

# Elective Surgery

## Hospital Quarterly: Performance of NSW public hospitals

April to June 2013

Elective surgery, often called planned surgery, is surgery that a doctor considers necessary but that can be delayed by at least 24 hours. Common examples of elective surgery include hip replacements, cataract extraction and ligament repairs. There are three categories of elective surgery; non-urgent, semi-urgent and urgent.

Compared with the same quarter one year ago, 5% more elective surgery was conducted in NSW.

Compared to the same quarter last year, non-urgent surgery increased by 9%, semi-urgent increased by 5% and urgent increased by 1%.

Most patients (97%) received their surgery on time in NSW. This is an improvement of five percentage points from the same quarter last year. The percentage point increase in patients receiving surgery by category is shown in the table below.

In this edition of Hospital Quarterly, the Bureau will report on new analyses of the differences between NSW hospitals by considering important factors that can influence a patient's time spent on the waiting list in each category.

The analyses uses data from patients who received their surgery in the April-June 2013 quarter. This is one of three *Hospital Quarterly* modules. For the Emergency Departments and Admitted Patients modules visit

[www.bhi.nsw.gov.au](http://www.bhi.nsw.gov.au)

During the quarter	Apr-Jun 2012	Apr-Jun 2013	The difference
Elective surgical procedures performed	52,537 procedures	55,118 procedures	2581 procedures (+5%)
Elective surgery patients treated on time	92% on time	97% on time	+5 percentage points
Urgent elective surgery patients treated on time	94% on time	99% on time	+5 percentage points
Semi-urgent elective surgery patients treated on time	91% on time	97% on time	+6 percentage points
Non-urgent elective surgery patients treated on time	91% on time	95% on time	+4 percentage points

\* Median waiting time: time by which half of patients received surgery. The other half of patients took equal to or longer than this time.

# Our approach to elective surgery reporting

If a person and their surgeon agree surgery is required but can be delayed by at least 24 hours, the surgeon will recommend the patient is placed on the waiting list for the procedure and assigns them to one of three urgency categories. Each category has its own target, which specifies the desired maximum time (in days) the patient should wait for their procedure. These are outlined in the box below:

Urgency categories: Elective surgery guidelines	
<b>Category 1</b> Urgent (Heart valve replacement, Amputation of limb)	Admission <b>within 30 days</b> desirable for a condition that has the potential to deteriorate quickly and become an emergency
<b>Category 2</b> Semi-urgent (Colposcopy, Amputation of digit)	Admission <b>within 90 days</b> desirable for a condition not likely to deteriorate quickly
<b>Category 3</b> Non-urgent (Septoplasty)	Admission <b>within 365 days</b> acceptable for a condition unlikely to deteriorate quickly

## Explaining staged surgery

There are times when surgery is deemed necessary but should not, or cannot, take place until a period of time has passed. This time is determined by a clinician and is necessary for the surgery to be effective. This is called staged surgery and is an essential concept in managing elective surgery. It allows surgeons to place patients on the waiting list but prevents them from being admitted to hospital before it is clinically appropriate. Surgeons use clinical judgement to decide whether a procedure should be categorised as staged or not. One example of a staged procedure is waiting for

a broken bone to heal before removing pins or plates. The Bureau excludes staged and non-urgent cystoscopy procedures from performance measures.

## Reporting waiting times

To provide a comprehensive picture of the variation in times that patients waited for surgery, the Bureau reports the 90th percentile time and the median wait time by urgency category. The median waiting time for patients who received surgery is also presented by the specialty of the surgeon and by common procedures.

The Bureau also reports on patients who are currently on the waiting list to have their surgery. For these patients, the Bureau reports by urgency category, specialty of the surgeon and most common procedures. The number of patients who have been waiting for more than 12 months is reported for each hospital and by the specialty of the surgeon for NSW.

The Bureau is committed to providing clarity on surgical waiting times in NSW. Further detail on our methods can be found in the Bureau's *Hospital Quarterly Technical Supplement: Elective surgery measures, April June 2013* available on the Bureau's website at [www.bhi.nsw.gov.au](http://www.bhi.nsw.gov.au)

See the **Appendices** section of this report (pages 22 to 23) for more detailed performance information about each public hospital providing elective surgery in NSW. This includes Hawkesbury Private Hospital, which is contracted to supply surgery for public patients.

# What influences differences in waiting times in NSW?

The Bureau of Health Information's *Hospital Quarterly* provides a detailed assessment of waiting times to receive elective surgery and achievement of the target of all patients receiving their elective surgery within the recommended time frame.

In this edition of *Hospital Quarterly*, the Bureau presents new analyses of the differences between NSW hospitals by considering important factors that can influence a patient's time spent on the waiting list for urgent, semi-urgent and non-urgent surgery.

The new analyses includes patients who received their surgery in the April-June 2013 quarter.

Factors considered in this section are:

- the urgency of the surgery received (i.e. urgent, semi-urgent, non-urgent),
- the number of elective surgery procedures performed in each hospital
- the peer group of the hospital

Hospitals are grouped by hospital type or 'peer groups'. A definition of each peer group is listed below.

## Peer groups

NSW hospitals vary in size and the types and complexity of clinical services that they provide. To enable valid comparisons to be made between hospitals, it is important to compare similar or like hospitals together. To do this, the Bureau uses a NSW Health classification system called '*peer group*'. The hospital peer groups included in this report are described in the table below:

Group	Name	Description
A1	Principal referral	Very large hospitals providing a broad range of services, including specialised units at a state or national level.
A2	Paediatric specialist	Specialist hospitals for children and young people.
A3	Ungrouped acute – tertiary referral	Major specialist hospitals that are not similar enough to any other peer group to be classified with them.
B	Major	Large metropolitan and non-metropolitan hospitals.
C1	District group 1	Medium sized hospitals treating between 5,000–10,000 patients each year.
C2	District group 2	Smaller hospitals, typically in rural locations.

# Number of elective surgery procedures performed

During April to June 2013, the Waiting List Collection On-line System (WLCOS) recorded that 55,118 patients were admitted from the waiting list to receive an elective surgery procedure in NSW public hospitals or facilities contracted by NSW hospitals. This is 15% higher than the 48,009 conducted in the previous quarter (in line with the usual seasonal pattern) and 5% higher than the 52,537 surgical procedures completed in the same quarter last year (Figure 1).

In this report, results and figures exclude staged patients and non-urgent cystoscopy, unless otherwise stated.

NSW elective surgery numbers were higher than usual this quarter and non-urgent surgeries were the highest reported over the last two years.

Figure 1: Total number of elective surgery procedures conducted, by urgency category, April 2011 to June 2013



1. Excluding staged procedures.
2. Excluding staged procedures and non-urgent cystoscopy.
3. Including non-urgent cystoscopy.

Source: NSW Health, *Waiting List Collection On-line System*. Data for April to June 2013 extracted on 16 July 2013. Data for all quarters from July 2011 to March 2013 extracted on 17 April 2013. Data for all previous quarters extracted on 15 July 2011.

