

# Technical Supplement: Outpatient Survey, 2016

May 2018

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Please note there is the potential for minor revisions of data in this report. Please check the online version at **[bhi.nsw.gov.au](http://bhi.nsw.gov.au)** for any amendments.

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The conclusions in this report are those of BHI 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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# NSW Patient Survey Program

The NSW Patient Survey Program began sampling patients in NSW public facilities from 2007. Up to mid-2012, the program was coordinated by the NSW Ministry of Health (Ministry) using questionnaires obtained under license from NRC Picker. Ipsos Social Research Institute (Ipsos) was contracted to manage the logistics of the survey program. Responsibility for the NSW Patient Survey Program was transferred from the Ministry to the Bureau of Health Information (BHI) in July 2012, with Ipsos continuing as the contracted partner to manage logistics.

The aim of the program is to measure and report on patients' experiences of care in public

healthcare facilities in New South Wales (NSW), on behalf of the Ministry and the local health districts (LHDs). The results are used as a source of performance measurement for individual hospitals, LHDs and NSW as a whole.

This document outlines the sampling methodology, data management and analysis of the 2016 Outpatient Survey (OPS).

For more information on how to interpret results and statistical analysis of differences between facilities and NSW, please refer to the Guide to Interpreting Differences on BHI's website at [bhi.nsw.gov.au/nsw\\_patient\\_survey\\_program](http://bhi.nsw.gov.au/nsw_patient_survey_program)

# Outpatient Survey

In 2016, the Outpatient Survey (OPS) was run as part of the revised NSW Patient Survey Program administered by BHI. Although this is the second survey of general outpatient services conducted by BHI, significant differences in the questionnaire and patient cohort mean that comparisons to the 2014 data are not advisable.

## Definition of an 'outpatient'

Outpatients are those patients whose care is provided by a hospital but are not admitted for care. The types of services these patients receive vary greatly and include allied health services (such as physiotherapy, social work, nutrition and psychology), dental care, dialysis, cancer treatment, medical services and surgery preparations and follow-up. The way these services are provided varies widely, with the most common being in a regular clinic operated by medical staff

## Producing the survey samples

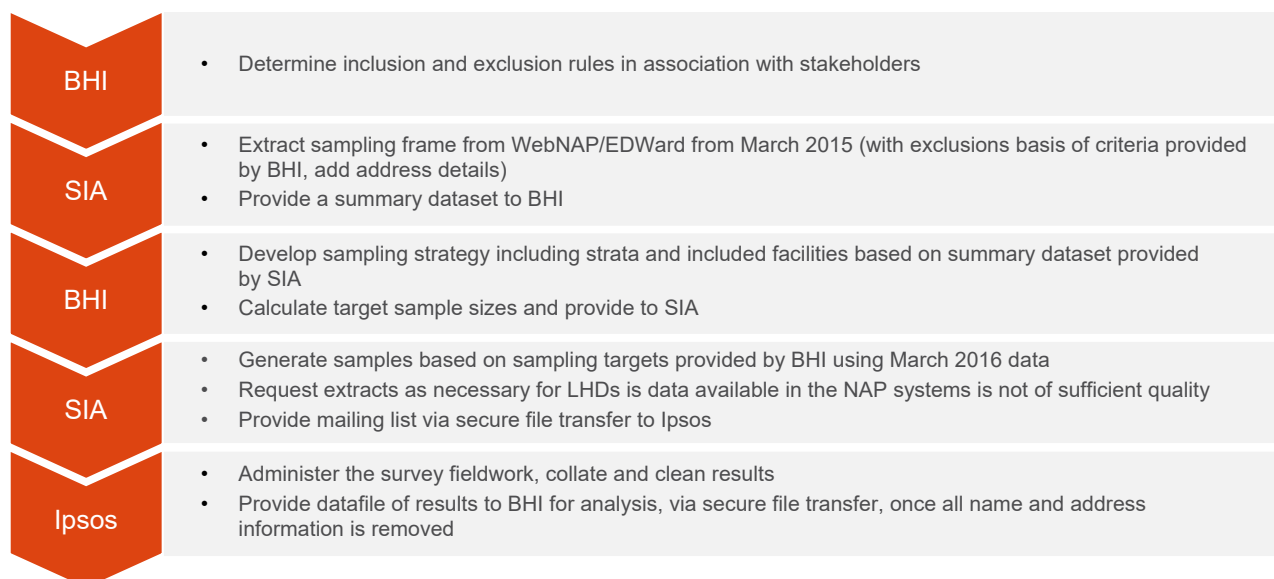
The survey program assures patients that their responses will be confidential and that staff at hospitals will not be able to identify individual patients. BHI does this through a number of mechanisms, including:

- data suppression (of results based on fewer than 30 respondents)
- reporting aggregated results

- de-identification of patient comments
- segregation of roles when constructing survey samples (see below).

The sampling method for the NSW Patient Survey Program requires collaboration between staff at BHI, Ipsos and the Ministry's System Information and Analytics (SIA) (see Figure 1). All surveys of outpatients use data obtained from the Ministry's Non-Admitted Patient (NAP) database.

