Bureau of Health Information

Admitted Patients

Hospital Quarterly:

Performance of NSW public hospitals

January to March 2014

Admitted patients are people who are accepted into hospital to receive care for reasons such as surgery, illness or childbirth. When a person is admitted into hospital they begin what is termed an 'episode of care'. This covers a single type of care such as acute care (typically a short-term admission for immediate care), rehabilitation or palliative care.

Sometimes, a change in the medical needs of a person requires that they start a second or third episode during the same period of stay in hospital. Examples include a patient who is transferred from acute care to rehabilitation, or a patient who is transferred from one hospital to another. Information on the number, type and length of episodes allows healthcare professionals to better understand hospital needs.

In the January to March 2014 quarter there were 435,633 admitted patient episodes of care completed, 3% (13,750) more than the same quarter in the previous year.

Same day episodes have increased more than overnight episodes.

The average length of stay (ALOS) for both acute and non-acute episodes has had a minimal decrease (0.1 days) since the same quarter last year. This reflects the higher proportion of same day episodes. Overnight acute ALOS is unchanged at 4.9 days.

Information at the hospital, LHD and peer group level from this issue of Hospital Quarterly will also be available for viewing and downloading on the Bureau's new online interactive tool Healthcare Observer. Visit www.bhi.nsw.gov.au/healthcareobserver

During the quarter	Jan-Mar 2013	Jan-Mar 2014	The difference
All admitted patient episodes	421,883	435,633	13,750 (3%)
All acute	406,272	419,335	13,063 (3%)
Overnight	223,606	226,742	3,136 (1%)
Sameday	182,666	192,593	9,927 (5%)
Newborn	17,807	18,092	285 (2%)
Average length of stay (days)			
Acute	3.2	3.1	-0.1 (-3%)
Acute overnight	4.9	4.9	no difference
Non-acute	15.1	15.0	-0.1 (-1%)

What's in this module

This module includes information on:

- The volume and average length of stay associated with admitted patient acute episodes that were completed within the reference period
- The number of babies born is also reported
- The volume, average length of stay and bed days for non-acute episodes of patient care
- Trends in the ALOS and bed days

- A graphic representation of the variation in ALOS for acute overnight episodes of care for each hospital peer group
- Percentages of same day and overnight episodes that are planned and unplanned

Which patients are included in this report

The group of patients reported in the admitted patient module includes individuals admitted to:

- Public hospitals
- Privately managed hospitals contracted to supply services for public patients
- Public multi-purpose services
- Public psychiatric hospitals

Excluded from this module are:

- Non-admitted patients, including community residential care and residential aged care covered by Commonwealth block funding
- Organ donors posthumously admitted
- Hospital boarders who are not admitted, such as relatives of patients
- Newborn babies who are aged 9 days or less at the time of admission and who only require newborn care and/or accommodation

How many patients are admitted to hospitals

Of the 435,633 episodes of care completed in the January to March 2014 quarter, 96% (419,335) were recorded as acute care.

The remaining 16,298 episodes were for patients admitted for non-acute care. Non-acute care includes rehabilitation, palliative care and "other" non-acute care.

The number of acute care episodes increased by 3% compared to the same quarter in the previous year. Non-acute episodes increased by 4%.

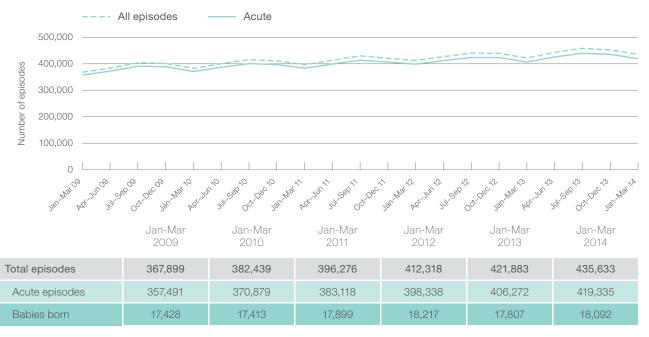
Over the past five years, although there are seasonal fluctuations, there has still been a gradual increase of episodes over time.

The number of babies born in the quarter (18,092) is 1.6% higher than the same period in the previous year.

Figure 1: Number of acute and non-acute episodes completed January to March 2014 by care type

		Same period last year	Change since one year ago
All episodes: 435,633		421,883	3%
Acute	419,335 (96%)	406,272	3%
Non-acute 16,298 (4%)		15,611	4%

Figure 2: Number of total and acute episodes completed January 2009 to March 2014



Note: Non-acute episodes involve patients hospitalised for rehabilitation, palliative care and 'other' non-acute reasons such as hostel accommodation, and geriatric evaluation and maintenance. These are sometimes referred to as sub-acute care.
Source: NSW Health, Health Information Exchange, Admitted Patient Data Collection. Data extracted on 15 April 2014.