# Composition of surgery

**Urgent surgery:** There were 12,712 procedures completed, up 1% compared with one year ago. Urgent procedures made up 23% of all completed elective surgery.

**Semi-urgent surgery:** There were 17,467 procedures completed, up 5% compared with one year ago. Semi-urgent procedures made up 32% of all completed elective surgery.

**Non-urgent surgery:** There were 21,588 procedures completed, up 9% compared with one year ago. Non-urgent procedures made up 39% of all completed elective surgery.

**Staged surgery:** There were 3,351 procedures, down 3% compared with one year ago. Staged procedures made up 6% of all completed elective surgery.

## Change over five years

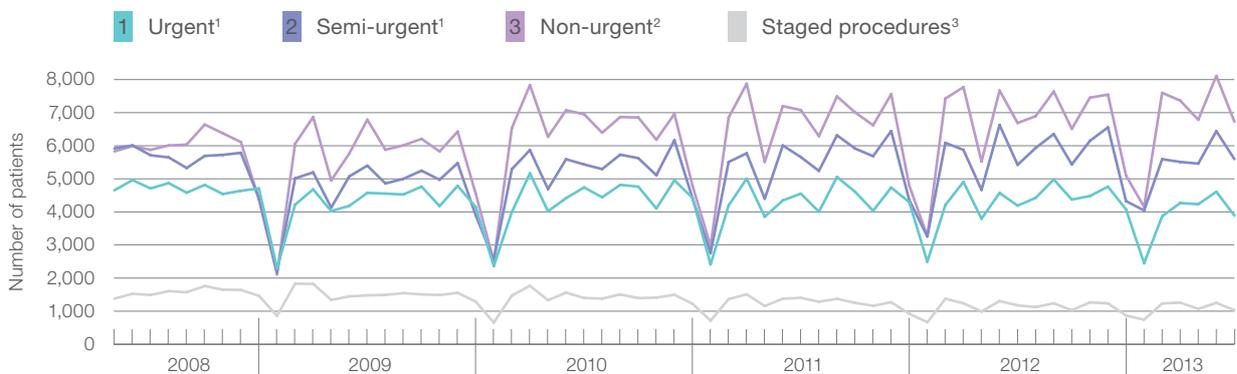
The composition of surgical procedures completed by urgency category has changed over the past five years (Figure 2). Most of this shift in urgency occurred during 2009 and early 2010.

Comparing the proportions that the surgical categories make up of all completed procedures, urgent surgery has decreased from 27% of all surgical procedures in May 2008 to 23% in May 2013.

Over the same period, non-urgent procedures have increased from 34% of all surgical procedures to 40%.

The proportion of non-urgent surgery, over the past five years has increased. This reflects both the increase in non-urgent surgery and the decrease in urgent surgery.

Figure 2: Patients who received elective surgery, by urgency category, by month, April 2008 to June 2013



1. Excluding staged procedures.
2. Excluding staged procedures and non-urgent cystoscopy.
3. Including non-urgent cystoscopy.

Source: NSW Health, *Waiting List Collection On-line System*. Data for April to June 2013 extracted on 16 July 2013. Data for all quarters from July 2011 to March 2013 extracted on 17 April 2013. Data for all previous quarters extracted on 15 July 2011.

# Patients admitted on time for elective surgery

In the April to June 2013 quarter, 97% of all patients who were admitted to a public hospital for elective surgery were admitted within the time frame recommended by their surgeon (Figure 3), up two percentage points from the preceding quarter (95%) and five percentage points from the same quarter in 2012 (92%).

Figure 3 presents the percentage of patients in each urgency category who received their surgery on time for the most recent nine quarters.

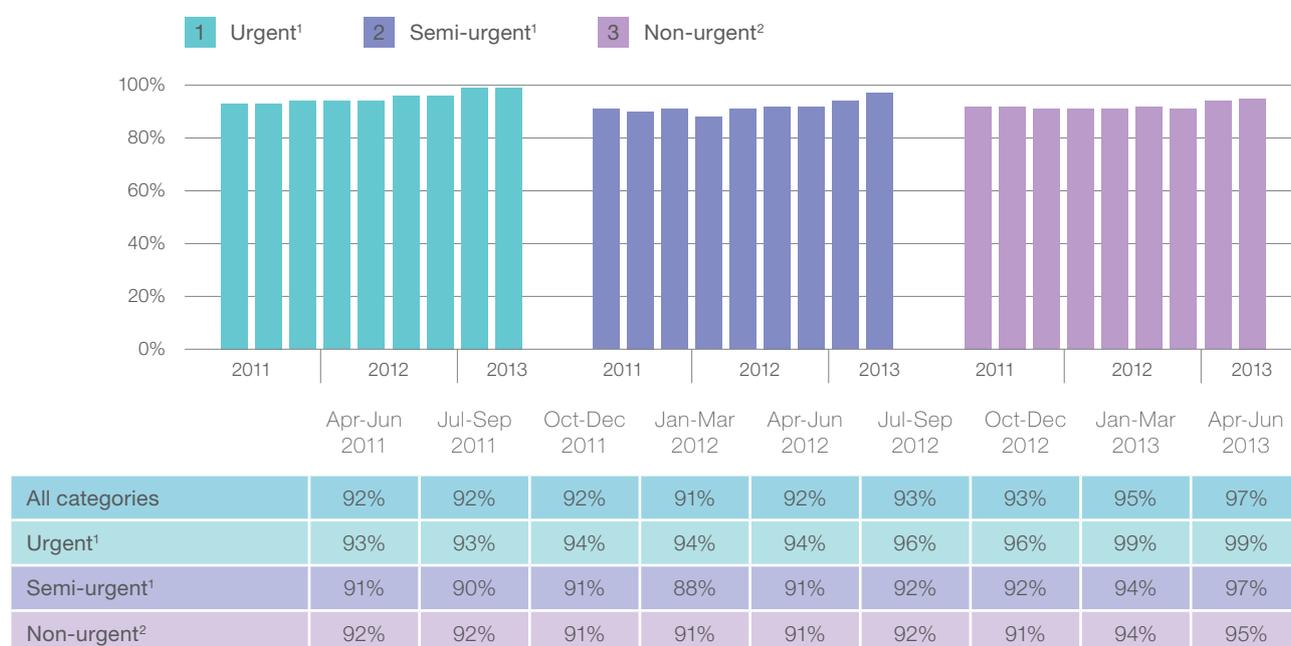
**Urgent surgery:** 99% of patients were admitted within the recommended 30 days, unchanged from last quarter and up five percentage points compared with the same quarter in 2012.

**Semi-urgent surgery:** 97% of patients were admitted within 90 days, an increase of three percentage points from last quarter and six percentage points compared with the same quarter in 2012.

**Non-urgent surgery:** 95% of patients admitted within 365 days, an increase of one percentage point from last quarter and four percentage points compared with the same quarter in 2012.

In the past two quarters there has been a noticeable increase in the proportion of surgeries completed on time across all categories.

