		
January to March 2010	6	26,889		
April to June 2010	6	25,905		
July to September 2010	6	26,328		
October to December 2010	6	26,778		
January to March 2011	6	26,313		
April to June 2011	6	26,609		
July to September 2011	9	38,949	9,447	32.0%
October to December 2011	9	40,591	9,618	31.1%

	Total EDs included	Attendances		
		Total emergency attendances	Attendances for additional EDs	Change in total attendances (%)
January to March 2012	9	39,439	9,402	31.3%
April to June 2012	9	39,275	9,612	32.4%
July to September 2012	9	39,789	9,293	30.5%
October to December 2012	9	42,064	9,957	31.0%

Southern New South Wales Local Health District (SNSWLHD)				
October to December 2007	1	3,897		
January to March 2008	1	3,715		
April to June 2008	1	3,753		
July to September 2008	1	3,776		
October to December 2008	1	4,022		
January to March 2009	1	3,950		
April to June 2009	1	3,962		
July to September 2009	1	4,169		
October to December 2009	1	4,124		
January to March 2010	1	3,978		
April to June 2010	1	†		
July to September 2010	2	7,081	2,787	64.9%
October to December 2010	2	7,584	2,973	64.5%
January to March 2011	2	7,393	3,117	72.9%
April to June 2011	2	6,779	2,824	71.4%
July to September 2011	4	12,884	8,648	204.2%
October to December 2011	4	13,991	9,660	223.0%
January to March 2012	4	13,956	9,733	230.5%
April to June 2012	4	13,176	8,974	213.6%
July to September 2012	4	13,248	9,148	223.1%
October to December 2012	4	13,736	9,639	235.3%

(†) Due to the implementation of a new electronic information system in this emergency department during the April to June 2010 quarter, the data for this hospital are not considered reliable enough to display (see *Hospital Quarterly Background Paper: Approaches to reporting time measures of emergency department performance, Addendum June 2012* for more information).

Appendix table 3: Effect on performance against the National Emergency Access Target (NEAT) of including additional emergency departments in *Hospital Quarterly* since October to December 2007, by local health district

% leaving the ED within 4 hours (Target 69%)

	Total EDs included (%)	Additional EDs (%)	Change (percentage points)
New South Wales			
October to December 2007	66.6%		
January to March 2008	66.4%		
April to June 2008	64.6%		
July to September 2008	62.1%		
October to December 2008	64.8%		
January to March 2009	64.0%		
April to June 2009	62.5%		
July to September 2009	59.0%		
October to December 2009	61.0%		
January to March 2010	61.6%		
April to June 2010	59.9%		
July to September 2010	57.5%		
October to December 2010	58.8%	81.1%	0.1%
January to March 2011	58.7%	76.3%	0.1%
April to June 2011	58.5%	73.8%	0.1%
July to September 2011	56.6%	80.2%	1.0%
October to December 2011	59.0%	80.6%	0.9%
January to March 2012	60.2%	81.9%	0.8%
April to June 2012	58.9%	80.1%	0.8%
July to September 2012	57.7%	77.4%	0.7%
October to December 2012	63.6%	79.3%	0.6%
Northern New South Wales Local Health District (NNSWLHD)			
October to December 2007	75.3%		
January to March 2008	75.4%		
April to June 2008	75.1%		
July to September 2008	71.8%		
October to December 2008	78.2%		
January to March 2009	76.8%		
April to June 2009	65.2%		
July to September 2009	63.3%		
October to December 2009	64.9%		
January to March 2010	63.8%		
April to June 2010	65.5%		
July to September 2010	64.6%		
October to December 2010	61.8%		
January to March 2011	59.4%		
April to June 2011	57.6%		
July to September 2011	66.6%	82.1%	5.3%

% leaving the ED within 4 hours (Target 69%)

	Total EDs included (%)	Additional EDs (%)	Change (percentage points)
October to December 2011	71.0%	84.6%	4.5%
January to March 2012	70.1%	85.7%	5.2%
April to June 2012	70.4%	83.2%	4.3%
July to September 2012	69.4%	78.5%	2.9%
October to December 2012	72.5%	81.8%	2.9%