Figure 1 Organisational responsibilities in sampling and survey processing, OPS 2016



## Drawing the sample

The sampling frame for OPS 2016 was the NSW non-admitted patient database. As BHI does not have access to confidential non-admitted patient data, sample sizes for each hospital were calculated based on aggregated clinic-level data provided by SIA.

For OPS 2016, the sampling frames were defined as attendees at NSW outpatient clinics during February 2016, with the date of attendance used to define eligible records.

### Definition of NSW outpatient service types

Outpatients eligible for the survey were identified in the non-admitted patient extract provided by SIA. Patients were allocated to one of five service groups for the purposes of stratified sampling and later reporting. Some examples of the service groups are presented in Table 1.

Table 1 Outpatient service groups included for sampling and reporting, OPS 2016

Clinic type	Examples of care provided
Allied health	Physiotherapy, optometry, occupational therapy, psychology, social work, nutrition, etc.
Obstetrics	Pregnancy, antenatal care
Medical specialties	Gynecology, cardiology, endocrinology, gastroenterology or endoscopy, oncology, ophthalmology, respiratory, etc.
Medical	Pain management, wound care
Surgery	Orthopedic surgery, plastic surgery

## Specifying inclusions and exclusions

BHI specified the following inclusion and exclusion criteria to SIA, who undertook the sampling for this survey.

### Inclusions

- Random sample of patients who received care from an outpatient service in March 2016
- Persons aged 18+ years
- Outpatients in hospitals within the A1 to C2 peer groups

### Exclusions

- Patients with subsequent death notifications
- Sydney Children's Hospital, Randwick and The Children's Hospital at Westmead
- The following Tier 1 categories:
  - dental
  - general practice / primary care

- The following Tier 2 categories:
  - 40.10 sexual health
  - 20.13 palliative care
  - 40.34 (specialist) mental health
  - 20.06 general practice and primary care
- All occasions of service where the location of care is away from the hospital (off-site)
- Bereavement services
- All sexual assault, or similar, clinics.

Where patients had multiple visits within the sampling month, they were included for their most recent visit. The questionnaire asks patients to respond to the survey based on their most recent visit.

## Screening

SIA extracted the sampling frame on the basis of the inclusion and exclusion criteria provided by BHI, including patient name and address information. The data are passed through additional checks as presented below.

## Exclusions

- Invalid address (including those with addresses listed as hotels, motels, nursing homes, Community Services, Matthew Talbot hostel, 100 William Street, army quarters, jails, unknown)
- Invalid name (including twin, baby of)
- Invalid date of birth
- On the 'do not contact' list
- Sampled in the previous six months for any BHI patient survey
- Had a death recorded according to the NSW Birth Deaths and Marriages Registry and/or the Agency Performance and Data Collection, prior to the sample being provided to Ipsos.

The data following these exclusions is defined by BHI as the final sampling frame.

A summary of the sampling frame was provided to BHI in order to determine sample sizes. These sample sizes were split proportionately across service groups within each hospital as described below.

The targets were provided to SIA, who then sampled from the patient-level data and provided the required fields to Ipsos for mailing.



## Sample size determination

Sample size was calculated at the hospital level.

The hospital targets were based on the aggregated NAP outpatient data from March 2016.

The required sample size for each hospital ( $i$ ) was estimated using Equation 1.

### Equation 1

$$s_i = \frac{\chi^2 N_i P(1 - P)}{d^2(N_i - 1) + \chi^2 P(1 - P)}$$

Where:

$s_i$  = estimated sample size for hospital  $i$

$\chi^2$  = tabulated value of chi-squared with one degree of freedom at 5% level of significance (3.841)

$N_i$  = population in hospital  $i$ , as reported in the data provided to BHI from NAP data

$P$  = expected proportion giving the most positive response to the question on satisfaction with overall care (0.8), based on previous levels of response to patient surveys

$d$  = degree of accuracy of the 95% confidence interval expressed as a proportion ( $\pm 0.07$ ).

The sample size calculation aimed for a confidence interval around an expected proportion of 0.8 of  $\pm 0.07$  at the hospital level.

The required number of mailings at the hospital level is obtained by multiplying the sample size by the inverse of the expected response rate of 37.8%.

Within each hospital, the sample was stratified by the five service groups proportional to the population sizes. Therefore target sample sizes were provided to SIA by service group within each hospital. Within the service group, patients were sampled using simple random sampling without replacement.

A list of the 74 sampled facilities and the total number of outpatients eligible for sampling versus outpatients sampled for the survey for 2016 is provided in Appendix 1.

With regards to these calculations:

- The sample size calculation assumes simple random sampling. This, and differences in the response rate between strata, may result in some estimates having wider confidence intervals than expected, even when the prevalence is 80%.
- The scope of the survey specified only patients aged 18+ years would be included and that the Sydney Children's Hospital, Randwick and The Children's Hospital at Westmead would be excluded.

# Data management

## Data collection

Upon completion of a hard copy or online survey, the respondent returns or submits the completed survey to Ipsos. Paper format surveys are scanned for fixed response options and manually entered in the case of free text fields

Once all of the data are collated into a single dataset, all names and addresses are removed. Also, all text entry fields are checked for potential identifiers (names of patients and doctors, telephone numbers, etc.) and any that are found are replaced with 'XXXX'.