Figure 3: Percentage of elective surgery patients treated within recommended waiting time, by urgency category, April 2011 to June 2013



1. Excluding staged procedures.
2. Excluding staged procedures and non-urgent cystoscopy.

Source: NSW Health, *Waiting List Collection On-line System*. Data for April to June 2013 extracted on 16 July 2013. Data for all quarters from July 2011 to March 2013 extracted on 17 April 2013. Data for all previous quarters extracted on 15 July 2011.

# Some hospitals are achieving the recommended time across all urgency categories

The rows in Figure 4 present the proportion of patients receiving their elective surgery within the recommended time frame for specific hospitals. These tables are sorted by peer group and place hospitals according to decreasing levels of achievement across all urgency categories, hospitals are listed alphabetically when performance is equal. They highlight differences in the percent of elective surgery that is completed on time and show some hospitals

achieve 100% of surgeries on time across all categories and others complete less than 95% of surgeries on time in one or more categories.

The tables show that more hospitals in peer group C2 achieve the highest levels of surgery being performed on time compared to the other peer groups, particularly in the semi-urgent and non-urgent categories.

Figure 4: Percentage of elective surgery patients treated within recommended waiting time, by urgency category and peer group April to June 2013.

● 100% ● 99% - 99.9% ● 95% - 98.9% ● < 95%



1. Excluding non-urgent cystoscopy.

Source: NSW Health, *Waiting List Collection On-line System*. Data for April to June 2013 extracted on 16 July 2013.

Figure 4: Percentage of elective surgery patients treated within recommended waiting time, by urgency category and peer group April to June 2013.

● 100%   ● 99% - 99.9%   ● 95% - 98.9%   ● < 95%



1. Excluding non-urgent cystoscopy.

Source: NSW Health, *Waiting List Collection On-line System*. Data for April to June 2013 extracted on 16 July 2013.

# Median waiting times for elective surgery

Median wait time is the number of days by which exactly half the number of patients received surgery. **Figure 5** shows median wait times in the semi-urgent category are the lowest they have been for two years however, median times in the non-urgent category are among the third highest over past two years.

**Urgent surgery:** The median wait was 11 days – largely unchanged over the past two years.

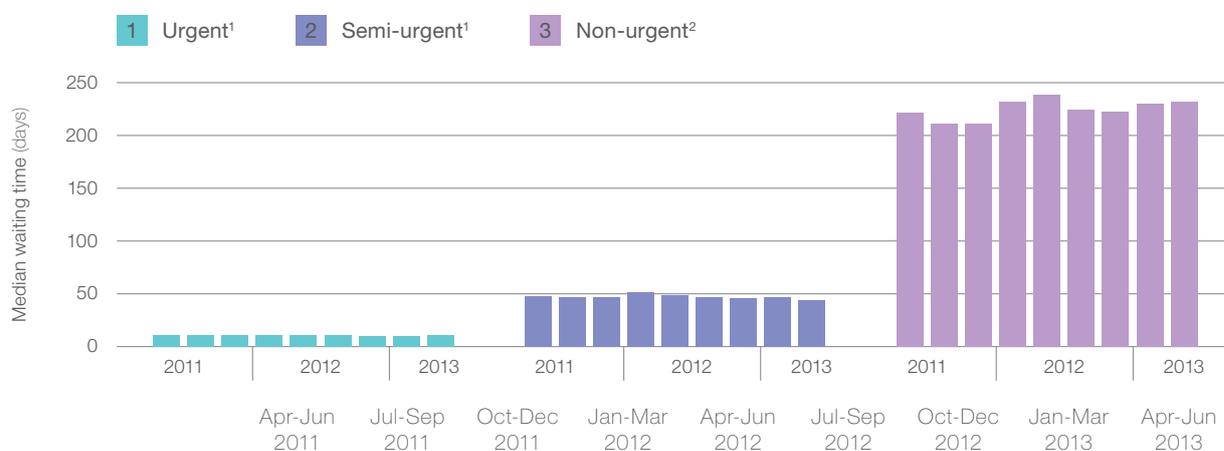
**Semi-urgent surgery:** The median wait time for this category was 44 days, five days less than the same quarter in 2012 (49 days) and four days less than the same quarter in 2011 (48 days).

**Non-urgent surgery:** The median wait time for this category was 232 days, six days less than the same quarter in 2012 (238 days).

Non-urgent median waiting times appear as the most volatile of the three urgency categories. Over the past nine quarters, non-urgent procedure wait times have ranged from 211 days in July to September 2011 to 238 in April to June 2012.

Median waiting times for semi-urgent elective surgery are the lowest they have been for two years.

Figure 5: NSW elective surgery median waiting time (days), by urgency category, April 2011 to June 2013



Urgency Category	Apr-Jun 2011	Jul-Sep 2011	Oct-Dec 2011	Jan-Mar 2012	Apr-Jun 2012	Jul-Sep 2012	Oct-Dec 2012	Jan-Mar 2013	Apr-Jun 2013
Urgent <sup>1</sup>	11	11	11	11	11	11	10	10	11
Semi-urgent <sup>1</sup>	48	47	47	51	49	47	46	47	44
Non-urgent <sup>2</sup>	221	211	211	232	238	224	222	230	232

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 of Health Information *Hospital Quarterly reports* published prior to May 2011.

**Source:** NSW Health, *Waiting List Collection On-line System*. Data for April to June 2013 extracted on 16 July 2013. Data for all quarters from July 2011 to March 2013 extracted on 17 April 2013. Data for all previous quarters extracted on 15 July 2011.

## Waiting time performance is not affected by number of procedures or by the mix of patients.

Figure 6 a, b and c presents the median waiting times at hospitals by total number of procedures.

Figure 6 a, b and c represent each urgency category. Because recommended waiting times are different for each urgency category, each graph has a different time scale. Corresponding time scales are represented in the shaded parts of graphs a, b and c.

Analysis of the graph shows smaller hospitals (peer groups C1 and C2) perform a lower number of procedures and therefore cluster at left hand side of graph in Figure 6.

Peer group A hospitals generally perform a higher number of procedures and so are at the right hand side of the graph. Looking across the graph, there are some shorter and some longer times in each peer group. In the non-urgent category in particular, there is a similar range of median waiting times in each peer group and there is no relationship apparent between the number of procedures and median waiting time, either across all hospitals, or within a peer group.

The Bureau also found that having a higher or lower percentage of urgent or less urgent cases was not associated with any increase or decrease in surgery completed on time. (Data not shown).

Our analysis reveals that there is no clear relationship between the volume of surgery performed in a hospital and the median waiting times for patients in all urgency categories: long and short waiting times are seen in hospitals performing both very low or very high numbers of surgical procedures.

Figure 6a: Urgent: NSW elective surgery median waiting time by peer group, April to June 2013.