Southern New South Wales Local Health District (SNSWLHD)

October to December 2007	91.8%		
January to March 2008	93.4%		
April to June 2008	92.5%		
July to September 2008	90.9%		
October to December 2008	90.8%		
January to March 2009	90.9%		
April to June 2009	88.6%		
July to September 2009	87.5%		
October to December 2009	86.8%		
January to March 2010	85.8%		
April to June 2010	†	†	†
July to September 2010	79.0%	77.8%	0.0%
October to December 2010	79.9%	81.4%	1.0%
January to March 2011	77.1%	76.0%	-0.8%
April to June 2011	77.4%	81.7%	3.0%
July to September 2011	75.4%	78.1%	5.2%
October to December 2011	75.0%	76.4%	2.9%
January to March 2012	75.8%	77.9%	4.6%
April to June 2012	73.2%	76.6%	7.0%
July to September 2012	73.5%	76.3%	5.9%
October to December 2012	74.4%	76.6%	4.9%

(†) Due to the implementation of a new electronic information system in this emergency department during the April to June 2010 quarter, the data for this hospital are not considered reliable enough to display (see *Hospital Quarterly Background Paper: Approaches to reporting time measures of emergency department performance, Addendum June 2012* for more information).

Appendix table 4: Effect on waiting times to treatment (minutes) of including additional emergency departments in *Hospital Quarterly, October to December 2012*, by local health district

	Median time to start treatment			95th percentile time to start treatment		
	Total EDs included	Additional EDs	Change in median time to start treatment	Total EDs included	Additional EDs	Change in 95th percentile time to start treatment
New South Wales						
Triage 2	8	8	0	33	43	0
Triage 3	21	23	0	111	107	0
Triage 4	29	37	0	156	167	1
Triage 5	27	35	1	149	181	2
Northern New South Wales Local Health District (NNSWLHD)						
Triage 2	7	7	0	32	37	2
Triage 3	20	22	1	96	98	1
Triage 4	29	36	3	149	164	3
Triage 5	27	28	0	150	153	0
Southern New South Wales Local Health District (SNSWLHD)						
Triage 2	10	9	-1	52	50	-1
Triage 3	26	24	-6	120	115	-6
Triage 4	41	38	-8	181	169	-13
Triage 5	39	40	11	190	198	45

Appendix table 5: Effect on time to leaving the ED (hours, minutes) of including additional emergency departments in *Hospital Quarterly, October to December 2012*, by local health district

	Median time to leaving the ED			95th percentile time to leaving the ED		
	Total EDs included	Additional EDs	Change in median time to leaving the ED	Total EDs included	Additional EDs	Change in 95th percentile time to leaving the ED
New South Wales						
October to December 2012	3h 6m	2h 0m	-2m	11h 13m	7h 24m	-8m
Northern New South Wales Local Health District (NNSWLHD)						
October to December 2012	2h 19m	1h 53m	-11m	10h 20m	7h 9m	-1h 5m
Southern New South Wales Local Health District (SNSWLHD)						
October to December 2012	2h 19m	2h 10m	-20m	8h 0m	7h 43m	-27m

References

1. Australian Institute of Health and Welfare. METeOR Metadata Online Registry. [Emergency department stay – presentation time, hmmm](#). [online] [cited 28 May 2012]. Available from www.meteor.aihw.gov.au/content/index.phtml/itemId/471889
2. Australian Government Department of Health and Ageing. National Health Reform. [National Partnership Agreement on Improving Public Hospital Services](#). [online] [cited 28 May 2012]. Available from www.yourhealth.gov.au/internet/yourhealth/publishing.nsf/Content/npa-improvingpublichospitals-agreement-toc
3. SAS Institute. [The SAS System for Windows, version 9.2](#) Cary (NC): SAS Institute 2005.

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

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.

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

Suggested citation: Bureau of Health Information.
Hospital Quarterly Technical Supplement: Emergency department measures, October to December 2012. 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 for any amendments.