How many acute episodes are same day and overnight

Admitted patient episodes can be either 'planned' (arranged in advance) or 'unplanned/ other' (which include emergency admissions or unplanned surgical patients). With regard to acute care episodes during the January to March 2014 quarter:

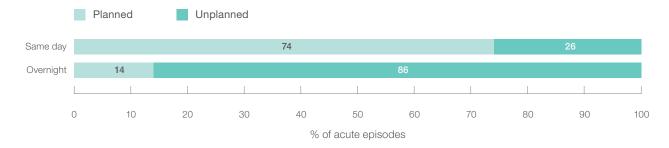
- 174,303 (42%) were planned,
- 245,032 (58%) were unplanned,
- 226,742 (54%) were overnight and
- 192,593 (46%) were same day.

Figure 3 shows that the majority of same day episodes were planned. Conversely the majority of overnight episodes were unplanned.

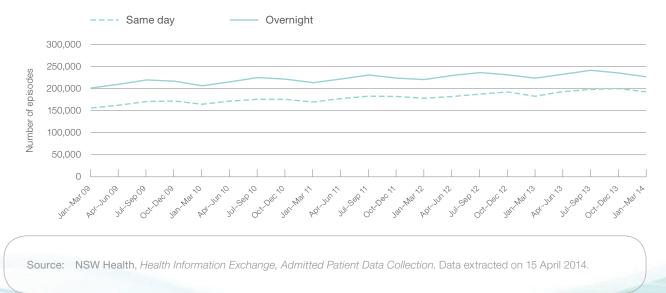
Figure 4 shows that the number of same day and overnight episodes have increased over the five year period.

The number of same day episodes has increased by a greater amount (23%) than overnight episodes (13%) compared to five years ago.

Figure 3: Sameday/overnight acute episodes by percentage planned/unplanned, January to March 2014







How long did people spend in hospital

The length of time a patient stays in hospital is a reflection of both the treatment needs of a patient and the efficiency and effectiveness of the treatment provided.

The average length of stay for a patient varies depending on whether the episode is for acute or non-acute care. This is because acute episodes tend to be for an immediate treatment or surgery that is usually completed in a short period of time. A non-acute episode usually involves treatment or care over a longer term. A typical non-acute episode might involve rehabilitation following surgery for a fractured hip. Another example might be palliative care for patients with a terminal illness.

The ALOS for all patient episodes completed during the quarter was 3.5 days. Over the five year period ALOS for all acute and overnight acute episodes have decreased by 0.4 days and 0.6 days respectively.

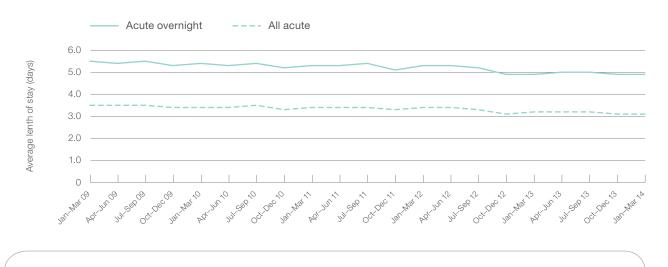
The average length of stay for an acute patient episode of care has decreased over the previous five years.

Figure 5: Average length of stay for acute, overnight acute and non-acute episodes completed, January to March 2014



Same period last year	
3.6 days	
3.2 days	
4.9 days	
15.1 days	

Figure 6: Average length of stay for all acute and acute overnight episodes completed, January 2009 to March 2014



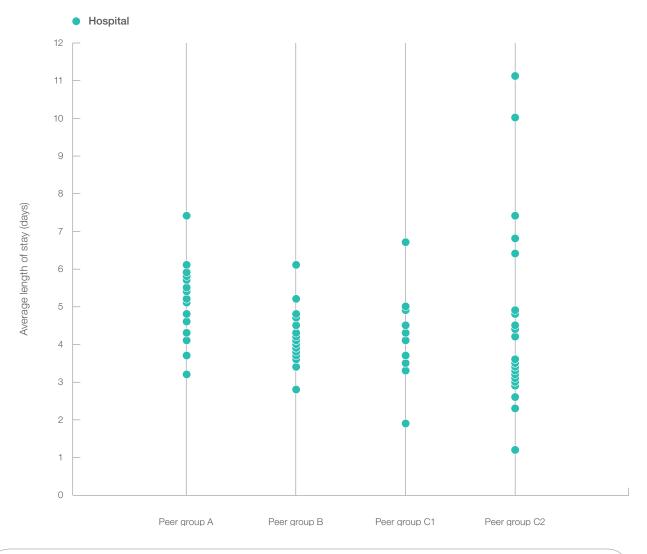
Source: NSW Health, Health Information Exchange, Admitted Patient Data Collection. Data extracted on 15 April 2014.