Following this, each record is checked for any errors in completion and reasonable adjustments

(known as 'cleaning') are made to the dataset, for example, removing responses where the patient has not correctly followed questionnaire instructions or provided multiple answers to a single response question.

At the end of this process, Ipsos uses a secure Ministry system to transfer data from their servers to BHI's secure servers, all of which are password protected with limited staff access.

At no stage does BHI, who analyse the data, have access to the names and contact details of the respondents. This ensures respondent answers remain confidential and identifying data can never be publicly released.

# Data analysis

## Completeness of survey questionnaires

In OPS 2016, the completeness of responses was very high, with 99% of respondents answering up to 74 out of 77 questions.

## Calculation of response rate

The response rate is the proportion of people sampled in the survey who actually completed and returned their survey form. The response rate,

number of mailings and patient population distribution are reported for NSW in Table 2. Additional tables present the actual number of surveys mailed to eligible patients, the number of responses received and the response rate, by local health district (LHD) and hospital (Tables 3 and 4 respectively). For reasons of data quality and patient confidentiality, any hospital or LHD with fewer than 30 responses is not publicly reported, although these responses are still included in LHD and NSW totals.

Table 2 Patient population distribution and corresponding number of surveys mailed, OPS 2016

Eligible patient population	Mailings (in scope)	Population in mailings	Total responses	Response rate
193,629	34,595	17.8%	130,85	37.8%

Table 3 Sample size and response rates by LHD, OPS 2016

LHD	Surveys mailed (in scope)	Survey responses	Response rate
Central Coast Local Health District	1,160	470	40.5%
Hunter New England Local Health District	5,535	2,241	40.5%
Illawarra Shoalhaven Local Health District	2,106	1,005	47.7%
Mid North Coast Local Health District	1,610	600	37.3%
Murrumbidgee Local Health District	1,248	432	34.6%
Nepean Blue Mountains Local Health District	1,681	593	35.3%
Northern NSW Local Health District	2,345	1,014	43.2%
Northern Sydney Local Health District	2,771	1,045	37.7%
South Eastern Sydney Local Health District	3,232	1,190	36.8%
South Western Sydney Local Health District	3,592	1,190	33.1%
Southern NSW Local Health District	1,558	472	30.3%
St Vincent's Health Network	675	286	42.4%
Sydney Local Health District	2,387	872	36.5%
Western NSW Local Health District	2,322	844	36.3%
Western Sydney Local Health District	2,373	831	35.0%
<b>NSW Total</b>	<b>34,595</b>	<b>13,085</b>	<b>37.8%</b>

Table 4 Sample size and response rates by hospital, OPS 2016

Hospital name	Surveys mailed	Survey responses	Response rate
Armidale Hospital	526	233	44.3
Auburn Hospital	593	177	29.8
Bankstown-Lidcombe Hospital	642	214	33.3
Bathurst Health Service	486	174	35.8
Belmont Hospital	514	297	57.8
Blacktown Hospital	626	211	33.7
Blue Mountains District Anzac Memorial Hospital	488	207	42.4
Bowral and District Hospital	527	208	39.5
Bulli Hospital	122	55	45.1
Calvary Mater Newcastle	649	350	53.9
Camden Hospital	546	199	36.4
Campbelltown Hospital	589	188	31.9
Canterbury Hospital	598	179	29.9
Cessnock Hospital	340	142	41.8
Coffs Harbour Health Campus	534	179	33.5
Concord Repatriation General Hospital	679	295	43.4
Cooma Hospital and Health Service	329	130	39.5
Cowra Health Service	156	69	44.2
Deniliquin Hospital and Health Services	157	55	35.0
Dubbo Base Hospital	558	196	35.1
Fairfield Hospital	631	173	27.4
Gosford Hospital	166	63	38.0
Goulburn Base Hospital and Health Service	575	242	42.1
Grafton Base Hospital	290	90	31.0
Griffith Base Hospital	555	247	44.5
Gunnedah Hospital	539	178	33.0
Hawkesbury District Health Services	136	29	21.3
Hornsby Ku-ring-gai Hospital	276	100	36.2
Inverell Hospital	527	194	36.8
John Hunter Hospital	245	80	32.7
Kempsey District Hospital	546	206	37.7