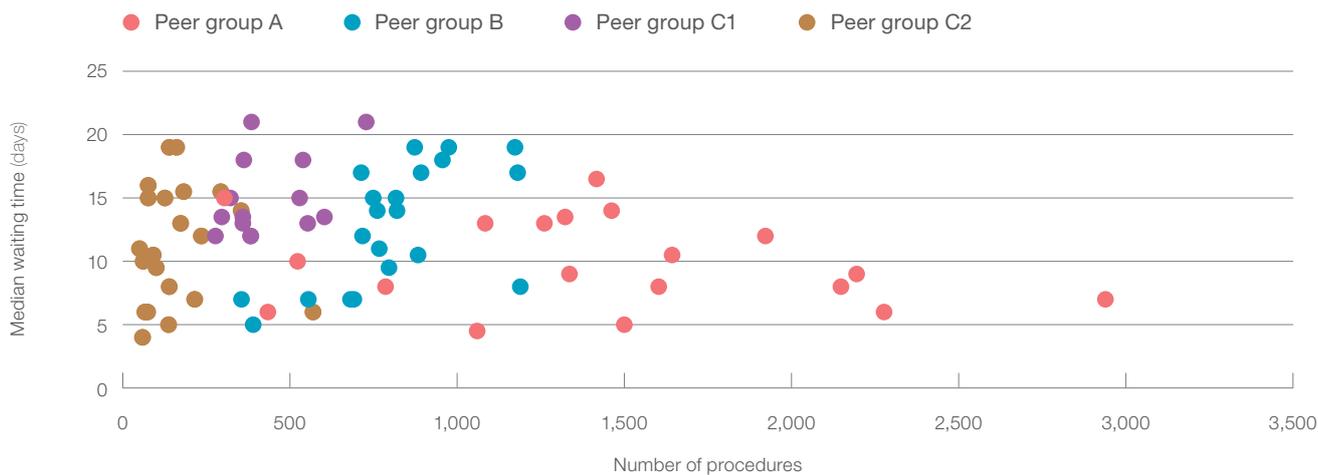


Figure 6b: Semi-urgent: NSW elective surgery median waiting time by peer group, April to June 2013.

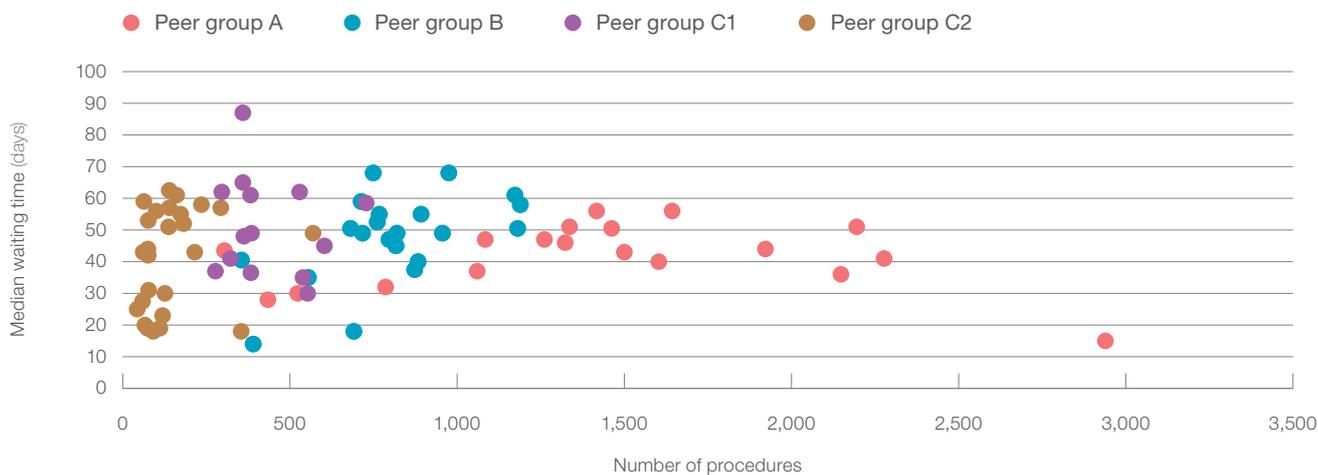
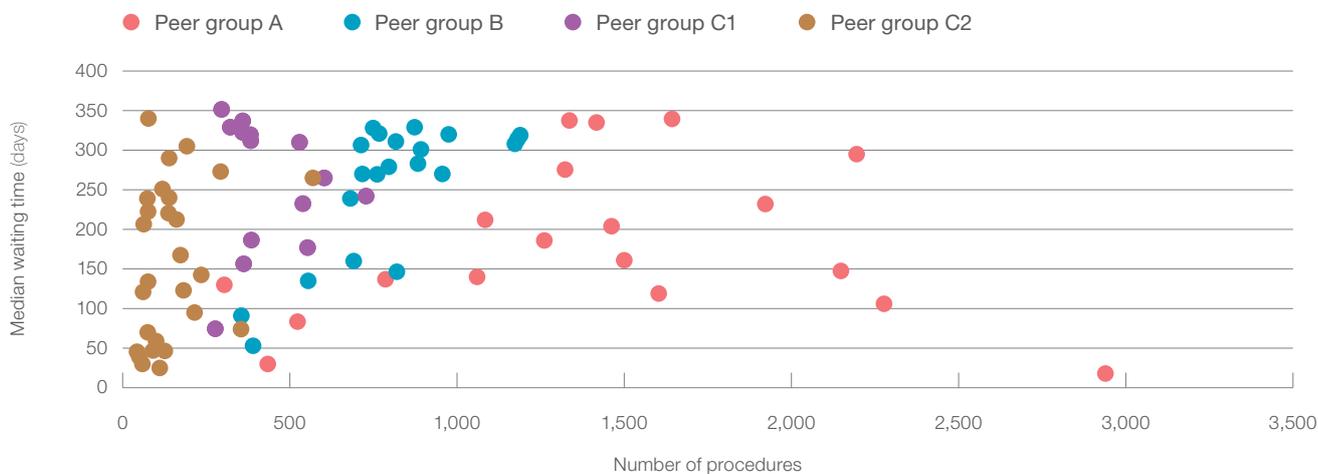


Figure 6c: Non-urgent<sup>1</sup>: NSW elective surgery median waiting time by peer group, April to June 2013.



1. Excluding non-urgent cystoscopy.

Source: NSW Health, *Waiting List Collection On-line System*. Data for April to June 2013 extracted on 16 July 2013.

# 90th percentile waiting times for elective surgery

The 90th percentile wait time is the number of days by which 90% of patients received surgery. The final 10% took equal to or longer than this time.

**Figure 7** presents the 90th percentile waiting time to be admitted for surgery for the last nine quarters. These results exclude staged patients and non-urgent cystoscopy procedures.

**Urgent surgery:** The 90th percentile wait was 26 days, two and three days less than the same quarters in 2012 and 2011 respectively.

