

Technical Supplement: Admitted Children and Young Patients Survey, 2014

November 2015

Revision History

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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 for any amendments.

The NSW Patient Survey Program

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

The aim of the program is to measure and report on patients' experiences of care in public health facilities in New South Wales (NSW), on behalf of the NSW Ministry of Health 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 2014 Admitted Children and Young Patients survey.

For more information on how to interpret results and whether differences in the results between hospitals, LHDs or NSW are statistically different, please refer to BHI's 'Guide to Interpreting Differences' at www.bhi.nsw.gov.au/nsw_patient_survey_program.

The Admitted Children and Young Patients Survey

In 2014, the Admitted Children and Young Patients Survey (CYPS) was run as part of the revised NSW Patient Survey Program administered by the Bureau of Health Information (BHI).

This survey is unique in the NSW Patient Survey Program as it uses two different survey questionnaires, depending on the age of the patient. The first questionnaire was designed to be completed by the parent or carer of patients aged 0–7 years of age, asking about both the parent's and child's experiences of care. The second questionnaire, for patients aged 8–17 years, was designed to be completed by both the parent AND the child. The first section of the questionnaire was to be completed by the parent alone or the parent and child working together. A second section of the questions was designed to be completed directly by patients aged 8-17 years. This format was used because international literature and key stakeholders felt that it was important to understand the experiences of both the patient and their parent/carer, as they can often differ. As many questions as possible were kept consistent between the two surveys to facilitate comparisons of the two groups and allow aggregate reporting of all patients aged 0–17.

Organisational roles in producing survey samples

The NSW Patient Survey Program assures patients that their responses will be confidential and that staff at hospitals will not be able to determine who gave which response. BHI does this through a number of mechanisms, including:

- Data suppression (results based on fewer than 30 responses are suppressed)
- Reporting aggregated results
- Anonymisation of patient comments
- Segregation of roles when constructing the survey samples (see below).

The sampling method for the survey program requires collaboration between staff at BHI, Ipsos SRI and the Ministry of Health's Health Systems Performance Information and Reporting Branch (HSPIRB) (see Figure 1). All surveys of admitted patients use data obtained from the Health Information Exchange (HIE).

BHI has access to confidentialised unit record data from selected tables of the HIE database. Use of an encrypted patient number allows deduplication at the patient level within a hospital. For the CYPS, sampling frames are defined separately for each month, with the date at discharge used to define eligible records. Sample sizes for each included hospital are calculated in advance, as defined later in this report.

Figure 1: Organisational responsibilities in sampling and survey processing, CYPS 2014

 Determine inclusion and exclusion rules in association with stakeholders Develop sampling strategy including strata and included facilities based on requests from stakeholders and availability of data in the database available for sampling (HIE in the case of admitted patient surveys) Calculate target sample sizes by strata within facilities and provide to HSIPRB BHI • Extract monthly data from HIE, create interim sampling frame following phase 1 screening and send via secure file transfer to HSIPRB Add names and addresses to interim sampling frame Undergo phase 2 cleaning and exclusions Generate samples based on sampling targets provided by BHI **HSIPRB** Provide mailing list via secure file transfer to Ipsos Administer the survey fieldwork, collate results, clean results • Provide datafile of results to BHI for analysis, via secure file transfer, once all name and address information is removed **Ipsos**

Inclusion criteria

Phase 1 screening

Admitted patient data passes through two phases of cleaning. The first phase of screening is applied by BHI. Many of these criteria are developed in conjunction with advice of stakeholders.

Inclusions

Persons aged 0–17 years who were admitted to a NSW public hospital in peer groups A1, A2, A3, B,
 C1 and C2, pending exclusions.

Exclusions

- Persons aged 18 years and over
- All unqualified babies (babies born without complication and in hospital for birth)
- Haemodialysis patients (high frequency)
- Same-day patients who stayed for less than 3 hours
- · Same-day episodes with a mode of separation of transfer
- Patients admitted for a termination of pregnancy procedure [35643-03]
- Patients treated for maltreatment syndromes [T74] in any diagnosis field, including neglect or abandonment, physical abuse, sexual abuse, psychological abuse, other maltreatment syndromes and maltreatment syndrome, (unspecified)
- Patients treated for contraceptive management [Z30] in any diagnosis field, including general
 counselling and advice on contraception, surveillance of contraceptive drugs, surveillance of
 contraceptive device, other contraceptive management and contraceptive management,
 (unspecified)
- Maternity patients
- Patients with a stillborn baby
- · Patients with a mode of separation of death
- Patients with subsequent death notifications
- Facilities with peer group lower than C2.