Hospital name	Surveys mailed	Survey responses	Response rate
Lachlan Health Service - Forbes	387	145	37.5
Lachlan Health Service - Parkes	607	300	49.4
Lismore Base Hospital	289	89	30.8
Lithgow Hospital	657	208	31.7
Liverpool Hospital	143	60	42.0
Macksville District Hospital	130	69	53.1
Maclean District Hospital	579	160	27.6
Maitland Hospital	506	180	35.6
Manly Hospital	600	279	46.5
Manning Hospital	156	73	46.8
Milton Ulladulla Hospital	547	183	33.5
Mona Vale Hospital	299	78	26.1
Moree Hospital	116	21	18.1
Moruya District Hospital	490	204	41.6
Mount Druitt Hospital	210	55	26.2
Mudgee Health Service	489	160	32.7
Murwillumbah District Hospital	121	32	26.4
Muswellbrook Hospital	198	61	30.8
Narrabri Hospital	628	197	31.4
Nepean Hospital	558	215	38.5
Orange Health Service	188	72	38.3
Port Macquarie Base Hospital	546	216	39.6
Prince of Wales Hospital	671	273	40.7
Queanbeyan Hospital and Health Service	511	111	21.7
RPAH Institute of Rheumatology & Orthopaedics	569	221	38.8
Royal Hospital for Women	660	200	30.3
Royal North Shore Hospital	615	247	40.2
Royal Prince Alfred Hospital	541	177	32.7
Ryde Hospital	576	241	41.8
Shellharbour Hospital	544	302	55.5
Shoalhaven District Memorial Hospital	633	300	47.4
Singleton Hospital	187	76	40.6

Hospital name	Surveys mailed	Survey responses	Response rate
South East Regional Hospital	312	120	38.5
St George Hospital	646	222	34.4
St Vincent's Hospital Sydney	675	286	42.4
Sutherland Hospital	607	236	38.9
Sydney Hospital and Sydney Eye Hospital	648	259	40.0
Tamworth Hospital	595	218	36.6
The Tweed Hospital	564	238	42.2
Wagga Wagga Rural Referral Hospital	552	199	36.1
Westmead Hospital	664	239	36.0
Wollongong Hospital	651	275	42.2
Wyong Hospital	585	228	39.0

## Recoding free text outpatient service types

If a respondent was unable to determine what type of service they attended when answering question 1, they were able to select 'other outpatient clinic' and to write in a response. Respondents selecting this option were reviewed independently by three

researchers before being categorised, when possible, to the service types included in the report. The following rules were agreed to ensure consistent assignment of these text entries to accepted categories:

**Table 5** Rules for recoding of 'Other Outpatient Clinic: Please specify' text entries

#	Rule
1	References to Emergency Departments (i.e. Emergency, ED, A&E, etc.) or Dental were excluded from reporting
2	If the administrative clinic type was Allied Health and text entry contains "Eye", then coded to Allied Health
3	If text entry was a hospital name, clinic name or staff member name, then use Administrative clinic type
4	Any text which included "imaging" was recoded to Medical, unless administrative clinic type was Allied Health or Orthopaedic (in which case, clinic type was coded to these)
5	If respondent named a medical condition, clinic type was coded to the administrative clinic type
6	If a respondent selected one of the clinic types from the multiple choice options but also provided a freetext response, the multiple choice was used preferentially to the freetext clinic type
7	Where a respondent had both a valid response to Question 1 and an 'other specified' response, the pre-coded response from Question 1 was used to allocate results
8	Where there was no agreement the decision of the Director, Surveys was accepted

## Weighting of data

The NSW Patient Survey Program's protocol is to, when possible, 'weight' data to account for differences (bias) in the probability of sampling and the likelihood of different patient groups to respond. Weighting makes the results more representative of the overall patient population, making the data more useful for the purposes of decision-making and service improvement.

Different hospitals have different mixes of clinical services and this needed to be taken into account when considering the aggregated hospital-level results. The 2016 OPS results were weighted by taking the ratio of the number of eligible patients to the number of respondents at the service group level (Allied Health, Medical Specialties, Obstetrics, Surgical and Medical) within each hospital. This ensures that a hospital-level result more accurately represents the patient population attending outpatient services at the hospital.

## Demographic characteristics of respondents to OPS

Table 6 presents the percentage of patients by LHD, age and sex at each stage of the survey. Of the four columns with data:

1. Percentage in sampling frame – this is the percentage of patients in each category in the dataset of eligible patients used to generate the sample (NAP data extract, February 2016).
2. Percentage in sample mailed – the percentage of patients in each category provided by the Ministry to Ipsos for mailing.
3. Percentage of respondents (unweighted) – the raw/unadjusted percentage of respondents.
4. Percentage of respondents (weighted) – the weighted percentage of respondents in the final data contributing to reported results.

Table 6 Demographic characteristics of patients and OPS respondents, OPS 2016

Demographic variable	Sub-group	Percentage in sampling frame	Percentage in sample mailed	Percentage of respondents (unweighted)	Percentage of respondents (weighted)
LHD	Central Coast	7	3	4	5
	Hunter New England	13	16	17	13
	Illawarra Shoalhaven	9	6	8	5
	Murrumbidgee	1	4	3	1
	Mid North Coast	0	5	5	2
	Nepean Blue Mountains	10	5	5	6
	Northern NSW	5	7	8	3
	Northern Sydney	5	8	8	9
	South Eastern Sydney	9	9	9	14
	Southern NSW	0	5	4	1
	St Vincent's Health Network	3	2	2	3
	South Western Sydney	12	10	9	14
	Sydney	4	7	7	7
	Western NSW	2	7	6	3
Western Sydney	20	7	6	14	
Age group	18–34	#	23	10	13
	35–54	#	22	16	18

Demographic variable	Sub-group	Percentage in sampling frame	Percentage in sample mailed	Percentage of respondents (unweighted)	Percentage of respondents (weighted)
	55-74	#	34	45	43
	75+	#	21	30	26
Sex	Female	#	63	59	61
	Male	#	37	41	39

\* Percentage missing = 0.9%; data not shown

# Sample summaries provided by the Ministry are summarised only by strata variables. As sex and age group were not strata variables for OPS 2016, this information is not available.