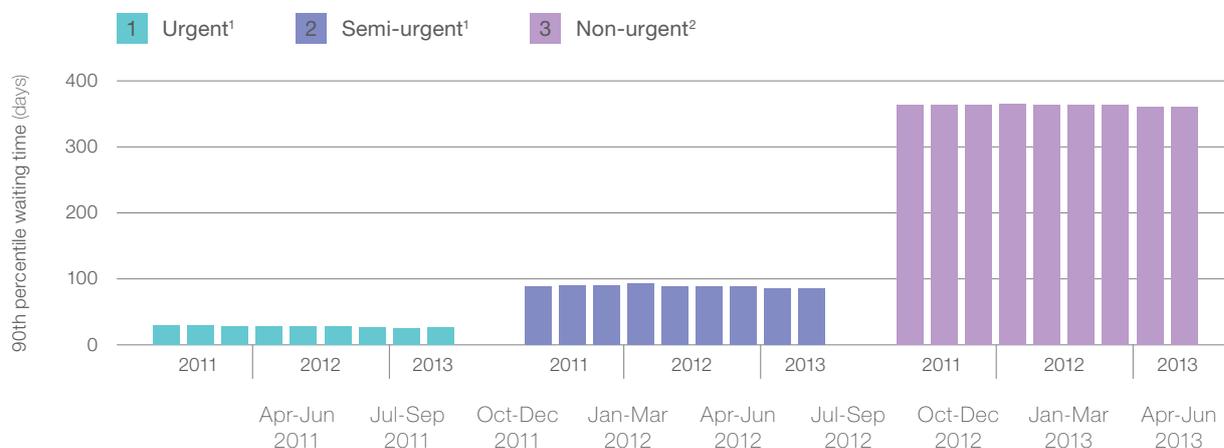
**Semi-urgent surgery:** The 90th percentile wait time for this category was 82 days, seven days

less than the same quarter in 2012 (89 days) and seven days less than the same quarter in 2011 (89 days).

**Non-urgent surgery:** The 90th percentile wait time for this category was 359 days, five days less than the same quarter in 2012 (364 days) and five days less than the same quarter in 2011 (364 days).

The time by which almost all patients (90%) have received their surgery has decreased over the last two quarters for semi-urgent and non-urgent surgery.

**Figure 7:** NSW elective surgery 90th percentile waiting time (days), by urgency category, January 2011 to March 2013



Urgency Category	2011 (Q1)	2011 (Q2)	2011 (Q3)	2011 (Q4)	2012 (Q1)	2012 (Q2)	2012 (Q3)	2012 (Q4)	2013 (Q1)	2013 (Q2)
Urgent <sup>1</sup>	29	29	28	28	28	28	28	27	25	26
Semi-urgent <sup>1</sup>	89	90	90	93	89	88	88	88	86	82
Non-urgent <sup>2</sup>	364	363	364	365	364	363	364	364	361	359

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 of Health Information *Hospital Quarterly reports* published prior to May 2011.

**Source:** NSW Health, *Waiting List Collection On-line System*. Data for April to June 2013 extracted on 16 July 2013. Data for all quarters from July 2011 to March 2013 extracted on 17 April 2013. Data for all previous quarters extracted on 15 July 2011.

## Cumulative wait time

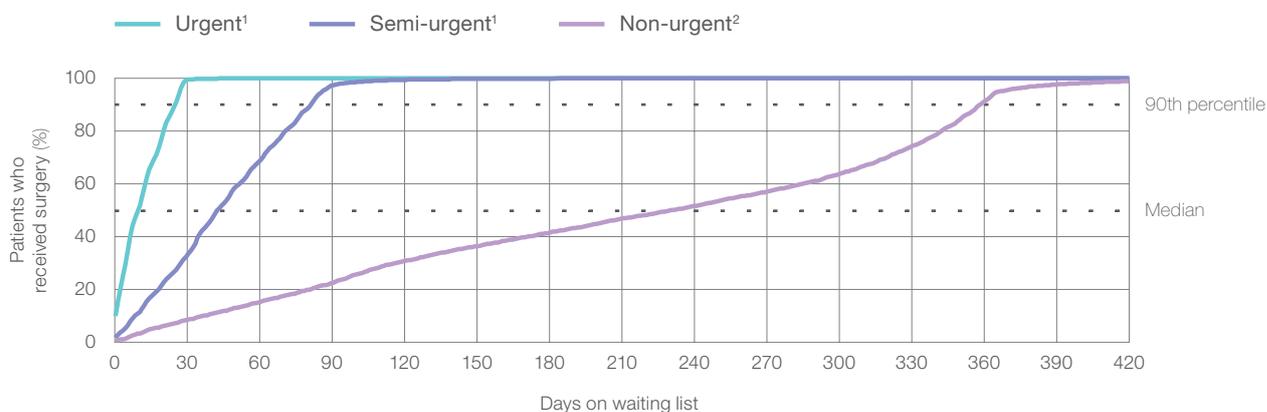
More detail on how long people waited to be admitted for their elective surgery during April to June 2013 is presented in [Figure 8](#).

The graph's slopes indicate the rate at which patients were admitted for surgery. A steep slope indicates a high rate of completion of patients'

surgery over the period shown. A flat slope shows a lower rate of completion of patients' surgery over the period.

Urgent patients have the most rapid rate of admission and almost all patients are admitted for surgery within 30 days. Non-urgent patients are admitted at a slower rate with almost all patients admitted within 420 days.

Figure 8: Cumulative percentage of patients who received elective surgery, by waiting time (days), April to June 2013



1. Excluding staged procedures.

2. Excluding staged procedures and non-urgent cystoscopy.

Note: Excludes the total number of days the patient was coded as 'not ready for care'.

Source: NSW Health, *Waiting List Collection On-line System*. Data extracted on 16 July 2013.

## Small number suppression

Some hospitals conduct very few surgical procedures. Publishing these small numbers could lead to some cases being recognised and can also affect the accuracy of the data. The Bureau suppresses information based on very few patients. If there are fewer than five patients in any group, patient numbers are displayed as <5. For measures reported by urgency category, counts have been pooled with another urgency group. Because the staged procedure category is excluded from performance measure calculations, low counts in this group are not suppressed ([Appendix table 1a, 2a](#)). If there are fewer than 10 patients in any group, on time performance and median waiting times are suppressed ([Appendix tables 1b,1c and 2b,2c](#)). If there are fewer than 100 patients in any group, the 90th percentile is suppressed ([Appendix table 1c and 2c](#)).

## Variation between hospitals within a peer group

Figure 9 presents the 90th percentile waiting time to receive elective surgery for each of the three urgency categories by peer group. The coloured lines across the graph represent the recommended time to receive surgery in each urgency category: 30 days for urgent, 90 days for semi-urgent and 365 days for non-urgent.

There is a considerable range in the 90th percentiles in each peer group, and every peer group has hospitals with short or long waiting times.

For example for non-urgent surgery, the 90th percentile waiting times ranged from

- 121 to 412 days for peer group A
- 226 to 386 days for peer group B
- 180 to 476 days for peer group C1
- 63 to 364 days for peer group C2.