From October 2014, the following additional exclusions were applied:

- Intentional self-harm: ICD10 code between X60 and X84
- Sequelae of intentional self-harm: ICD10 code = Y87.0
- Unspecified event, undetermined intent: ICD10 code commences with Y34
- Suicidal ideation: ICD10 code =R45.81
- Family history of other mental and behavioural disorders: ICD10 code commences with Z81.8
- Personal history of self-harm: ICD10 code commences with Z91.5.

Where patients had multiple visits within the sampling month, their most recent hospital stay was kept. The questionnaire asks patients to respond to the survey based on their most recent admission in a particular month.

Phase 2 screening

BHI provides the interim sampling frame to HSIPRB, who add patient name and address information. Data then undergo a second phase of screening. This involves exclusions for administrative/logistical reasons, or where death had been recorded after discharge for the stay used for sample selection but before the final sampling frame is prepared.

Exclusions

- Invalid address (including those with addresses listed as hotels, motels, nursing homes, Community Services, Mathew Talbot hostel, 100 William Street, army quarters, jails, unknown, NFA)
- Invalid name (including twin, baby of, etc.)
- 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 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.

Drawing of the sample

Survey design

A stratified sample design was applied, with each facility defined as a stratum. Within each facility, patients are further stratified by the following variables.

- Age: aged 0–7, 8–13 and 14–17 years (including patients with missing age data), based on the age variable
- Stay type: same day or overnight admission, based on the start and end times of the last hospital stay in the month. It was decided that it was important to use hospital stay rather than episode to determine start and end dates and times. A stay can include several episodes of care, but patients may not be aware of new episodes within a stay

Patients are selected within strata using simple random sampling without replacement. Target sample sizes are defined at the facility level, with proportional sampling of strata within facilities/patient types.

The monthly targets by strata for the 2014 calendar year were based on the admitted patient data from March 2013 to February 2014 (after Phase 1 of the screening process).

The required sample size for each facility (i) within reporting stratum (j) was estimated using Equation 1.

Equation 1

$$s_{ij} = \frac{\chi^2 N_{ij} P(1-P)}{d^2(N_{ij}-1) + \chi^2 P(1-P)}$$

Where:

 s_{ij} = estimated sample size for facility i and stratum j

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

 N_{ij} = population in the reporting stratum j of facility i, estimated using data from the 2013 calendar year with phase 1 exclusion criteria applied, aggregated to correspond with the reporting period (i.e. by quarter or full year)

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 (±0.07).

The sample size calculation aimed for a confidence interval around an expected proportion of 0.8 of ± 0.07 at the reporting strata level within each facility.

The required number of mailings at the facility level was obtained by multiplying the sample size by the inverse of the expected response rate. For both surveys this was set at 30%. Monthly targets were then created in the following manner:

- Number of required mailings by strata (within facility) were allocated proportional to patient population in these strata
- Monthly targets were created by dividing target by 12 and setting minimum target for any cell to four.

Sample sizes and resultant targets were set separately for the two surveys. The following five hospitals were excluded from the 0–7 years survey as these had no admitted patients in this age group from March 2013 to February 2014 (i.e. during the sample methods development period):

- St Vincent's Hospital, Darlinghurst
- RPAH Institute of Rheumatology and Orthopaedics
- Prince of Wales Hospital
- Royal Hospital for Women
- Calvary Mater Newcastle.

All other facilities from the A1 to C2 peer groups were included in both surveys, even if respondent numbers were expected to be too small for hospital-level reporting, in order to facilitate LHD-level report. The expected mailings and responses are shown in Table 1.

Assuming a response rate of 30%, it was expected that reporting for the 8–17 years survey would be possible for 57 hospitals and the 0–7 years survey for 51 hospitals. Furthermore, 72 facilities could expect to be reported for common questions across both surveys when data were combined.