# Reporting

## Confidentiality

BHI does not receive any confidential patient information. The process of mailing of surveys and collation of responses are carried out by Ipsos on behalf of BHI. All personal identifiers, such as name and address, are removed from the data before it is provided to BHI.

Only aggregated data are published – data at the individual patient level are never published in BHI reports. To further ensure that respondents are not identifiable, BHI only publishes results that include a minimum of 30 respondents.

## Statistical analysis

Data were analysed for the entire March 2016 period. Analysis was undertaken in SAS V9.4 using the SURVEYFREQ procedure using a finite population correction factor and the Copper Pearson adjustment for confidence interval calculation. Strata variables were service group classification and 'hospital'. Scored questions were analysed using the SURVEYMEANS procedure with finite population correction and the same strata variables as used in the SURVEYFREQ procedure. Results were generated for each question in the survey at the NSW, LHD and hospital level.

Unless otherwise specified, missing responses and those who responded 'don't know/can't remember' to questions were excluded from analysis. The exception is when the 'don't know/can't remember' response is used for a question that asks about a third party (e.g. if family had enough opportunity to talk to doctor) or when the percentage responding with this option is over 10%. When reporting on questions that are used to filter respondents through the questionnaire rather than asking about hospital performance, the 'don't know/can't remember' option and missing responses are also reported. Appendix 2 presents the rates of missing or 'don't know' responses for OPS 2016.

The BHI document, *Guide to Interpreting Differences* ([bhi.nsw.gov.au/nsw\\_patient\\_survey\\_program](http://bhi.nsw.gov.au/nsw_patient_survey_program)), provides information in understanding comparison of results. Testing conducted by BHI identifies results that are statistically different (i.e. not due to chance). Sometimes, hospitals and LHDs are not identified as significantly different even though they have a lower result than another hospital that is marked as being significantly worse. This is often due to the number of patients from each hospital – hospitals with more respondents allow us to more accurately analyse if results are truly (statistically) different. In addition, some differences in results between facilities may be due to differences in the demographic profile of patients attending those facilities. BHI is currently developing methods to standardise survey results in order to account for differences in patient mix and to optimise direct comparisons.

### **Determination of statistical significance at 0% and 100%**

Confidence intervals around results that are universally positive or negative are not created by the SURVEYFREQ procedure with the specifications described above. Therefore, it is not possible to determine if such a result is significantly different from the NSW result using overlapping 95% confidence intervals. BHI is exploring alternative methods for comparison. However, as an interim method, BHI will report results as significantly higher than NSW if the next lowest value, at that level of analysis, is significantly higher than NSW. For example, at the hospital level, if Hospital A has a result of 100% and the next highest result for the same question is 99% and significantly higher than the NSW result, then the result for Hospital A will be inferred as significantly higher than the NSW result. Results of 0% are treated similarly.

## Calculation of percentages

The result (percentage) for each response option in the questionnaire is determined using the following method:

### **Numerator**

The (weighted) number of survey respondents who selected a specific response option to a certain question, minus exclusions.

### **Denominator**

The (weighted) number of survey respondents who selected any of the response options to a certain question, minus exclusions.

### **Calculation**

= numerator/denominator x 100

The results are weighted for most questions. They are not weighted for questions relating to demographics or self-reported health status.

In some cases, the results from several responses are combined to form a 'derived measure', as indicated in the reporting. For information about how these measures are developed, please see Appendix 3.

# Appendix 1: Facilities included in the OPS 2016 sampling frame

Table A1 Eligible patients, sampled patients and proportion sampled by hospital, OPS 2016

Hospital name	Total eligible patients	Total sampled	Percentage sampled
Armidale Hospital	796	537	67%
Auburn Hospital	2141	594	28%
Bankstown-Lidcombe Hospital	5259	653	12%
Bathurst Health Service	1210	505	42%
Belmont Hospital	624	521	83%
Blacktown Hospital	4445	632	14%
Blue Mountains District Anzac Memorial Hospital	715	505	71%
Bowral and District Hospital	785	534	68%
Bulli Hospital	126	126	100%
Calvary Mater Newcastle	2901	668	23%
Camden Hospital	967	579	60%
Campbelltown Hospital	4406	599	14%
Canterbury Hospital	2113	599	28%
Cessnock Hospital	405	354	87%
Coffs Harbour Health Campus	1454	544	37%
Concord Repatriation General Hospital	9598	686	7%
Cooma Hospital and Health Service	340	340	100%
Cowra Health Service	158	158	100%
Deniliquin Hospital and Health Services	176	165	94%
Dubbo Base Hospital	2318	567	24%
Fairfield Hospital	2964	634	21%
Gosford Hospital	6131	593	10%
Goulburn Base Hospital and Health Service	296	296	100%
Grafton Base Hospital	1045	567	54%
Griffith Base Hospital	909	550	61%
Gunnedah Hospital	145	139	96%
Hawkesbury District Health Services	354	286	81%