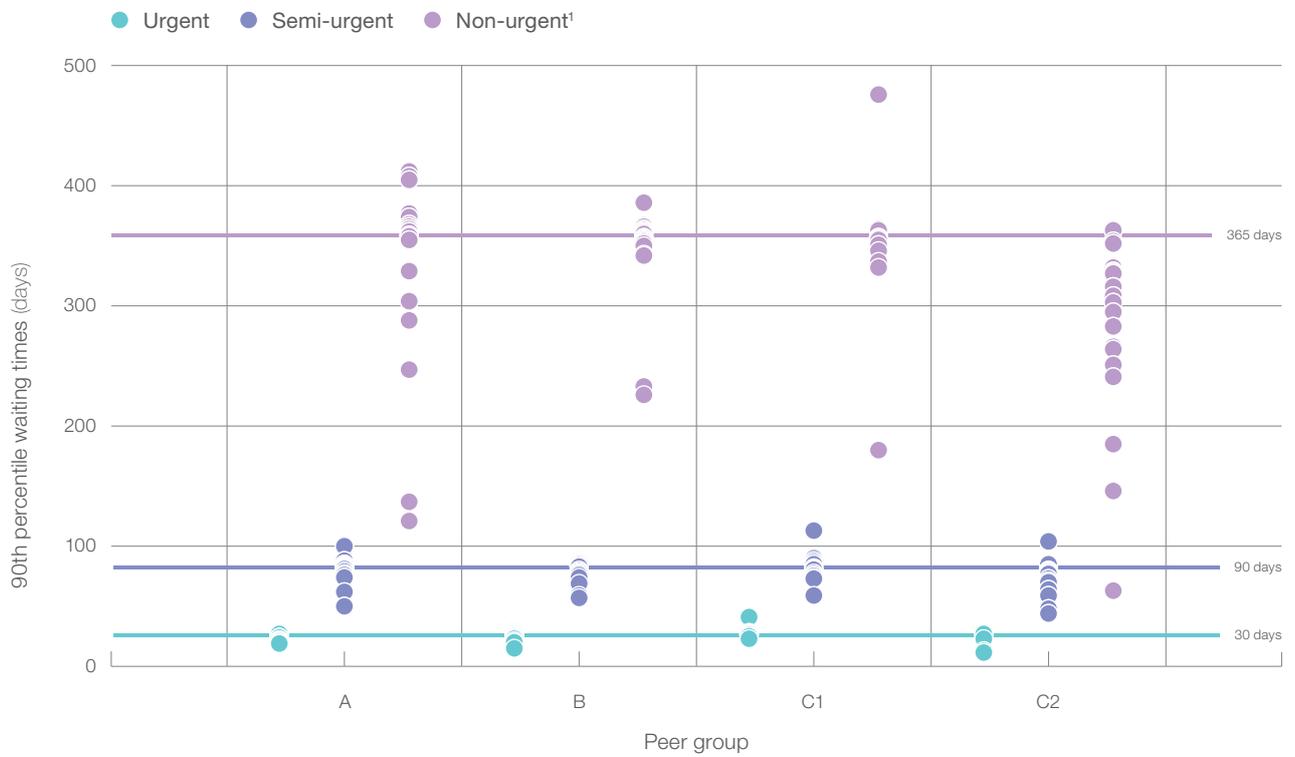
The longest 90th percentile waiting times were in the A peer group, and the shortest 90th percentile was in the C2 group.

Nine hospitals had 90th percentiles greater than the recommended maximum waiting time of one year. Seven of these were in peer group A, one each in the B and C1 peer groups and none in the C2 peer group. Hospitals in the B and C1 peer groups generally had 90th percentile times close to one year; the A and C2 peer groups had a wider range of 90th percentile times.

There is a wide range of 90th percentile waiting times for elective surgery. More hospitals in the higher peer groups had 90th percentiles greater than the maximum recommended waiting times matching fact that fewer hospitals in these groups reached 100% on time surgery. However, there are hospitals with shorter or longer waiting times in each peer group.

While most hospitals cluster together within each peer group with regards to their 90th percentiles times for non-urgent elective surgery, each peer group has some hospitals showing particularly low waiting times.

Figure 9: NSW elective surgery 90th percentile waiting time (days) by peer group and urgency category



1. Excluding non-urgent cystoscopy.

Note: 90th percentile not shown for hospitals with less than 30 patients.

Source: NSW Health, *Waiting List Collection On-line System*. Data for April to June 2013 extracted on 16 July 2013.

## Median waiting times by specialty

Figure 10 presents the median waiting times for patients who received elective surgery and the number of patients who received elective surgery, by the specialty of the surgeon. The specialty of the surgeon describes the area of clinical expertise held by the doctor who performed the surgery.

The median waiting time does not include the time waited for the initial appointment with the specialist. The *NSW Patient Survey Program*, currently managed by the Bureau, asks questions about operations and surgical procedures. This includes how long patients waited to first see a specialist, and then how long they had to wait to be admitted to hospital. Results will be available in early 2014.

Ophthalmology (202 days), ear, nose and throat surgery (161 days) and orthopaedic surgery (118 days) were the surgical specialties

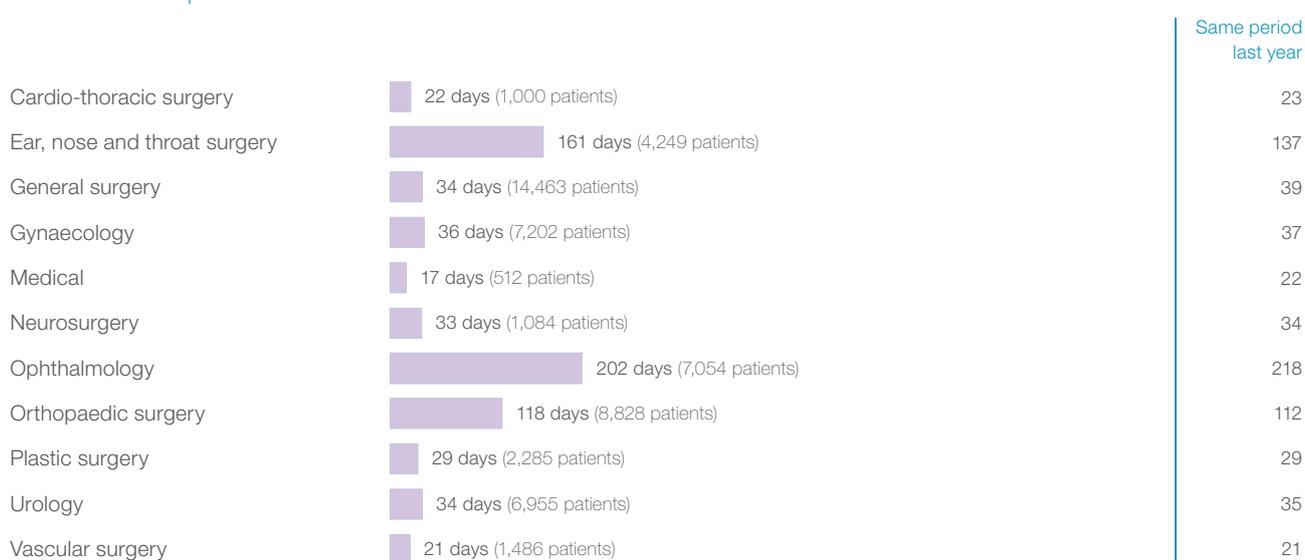
with the longest median waiting times in April to June 2013. These specialties also had the longest median waiting times in the same quarter last year.