What is the variation in length of stay among hospitals

Figure 7 shows the variation in the ALOS related to acute overnight episodes of care for NSW hospitals within peer groups A, B, C1 and C2. Among peer group A (tertiary referral) hospitals the ALOS varies between 3.2 and 7.4 days. The ALOS among peer group B (major) hospitals varies between 2.8 and 6.1 days. Peer group C1 (district) hospitals show variations in their ALOS of between 1.9 and 6.7 days.

Peer group C2 (smaller district) hospitals have the greatest variation in ALOS - 1.2 to 11.1 days.





Source: NSW Health, Health Information Exchange, Admitted Patient Data Collection. Data extracted on 15 April 2014.
Note: ALOS is calculated by using the total bed days for all episodes that ended in the quarter. Variation in the mix of services provided by a hospital can influence the ALOS.

How many beds are utilised

Bed days are the number of days a person occupies a hospital bed within a specified time period. This is an important measure of hospital utilisation, patient demand and service provision.

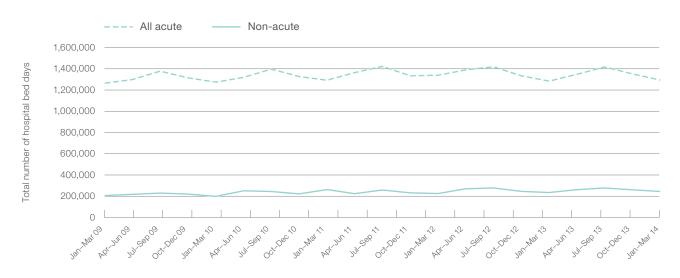
For patient episodes completed during January to March 2014 there was a total of 1,537,437 hospital bed days, a 1% increase on the number in the same quarter in the previous year (1,518,861). The number of acute bed days was 1,292,773, an increase of 1% from the same quarter in the previous year (1,283,448). The number of non-acute bed days was 244,664, an increase of 4% from the same quarter in the previous year (235,413).

Over the previous five year period the number of bed days for acute episodes has fluctuated seasonally but remained relatively stable. The number of non-acute bed days has increased by 19% over this period.

Figure 8: Total number of hospital bed days for January to March 2014



Figure 9: Total number of bed days for each quarter, January 2009 to March 2014



Note: Bed days are calculated for all episodes completed during the reference period. Source: NSW Health, Health Information Exchange, Admitted Patient Data Collection. Data extracted on 15 April 2014.

7

Appendix table 1a: activity by hospital and local health district

Appendix table 1a presents the admitted patient episode activity for public hospitals in NSW. Data are presented by local health district for all principal referral, paediatric specialist, ungrouped acute – tertiary referral, major and district groups 1 and 2 hospitals. Information from smaller hospitals is presented for each local health district under the *'other'* category.

> Download Appendix 1 information by 'local health district' in a PDF file

> **Download Appendix 1** information by 'local health district' in an Excel file

Appendix table 2a: activity by hospital and peer group

Appendix table 2a presents the admitted patient episode activity for public hospitals in NSW. Data are presented by peer group for all principal referral, paediatric specialist, ungrouped acute – tertiary referral, major and district groups 1 and 2 hospitals. Information from smaller hospitals is presented under the 'other' category.

> Download Appendix 2 information by 'peer group' in a PDF file

> Download Appendix 2 information by 'peer group' in an Excel file

Download our reports

The report, *Hospital Quarterly: Performance of NSW public hospitals, January to March 2014* and related reports are available at www.bhi. nsw.gov.au

The suite of products includes:

- Three core modules titled *Admitted Patients, Elective Surgery* and *Emergency Departments*
- Appendix tables showing key results by peer group and LHD
- Activity and performance profiles about emergency department care and elective surgery for more than 80 hospitals and NSW as a whole
- Performance dashboards of hospital, LHD and peer group results on the Bureau's new online interactive tool Healthcare Observer at www.bhi.nsw. gov.au/healthcareobserver



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. The work of the Bureau helps to improve and enhance accountability in the NSW health system and assists in ensuring the system benefits 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 Ministry of Health or any other NSW public health organisation is intended or should be inferred.

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State Health Publication Number: (BHI) 140199 ISSN 1838-3238

Suggested citation: Bureau of Health Information. Hospital Quarterly: Performance of NSW public hospitals, January to March 2014. Admitted Patients. 4(2). Sydney (NSW); 2014.

Published June 2014

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.