Hospital name	Total eligible patients	Total sampled	Percentage sampled
Hornsby Ku-ring-gai Hospital	2200	534	24%
Inverell Hospital	261	258	99%
John Hunter Hospital	13658	555	4%
Kempsey District Hospital	394	391	99%
Lachlan Health Service - Forbes	169	169	100%
Lachlan Health Service - Parkes	190	190	100%
Lismore Base Hospital	2275	618	27%
Lithgow Hospital	290	290	100%
Liverpool Hospital	12019	663	6%
Macksville District Hospital	143	143	100%
Macleay District Hospital	135	135	100%
Maitland Hospital	1489	584	39%
Manly Hospital	1209	509	42%
Manning Hospital	1249	614	49%
Milton Ulladulla Hospital	157	157	100%
Mona Vale Hospital	1028	551	54%
Moree Hospital	355	308	87%
Moruya District Hospital	116	116	100%
Mount Druitt Hospital	885	498	56%
Mudgee Health Service	230	214	93%
Murwillumbah District Hospital	499	490	98%
Muswellbrook Hospital	123	123	100%
Narrabri Hospital	206	206	100%
Nepean Hospital	11133	637	6%
Orange Health Service	1729	565	33%
Port Macquarie Base Hospital	1568	553	35%
Prince of Wales Hospital	7755	681	9%
Queanbeyan Hospital and Health Service	574	520	91%
RPAH Institute of Rheumatology & Orthopaedics	1438	569	40%
Royal Hospital for Women	3191	662	21%
Royal North Shore Hospital	12308	617	5%
Royal Prince Alfred Hospital	1193	549	46%

Hospital name	Total eligible patients	Total sampled	Percentage sampled
Ryde Hospital	1294	582	45%
Shellharbour Hospital	854	561	66%
Shoalhaven District Memorial Hospital	2610	646	25%
Singleton Hospital	196	193	98%
South East Regional Hospital	314	314	100%
St George Hospital	8047	655	8%
St Vincent's Hospital Sydney	5479	685	13%
Sutherland Hospital	3113	623	20%
Sydney Hospital and Sydney Eye Hospital	4162	651	16%
Tamworth Hospital	2187	613	28%
The Tweed Hospital	1520	575	38%
Wagga Wagga Rural Referral Hospital	1483	570	38%
Westmead Hospital	19315	673	3%
Wollongong Hospital	6533	656	10%
Wyong Hospital	3572	598	17%
<b>NSW Total</b>	<b>193,629</b>	<b>35,195</b>	<b>18%</b>

## Appendix 2: Missing and ‘don’t know’ responses

Table A2 Proportion of ‘don’t know’ and missing responses, by question, OPS 2016

Question Number	Question text	Missing (%)	Don’t know (%)	Missing + Don’t know (%)*
1	What outpatient service did you receive?	10		10
2	What was the purpose of this visit?	4		4
3	Were you able to get an appointment time that suited you?	3		3
4	Did you have any of the following difficulties when making this appointment?	6		6
5	From the time you booked this appointment to the time you went to the clinic, how long did you wait?	7	5	12
6	Do you think the amount of time you waited was...?	7	3	10
7	How much did your symptoms or condition stop you from carrying out your normal daily activities (for example, eating, dressing or using the bathroom) while you waited for this appointment?	7		7
8	While you were waiting for this appointment, did your symptoms or condition...?	4	4	8
9	How long did it take you to travel to the clinic for this appointment?	3	1	4
10	What was your main form of transport to the clinic?	3		3
11	Was there a problem finding parking near the clinic?	1		1
12	Did any of the following cause you difficulties when entering and moving around the clinic?	3		3
13	Were the reception staff polite and courteous?	2		2
14	Did you feel you had enough privacy when talking with the receptionist?	2		2
15	How long after the scheduled appointment time did your appointment actually start?	4	3	7
16	Did you experience any inconvenience or problems as a result of the wait?	1		1
17	Were you told how long you had to wait [for appointment to start]?	2		2
18	Were you told why you had to wait [for appointment to start]?	3		3
19	How comfortable was the waiting area?	3		3

Question Number	Question text	Missing (%)	Don't know (%)	Missing + Don't know (%)*
20	How clean was the clinic?	2		2
21	Did you see health professionals wash their hands, or use hand gel to clean their hands, before touching you?	2	10	13
22	Were you given enough privacy when being examined or treated?	3		3
23	Were you given enough privacy when discussing your condition or treatment?	3		3
24	Who did you see during this visit?	2		2
25	Did you have enough time to discuss your health issue with the health professionals you saw?	2		2
26	Did the health professionals explain things in a way you could understand?	2		2
27	During this visit, did the health professionals know enough about your medical history?	3		3
28	Did you have confidence and trust in the health professionals?	2		2
29	Were the health professionals polite and courteous?	2		2
30	Were the health professionals kind and caring towards you?	2		2
31	Overall, how would you rate the health professionals who treated you?	2		2
32	Did you have worries or fears about your condition or treatment?	3		3
33	Did a health professional discuss your worries or fears with you?	1		1
34	Were you involved, as much as you wanted to be, in decisions about your care and treatment?	3		3
35	How would you rate how well the health professionals worked together?	2		2
36	Were you treated with respect and dignity while you were at the clinic?	2		2
37	Were your cultural or religious beliefs respected by the clinic staff?	3		3
38	During your visit, did you receive or see any information about how to comment or complain about your care?	3	33	35
39	Not including the reason you came to the clinic, during your visit, or soon afterwards, did you experience any of the following complications or problems?	4		4
40	Was the impact of this complication or problem ...?	3		3