Table 1 Expected number of surveys to be mailed and expected responses by age stratum, CYPS 2014

Age group	Expected Number of mailings	Expected number of responses
0–7 years	17,211	5,125
8–17 years	18,587	5,538
Total	35.798	10.663

For a list of sampled facilities and the total number of paediatric patients versus patients eligible for the survey for 2014, please refer to Appendix 1. Several facilities had very low attendance numbers for patients under 18 years. In these, all eligible younger patients were sampled.

The adjusted sample size was provided to HSIPRB as the survey targets. For each month of sampling, HSPIRB randomly selected patients within each stratum, according to mailing targets provided by BHI.

Notes:

- The sample size calculation based on Equation 1 (previous page) assumes simple random sampling, whereas a stratified survey design was used. 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%
- For the purposes of sampling and reporting, the population of Sydney and Sydney Eye Hospitals were combined as one facility
- Because the patient population at RPAH Institute of Rheumatology and Orthopaedics is small, sample sizes are pooled with the Royal Prince Alfred Hospital for calculation of the 8–17 year survey, with the sample proportionately allocated, by strata, according to the population of each facility. These facilities are also aggregated for reporting purposes.

Data Management

Data collection

Upon completion of a survey questionnaire, the respondent returned or submitted the completed survey (depending on whether they completed the paper-based questionnaire or the online questionnaire) to Ipsos. If a paper form was returned, Ipsos then scanned in the answers electronically and manually entered free text fields.

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

Following this, each record was checked for any errors in completion and reasonable adjustments (known as 'cleaning') were made to the dataset — for example, removing responses where the patient had not correctly followed questionnaire instructions or provided multiple answers to a single response question.

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

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

Data Analysis

Completeness of survey questionnaires

In 2014, all respondents answered at least one of the codeable questions in the survey (excluding the two open-text questions at the end of the questionnaire), thus all respondents were included in the analysis. The completeness of responses was very high, with only 2.14% of respondents answering fewer than 50 questions in the questionnaire.

Text responses are currently not reported publicly. LHDs receive the deidentified free-text responses in a spreadsheet for their use in quality improvement. BHI is currently investigating qualitative analysis of the free-text responses.

Calculation of response rate

The response rate is the proportion of people sampled in the survey that actually completed and returned their survey form. The response rate, number of mailings and the patient population distribution are reported for NSW in Table 2. Tables 3 and 4 show the actual number of surveys mailed to in-scope patients, responses, and response rate, by LHD and hospital, respectively. Because of concerns about representativeness, any hospital or LHD with a response rate of below 20% was not publicly reported; responses were still included in the LHD and NSW totals.

Table 2 Patient population distribution and corresponding number of surveys mailed, CYPS 2014

Age group	Patient population	Proportion of total population	Mailings (in scope)	Population in mailings (%)	Responses	Response rate (%)
0–7	72,511	57.6%	14,962	20.6%	4,128	27.6%
8–17	53,460	42.4%	15,508	29.0%	4,265	27.5%
Total	125,971	100.0%	30,470	24.2%	8,393	27.5%

Table 3 Sample size and response rate by LHD, CYPS, January to December 2014

LHD	Surveys Mailed	Survey Responses	Response Rate
Central Coast	881	232	26.3%
Far West	297	46	15.5%
Hunter New England	4,214	1,033	24.5%
Illawarra Shoalhaven	1,510	409	27.1%
Mid North Coast	1,505	398	26.4%
Murrumbidgee	1,495	378	25.3%
Nepean Blue Mountains	1,192	315	26.4%
Northern NSW	2,318	580	25.0%
Northern Sydney	2,404	914	38.0%
Sydney Children's Hospitals Network	1,656	539	32.5%
South Eastern Sydney	1,909	601	31.5%
South Western Sydney	3,446	869	25.2%
Southern NSW	1,014	295	29.1%
St Vincent's Health Network#	76	17	22.4%
Sydney	1,681	553	32.9%
Western NSW	2,318	588	25.4%
Western Sydney	2,554	626	24.5%
NSW Total	30,470	8,393	27.5%

^{*}St Vincent's Hospital, Darlinghurst has less than 30 total responses and could not be reported.