Cardio-thoracic surgery (22 days), vascular surgery (21 days) and medical <sup>2</sup> (17 days) had the shortest median waiting times. These specialties also had the shortest median waiting times in the same quarter last year.

General surgery (14,463 patients), orthopaedic surgery (8,828 patients) and urology (6,955 patients) were the surgical specialties with the highest number of patients receiving elective surgery in the April to June 2013 quarter.

Cardio-thoracic surgery (1,000 patients) and medical <sup>2</sup> (512 patients) had the lowest number of patients receiving elective surgery.

Figure 10: Median<sup>1</sup> waiting time (days) for patients who received elective surgery, by specialty, April to June 2013



1. This is the number of days it took for half the patients who received elective surgery during the period to be admitted and receive their surgery. The other half took equal to or longer than the median to be admitted for surgery.

2. Medical refers to surgery performed by a non-specialist medical practitioner.

Source: NSW Health, *Waiting List Collection On-line System*. Data for April to June 2013 extracted on 16 July 2013. Data for all quarters from July 2011 to March 2013 extracted on 17 April 2013. Data for all previous quarters extracted on 15 July 2011.

# Median waiting times by common procedures

Figure 11 presents the median waiting times for patients who received elective surgery and the number of patients who received elective surgery, by common procedures. The procedure is the treatment the patient receives when admitted to hospital for elective surgery.

The procedures with the longest median waiting times in the April to June 2013 quarter were septoplasty (316 days), total knee replacement (307 days) and myringoplasty / tympanoplasty (310 days). The procedures with the shortest median waiting times were other – general (21 days), coronary artery bypass graft (27 days),

cystoscopy (29 days) and hysteroscopy (32 days). These procedures also had the longest and shortest median waiting times in the same quarter last year.

Cataract extraction was the most common procedure (5,642 patients) performed in the April to June 2013 quarter.

Wait times for total hip replacement and total knee replacement increased while all other surgeries showed a reduction or stable results over the 12 months.

Figure 11: Median<sup>1</sup> waiting time (days) for patients who received elective surgery, by procedure,<sup>2</sup> April to June 2013

Procedure	Median waiting time (days) (Number of patients)	Same period last year
Abdominal hysterectomy	55 days (683 patients)	62
Cataract extraction	243 days (5,642 patients)	256
Cholecystectomy	55 days (1,874 patients)	62
Coronary artery bypass graft	27 days (211 patients)	27
Cystoscopy	29 days (3,203 patients)	32
Haemorrhoidectomy	58 days (295 patients)	71
Hysteroscopy	32 days (2,159 patients)	32
Inguinal herniorrhaphy	73 days (1,581 patients)	77
Myringoplasty / Tympanoplasty	310 days (113 patients)	327
Myringotomy	61 days (80 patients)	86
Other – General	21 days (1,830 patients)	23
Prostatectomy	55 days (648 patients)	53
Septoplasty	316 days (437 patients)	338
Tonsillectomy	251 days (1,380 patients)	256
Total hip replacement	221 days (880 patients)	192
Total knee replacement	307 days (1,538 patients)	296
Varicose veins stripping and ligation	90 days (381 patients)	117

1. This is the number of days it took for half the patients who received elective surgery during the period to be admitted and receive their surgery. The other half took equal to or longer than the median to be admitted for surgery.

2. For a description of these procedures see *Elective Surgery Glossary of Common Procedures, December 2012*.

Source: NSW Health, *Waiting List Collection On-line System*. Data for April to June 2013 extracted on 16 July 2013. Data for all quarters from July 2011 to March 2013 extracted on 17 April 2013. Data for all previous quarters extracted on 15 July 2011.

# Elective surgery waiting list

The following three pages are about patients who have not received surgery but are waiting for elective surgery and are ready for surgery.

During the quarter, patients were added to and removed from the waiting list. Patients can be removed from the waiting list because they received the surgery they were waiting for, or for other reasons such as the surgeon or patient deeming that the surgery is no longer required.

At the end of the April to June 2013 quarter, there were 70,153 patients waiting for elective surgery, which is a similar figure to the same quarter last year (Figure 12). A breakdown of patients waiting for elective surgery by urgency category shows

that 80% were assigned as non-urgent, 17% as semi-urgent and 3% as urgent. The number of patients waiting for urgent surgery decreased by 7%, semi-urgent increased by 2% and non-urgent remained unchanged (Figure 13).

As at 30 June 2013, there were 12,097 patients not ready for surgery on the waiting list, up 3% compared with the same quarter last year (Figure 12).

The semi-urgent and non-urgent waiting lists remain fairly stable, but there is a 7% reduction in the urgent waiting list.

Figure 12: Elective surgery waiting list, April to June 2013

	Same period last year	Change since one year ago
Patients ready for surgery on waiting list at start of quarter:	69,294 patients	
Patients ready for surgery on waiting list at end of quarter:	70,153 patients	
Patients not ready for surgery <sup>1</sup> on waiting list at end of quarter:	12,097 patients	3%

1. Includes staged procedures, non-urgent cystoscopy and patients currently not available for personal reasons.  
 Source: NSW Health, *Waiting List Collection On-line System*. Data for April to June 2013 extracted on 16 July 2013. Data for all quarters from July 2011 to March 2013 extracted on 17 April 2013. Data for all previous quarters extracted on 15 July 2011.

Figure 13: Elective surgery waiting list, as at 30 June 2013

	Same period last year	Change since one year ago
Patients ready for surgery on waiting list by urgency category:	70,153 patients	
1 Urgent <sup>1</sup> (3%)	1,861	-7%
2 Semi-urgent <sup>1</sup> (17%)	11,881	2%
3 Non-urgent <sup>2</sup> (80%)	56,411	0%

1. Excluding staged procedures.  
 2. Excluding staged procedures and non-urgent cystoscopy.  
 Source: NSW Health, *Waiting List Collection On-line System*. Data for April to June 2013 extracted on 16 July 2013. Data for all quarters from July 2011 to March 2013 extracted on 17 April 2013. Data for all previous quarters extracted on 15 July 2011.

## Elective surgery waiting list by specialty

Figure 14 presents the number of patients on the waiting list and those patients who have been waiting more than 12 months, by the specialty of the surgeon. The specialty of the surgeon describes the area of clinical expertise of the doctor who is to perform the surgery.

The time a patient waited for the initial appointment with the specialist is not included in the time spent on the waiting list.

Orthopaedic surgery (17,232 patients) and ophthalmology (15,756 patients) were the surgical specialties with the highest number of patients waiting for surgery as at 30 June 2013.

Cardio-thoracic surgery (338 patients) and medical (219 patients) had the lowest number of patients waiting for elective surgery.

Orthopaedic surgery (118 patients) and ear, nose and throat surgery (254 patients) were the surgical specialties with the highest number of patients waiting more than 12 months as at 30 June 2013. Cardio-thoracic surgery, and medical<sup>1</sup> had no patients waiting in NSW more than 12 months.

The number of patients waiting more than 12 months for surgery was 195 in the same quarter last year compared to 581 in April -June quarter 2013.