Question Number	Question text	Missing (%)	Don't know (%)	Missing + Don't know (%)*
41	In your opinion, were the clinic staff open with you about this complication or problem?	3		3
42	When you left the clinic, were you given enough information about how to manage your care at home?	2		2
43	Were you told who to contact if you were worried about your condition or treatment after you left the clinic?	2	4	6
44	Were you given, or prescribed, any new medication to take at home?	3		3
45	During your visit, did a health professional explain the purpose of this medication in a way you could understand?	6		6
46	During your visit, did a health professional tell you about medication side effects to watch for?	7		7
47	Did you have to pay any of the following out of pocket expenses in relation to this visit?	3	3	6
48	Did you skip any follow-up medication, tests, or treatment recommended at this visit because of their cost?	4		4
49	Overall, how would you rate the care you received in the clinic?	2		2
50	How well organised was the care you received in the clinic?	2		2
51	If asked about your clinic experience by friends and family, how would you respond?	3		3
52	Did the care and treatment received at the clinic help you?	3		3
53	Is the problem you went to the clinic for...?	6		6
54	How long have you been attending this clinic?	5		5
55	In the last 12 months, how many times have you visited this clinic?	4		4
56	Was there any time when the health professionals needed access to your health records and they were not available? [in last 12 months]	2	14	16
57	Did you ever receive conflicting information about your condition or treatment from the health professionals? [in last 12 months]	3		3
58	Was this visit related to a long-standing or chronic health condition?	4		4
59	Do you have a care plan for your treatment?	8	4	12
60	Was your care plan developed by health professionals from this clinic?	3		3



Question Number	Question text	Missing (%)	Don't know (%)	Missing + Don't know (%)*
61	Were you asked for your ideas and preferences when developing this [treatment/care] plan?	1	4	5
62	During your visit, did the health professionals review your care plan with you?	3	5	8
63	Over the past 6 months, when you received outpatient care for your chronic condition(s), were you given choices on treatment to think about?	18		18
63	Over the past 6 months, when you received outpatient care for your chronic condition(s), were you satisfied that your care was well organised?	13		13
63	Over the past 6 months, when you received outpatient care for your chronic condition(s), were you helped to set specific goals to improve your eating or exercise?	20		20
63	Over the past 6 months, when you received outpatient care for your chronic condition(s), were you given a copy of your care plan?	23		23
63	Over the past 6 months, when you received outpatient care for your chronic condition(s), were you encouraged to go to a specific group/class to help you cope with your chronic illness?	22		22
63	Over the past 6 months, when you received outpatient care for your chronic condition(s), were you asked questions, either directly or on a survey, about your health habits?	20		20
63	Over the past 6 months, when you received outpatient care for your chronic condition(s), were you helped to make a care plan that you could do in your daily life?	22		22
63	Over the past 6 months, when you received outpatient care for your chronic condition(s), were you helped to plan ahead so you could take care of your illness even in hard times?	22		22
63	Over the past 6 months, when you received outpatient care for your chronic condition(s), were you asked how your chronic illness affects your life?	20		20
63	Over the past 6 months, when you received outpatient care for your chronic condition(s), were you contacted after a visit to see how things were going?	20		20
63	Over the past 6 months, when you received outpatient care for your chronic condition(s), were you told how your visits with other types of doctors, like the eye doctor or surgeon, helped your treatment?	23		23
64	What year were you born?	3		3
65	What is your gender?	2		2
66	Highest level of education completed	4		4

Question Number	Question text	Missing (%)	Don't know (%)	Missing + Don't know (%)*
67	Which, if any, of the following long-standing conditions do you have (including age related conditions)?	4		4
68	In general, how would you rate your health?	2		2
69	Language mainly spoken at home	2		2
70	Did you need, or would you have liked, to use a professional interpreter at any stage while you were at the clinic?	2		2
71	Did the hospital provide an interpreter when you needed one?	4		4
72	Aboriginal and/or Torres Strait Islander	3		3
73	Who completed this survey?	2		2
74	Do you give permission for the Bureau of Health Information to link you answers from this survey to health records related to you?	4		4

\* Percentages for this column may not equal the sum of the 'missing %' and 'Don't know %' columns because they were calculated using unrounded figures.

# For respondents who did not answer these questions, information about age and sex were substituted with age and sex fields from administrative data (from the Health Information Exchange).