Table 4 Sample size and response rate by facility, CYPS, January to December 2014

Facility name	Peer group	Surveys mailed	Survey R responses	esponse rate (%)	0–7	Reported 8–17	0–17
Bankstown / Lidcombe Hospital	A1	744	184	24.7	Yes	Yes	Yes
Concord Hospital	A1	195	62	31.8	No	Yes	Yes
Gosford Hospital	A1	804	211	26.2	Yes	Yes	Yes
John Hunter Hospital	A1	816	244	29.9	Yes	Yes	Yes
Liverpool Hospital	A1	790	200	25.3	Yes	Yes	Yes
Nepean Hospital	A1	792	203	25.6	Yes	Yes	Yes
Prince of Wales Hospital	A1	226	48	21.2	No	Yes	Yes
Royal North Shore Hospital	A1	792	323	40.8	Yes	Yes	Yes
Royal Prince Alfred Hospital	A1	753	269	35.7	Yes	Yes	Yes
St George Hospital	A1	767	225	29.3	Yes	Yes	Yes
St Vincent's Hospital, Darlinghurst	A1	76	17	22.4	No	No	No
Westmead Hospital	A1	748	191	25.5	Yes	Yes	Yes
Wollongong Hospital	A1	778	217	27.9	Yes	Yes	Yes
Sydney Children's Hospital	A2	828	265	32	Yes	Yes	Yes
The Children's Hospital at Westmead	A2	828	274	33.1	Yes	Yes	Yes
Calvary Mater Newcastle	А3	68	11	16.2	No	No	No
Royal Hospital for Women	А3	16	8	50	No	No	No
Sydney/Sydney Eye Hospital	А3	177	61	34.5	No	Yes	Yes
Auburn Hospital	В	616	159	25.8	Yes	Yes	Yes
Blacktown Hospital	В	484	108	22.3	No	Yes	Yes
Campbelltown Hospital	В	792	195	24.6	Yes	Yes	Yes
Canterbury Hospital	В	733	222	30.3	Yes	Yes	Yes
Coffs Harbour Base Hospital	В	742	193	26	Yes	Yes	Yes
Dubbo Base Hospital	В	736	165	22.4	Yes	Yes	Yes
Fairfield Hospital	В	668	157	23.5	Yes	Yes	Yes
Hornsby and Ku-Ring-Gai Hospital	В	737	288	39.1	Yes	Yes	Yes
Lismore Base Hospital	В	744	185	24.9	Yes	Yes	Yes
Maitland Hospital	В	744	166	22.3	Yes	Yes	Yes
Manly District Hospital	В	80	20	25	No	No	No
Manning Base Hospital	В	589	128	21.7	No	Yes	Yes
Mona Vale and District Hospital	В	727	267	36.7	Yes	Yes	Yes
Orange Health Service	В	717	190	26.5	Yes	Yes	Yes
Port Macquarie Base Hospital	В	707	193	27.3	Yes	Yes	Yes
Shoalhaven and District Memorial Hospital	В	633	163	25.8	Yes	Yes	Yes
Sutherland Hospital	В	723	259	35.8	Yes	Yes	Yes
Tamworth Base Hospital	В	726	180	24.8	Yes	Yes	Yes
The Tweed Hospital	В	753	206	27.4	Yes	Yes	Yes
Wagga Wagga Base Hospital	В	759	210	27.6	Yes	Yes	Yes
Wyong Hospital [^]	В	77	21	27.3	No	No	No
Armidale and New England Hospital	C1	450	125	27.8	Yes	Yes	Yes
Bathurst Base Hospital	C1	512	142	27.7	Yes	Yes	Yes
Bega District Hospital	C1	316	97	30.7	Yes	Yes	Yes

[^]All eligible patients sampled due to small patient population

Table 4 Sample size and response rate by facility, CYPS, January to December 2014 (cont.)