Figure 14: Patients waiting for elective surgery and patients waiting more than 12 months, by specialty, as at 30 June 2013

	Patients waiting	Patients waiting (same time last year)	Change since one year ago	Patients waiting more than 12 months	Patients waiting more than 12 months (same time last year)
<b>All specialties</b>	70,153	70,031	0%	581	195
Cardio-thoracic surgery	338	313	8%	0	0
Ear, nose and throat surgery	9,371	9,629	-3%	254	39
General surgery	13,137	12,889	2%	89	36
Gynaecology	6,007	5,985	0%	< 5	22
Medical <sup>1</sup>	219	287	-24%	0	0
Neurosurgery	1,177	1,127	4%	18	12
Ophthalmology	15,756	15,789	0%	44	13
Orthopaedic surgery	17,232	17,414	-1%	118	60
Plastic surgery	2,395	2,317	3%	34	7
Urology	3,524	3,366	5%	12	< 5
Vascular surgery	997	915	9%	9	< 5

1. Medical refers to surgery performed by a non-specialist medical practitioner.

Source: NSW Health, *Waiting List Collection On-line System*. Data for April to June 2013 extracted on 16 July 2013. Data for all quarters from July 2011 to March 2013 extracted on 17 April 2013. Data for all previous quarters extracted on 15 July 2011.

# Elective surgery waiting list by common procedures

Figure 15 presents the number of patients on the waiting list by common procedures. Cataract extraction was the most common procedure (13,808 patients) that patients were waiting for as at 30 June 2013.

The procedures that had the least number of patients waiting were coronary artery bypass graft (86 patients) and myringotomy (165 patients).

Figure 15: Patients waiting for elective surgery by procedure,<sup>1</sup> as at 30 June 2013

	Patients waiting	Patients waiting (same time last year)	Change since one year ago
Abdominal hysterectomy	686	1,044	-34%
Cataract extraction	13,808	13,935	-1%
Cholecystectomy	1,825	1,863	-2%
Coronary artery bypass graft	86	94	-9%
Cystoscopy	1,050	1,384	-22%
Haemorrhoidectomy	350	363	-4%
Hysteroscopy	1,424	1,333	7%
Inguinal herniorrhaphy	2,188	2,325	-6%
Myringoplasty / Tympanoplasty	323	370	-13%
Myringotomy	165	164	1%
Other – General	1,232	1,215	1%
Prostatectomy	629	663	-5%
Septoplasty	1,457	1,426	2%
Tonsillectomy	3,383	3,816	-11%
Total hip replacement	1,961	2,020	-3%
Total knee replacement	4,785	4,826	-1%
Varicose veins stripping and ligation	739	675	9%

1. The procedures included in this list are procedures which are high volume; some may be associated with long waiting periods. For a description of these procedures see *Elective Surgery Glossary of Common Procedures, December 2012*.

Source: NSW Health, *Waiting List Collection On-line System*. Data for April to June 2013 extracted on 16 July 2013. Data for all quarters from July 2011 to March 2013 extracted on 17 April 2013. Data for all previous quarters extracted on 15 July 2011.

## Conclusions of analysis

There is considerable variation in waiting times between similar hospitals. There is also variation between different peer groups.

Most NSW hospitals perform well in the urgent surgery category, with close to 95% of patients receiving their procedure within the recommended time frame. However, performance varies more for patients in the less urgent categories and variation is greatest for patients in the non-urgent category.

Smaller hospitals (C1 and C2 peer group) vary most in median and 90th percentile waiting times. Patients at hospitals in the C2 peer group are more likely to receive semi-urgent or non-urgent surgery within the recommended time frame.

The analysis in this edition of *Hospital Quarterly* shows that patients can expect to receive urgent surgery within 30 days at all hospitals, but waiting time for semi-urgent and non-urgent surgery varies across hospitals. These variations are not associated with the number of procedures performed in hospitals (Figure 6) nor are they related to the percentage of cases in each urgency category. Performance varies between peer groups, and there are high and low performers in each peer group (Figure 4).

# Appendix 1: information by hospital and local health district

**Appendix table 1a** presents elective surgery activity for major hospitals in NSW. The table is ordered by local health district and includes all principal referral (A1), paediatric specialist (A2), ungrouped acute – tertiary referral (A3), major (B) and district groups 1 (C1) and 2 (C2) hospitals that conduct elective surgery. These hospitals account for 98% of all elective surgery recorded as complete in the NSW booking system. Surgery 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 1b** presents the percentages of elective surgery admissions within the clinically recommended time for each urgency category for April to June 2013. The table is ordered by local health district and includes all principal referral (A1), paediatric specialist (A2), ungrouped acute – tertiary referral (A3), major (B) and district groups 1 (C1) and 2 (C2) hospitals that conduct elective surgery. Surgery information from smaller hospitals is presented for each local health district under the *'other'* category.

**Appendix table 1c** presents the median and 90th percentile waiting times (in days) of elective surgery admissions for each urgency category for this quarter. The table is ordered by local health district and includes all principal referral (A1), paediatric specialist (A2), ungrouped acute – tertiary referral (A3), major (B) and district groups 1 (C1) and 2 (C2) hospitals that conduct elective surgery. Surgery information from smaller hospitals is presented for each local health district under the *'other'* category.

## Appendix 2: information by hospital and peer group

**Appendix table 2a** presents elective surgery activity for major hospitals in NSW. The table is ordered by peer group and includes all principal referral (A1), paediatric specialist (A2), ungrouped acute – tertiary referral (A3), major (B) and district groups 1 (C1) and 2 (C2) hospitals that conduct elective surgery. These hospitals account for 98% of all elective surgery recorded as complete in the NSW booking system. Surgery information from smaller hospitals is presented for each peer group 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](#)

**Appendix table 2b** presents the percentages of elective surgery admissions within the clinically recommended time for each urgency category for April to June 2013. The table is ordered by peer group and includes all principal referral (A1), paediatric specialist (A2), ungrouped acute – tertiary referral (A3), major (B) and district groups 1 (C1) and 2 (C2) hospitals that conduct elective surgery. Surgery information from smaller hospitals is presented for each peer group under the *'other'* category.

**Appendix table 2c** presents the median and 90th percentile waiting times (in days) of elective surgery admissions for each urgency category for this quarter. The table is ordered by peer group and includes all principal referral (A1), paediatric specialist (A2), ungrouped acute – tertiary referral (A3), major (B) and district groups 1 (C1) and 2 (C2) hospitals that conduct elective surgery. Surgery information from smaller hospitals is presented for each peer group under the *'other'* category.

## Download our reports

The report, *Hospital Quarterly: Performance of NSW public hospitals, April to June 2013* and related reports are available at [www.bhi.nsw.gov.au](http://www.bhi.nsw.gov.au)

The suite of products includes:

- A one page *Highlights* document, summarising each module
- 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 80 hospitals and NSW as a whole
- *Data Quality Assessments and Data Completeness Reports*
- *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. 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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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](http://www.bhi.nsw.gov.au) for any amendments.