# Appendix 3: Derived measures

## Definition

Derived measures are those for which results are calculated indirectly from respondents' answers to a survey question. These tend to be from questions that contain a 'not applicable' type response option and are used to gather information about the array of patients' needs.

Derived measures involve the grouping together of more than one response option to a question. The derived measure 'Quintile of Disadvantage' is an exception to this rule (for more information on this, refer to this data dictionary document on the BHI website at [bhi.nsw.gov.au/nsw\\_patient\\_survey\\_program](http://bhi.nsw.gov.au/nsw_patient_survey_program))

## Statistical methods

Results are expressed as the percentage of respondents who chose a specific response option or options for a question. The reported percentage is calculated as the numerator divided by the denominator (defined earlier in this Technical Supplement).

Results are weighted as described in this report.

## Inclusions

The following questions and responses were used in the construction of the derived measures.

Table A3 Derived measures, OPS 2016

Derived Measure	Original Question	Derived Measure Categories	Original Question Responses
Had an appointment arranged in advance	Q3. Were you able to get an appointment time that suited you?	Had appointment	Yes
		Didn't have appointment	No
Had symptoms during wait for appointment	Q7. How much did your symptoms or condition stop you from carrying out your normal daily activities (for example, eating, dressing or using the bathroom) while you waited for this appointment?	Had symptoms	I didn't have an appointment arranged in advance
			Not at all
			Only a little
			Somewhat
		Very much	
Didn't have symptoms	I was not able to at all		
Experienced change of symptoms or condition during wait for appointment	Q8. While you were waiting for this appointment, did your symptoms or condition...?	Better or no change	I had no symptoms
			Get much better
			Get a little better
		Got worse	Stay about the same
			Get a little worse
Needed parking	Needed parking	Needed parking	Get much worse
			Yes, a big problem
			Yes, a small problem

Derived Measure	Original Question	Derived Measure Categories	Original Question Responses
	Q11. Was there a problem finding parking near the clinic?		No problem
		Didn't need parking	I did not need parking
Wanted to be involved in decisions about care and treatment	Q34. Were you involved, as much as you wanted to be, in decisions about your care and treatment?	Wanted involvement	Yes, definitely
			Yes, to some extent
			No
		Didn't want involvement	I did not want or need to be involved
Saw more than one health professional at clinic during visit	Q35. How would you rate how well the health professionals worked together?	Saw 2+ health professionals	Very good
			Good
			Neither good nor poor
			Poor
			Very poor
		Saw 1 health professional	Not applicable only saw one
Had religious or cultural beliefs to consider	Q37. Were your cultural or religious beliefs respected by the clinic staff?	Had beliefs to consider	Yes, always
			Yes, sometimes
			No, my beliefs were not respected
		Beliefs not an issue	My beliefs were not an issue
Experienced complication or problem during or shortly after clinic visit	Q39. Experienced complication or problem during or shortly after clinic visit (derived measure)	Experienced complication	An infection
			Uncontrolled bleeding
			A negative reaction to medication
			Complications as a result of tests or procedures
			Severe pain due to the treatment
			Any other complications or problem
		None reported	None of these
			Missing
Complication or problem occurred during clinic visit	Q41. In your opinion, were the clinic staff open with you about this complication or problem?	Occurred in clinic	Yes, completely
			Yes, to some extent
			No

Derived Measure	Original Question	Derived Measure Categories	Original Question Responses
		Occurred after left	Not applicable, as it happened after I left
Needed information on how to manage care at home	Q42. When you left the clinic, were you given enough information about how to manage your care at home?	Needed information	Yes, completely
			Yes, to some extent
			No, I was not given enough
		Didn't need information	I did not need this type of information
Needed information on who to contact if worried about condition/treatment at home	Q43. Were you told who to contact if you were worried about your condition or treatment after you left the clinic?	Needed information	Yes
			No
			I did not need this type of information
		Didn't need information	I did not need this type of information
Needed follow-up medication, tests, or treatment	Q48. Did you skip any follow-up medication, tests, or treatment recommended at this visit because of their cost?	Needed follow-up action	Yes
			No
			I didn't need any of these
		No follow-up needed	I didn't need any of these
Treated by the same health professional within last 12 months of visiting clinic	Q57. Did you ever receive conflicting information about your condition or treatment from the health professionals? [in last 12 months]	Treated by same professional	Yes
			No
			Not applicable – I was always treated by the same person
		Treated by multiple professionals	Not applicable – I was always treated by the same person
Received care plan at visit	Q62. During your visit, did the health professionals review your care plan with you?	Received plan at visit	Not applicable as I did not have a care plan before this visit
			Yes
			No
		Received plan before visit	Yes
			No

## Exclusions

For derived measures, the following responses are excluded:

- 'Don't know/can't remember' or similar non-committal response (with the exception of questions where the rate of this response was over 10% and questions that refer to the experience of a third party such as a family/carer)

- Invalid (i.e. respondent was meant to skip a question but did not)
- Missing (with the exception of questions that allow multiple responses or a 'none of these' option, to which the missing responses are combined to create a 'none reported' variable).

## Interpretation of indicator

The higher the percentage, the more respondents fall into that response category.