Broken Hill Base Hospital*	Facility name	Peer group	Surveys mailed	Survey responses	Response rate (%)	0–7	Reported 8–17	0–17
Coulburn Base Hospital	Bowral and District Hospital	C1	451	133	29.5	Yes	Yes	Yes
Grafton Base Hospital C1 530 116 21.8 Yes	Broken Hill Base Hospital*	C1	297	46	15.5	No	No	No
Griffith Base Hospital C1 524 133 25.4 Yes Yes<	Goulburn Base Hospital	C1	449	132	29.4	Yes	Yes	Yes
Mount Druitt Hospital	Grafton Base Hospital	C1	530	116	21.8	Yes	Yes	Yes
Murwillumbah District Hospital	Griffith Base Hospital	C1	524	133	25.4	Yes	Yes	Yes
Ryde Hospital	Mount Druitt Hospital	C1	706	168	23.8	Yes	Yes	Yes
Shellharbour Hospital	Murwillumbah District Hospital	C1	127	37	29.1	No	No	Yes
Ballina District Hospital	Ryde Hospital	C1	68	16	23.5	No	No	No
Bateman's Bay District Hospital	Shellharbour Hospital [^]	C1	58	18	31	No	No	No
Bellinger River District Hospital*	Ballina District Hospital	C2	14	5	35.7	No	No	No
Blue Mountains Dist. Anzac Mem Hosp. C2 286 85 29.7 Yes No Yes No No No No No No No N	Bateman's Bay District Hospital	C2	74	19	25.7	No	No	No
Bulli District Hospital	Bellinger River District Hospital [^]	C2	13	4	30.8	No	No	No
Camden Hospital C2 1 0 0 No No No Casino and District Memorial Hospital C2 146 30 20.5 No No Ye Cessnock District Hospital C2 40 14 35 No	Blue Mountains Dist. Anzac Mem Hosp.	C2	286	85	29.7	Yes	No	Yes
Casino and District Memorial Hospital C2 146 30 20.5 No No Ye Cessnock District Hospital* C2 40 14 35 No N	Bulli District Hospital	C2	31	9	29	No	No	No
Cessnock District Hospital* C2 40 14 35 No No <t< td=""><td>Camden Hospital[^]</td><td>C2</td><td>1</td><td>0</td><td>0</td><td>No</td><td>No</td><td>No</td></t<>	Camden Hospital [^]	C2	1	0	0	No	No	No
Cooma Health Service C2 98 28 28.6 No No<	Casino and District Memorial Hospital	C2	146	30	20.5	No	No	Yes
Cowra District Hospital C2	Cessnock District Hospital	C2	40	14	35	No	No	No
Deniliquin Health Service	Cooma Health Service	C2	98	28	28.6	No	No	No
C2	Cowra District Hospital	C2	104	29	27.9	No	No	No
Gunnedah District Hospital C2 106 16 15.1 No No No No No No No N	Deniliquin Health Service	C2	58	14	24.1	No	No	No
No	Forbes District Hospital	C2	112	25	22.3	No	No	No
Kempsey Hospital C2 31 6 19.4 No No No Kurri Kurri District Hospital C2 95 21 22.1 No No No Lithgow Health Service C2 114 27 23.7 No No No Macksville District Hospital C2 12 2 16.7 No No No Maclean District Hospital C2 4 1 25 No No No Milton and Ulladulla Hospital C2 10 2 20 No No No Moree District Hospital C2 108 11 10.2 No No No Mudgee District Hospital C2 65 18 27.7 No No No Muswellbrook District Hospital C2 102 17 16.7 No No No Narrabri District Hospital C2 129 33 25.6 No No No <tr< td=""><td>Gunnedah District Hospital</td><td>C2</td><td>106</td><td>16</td><td>15.1</td><td>No</td><td>No</td><td>No</td></tr<>	Gunnedah District Hospital	C2	106	16	15.1	No	No	No
Kurri Kurri District Hospital C2 95 21 22.1 No No N Lithgow Health Service C2 114 27 23.7 No No No Macksville District Hospital C2 12 2 16.7 No No No Maclean District Hospital C2 4 1 25 No No No Milton and Ulladulla Hospital C2 10 2 20 No No No Moree District Hospital C2 108 11 10.2 No No No No Mudgee District Hospital C2 65 18 27.7 No	Inverell District Hospital	C2	117	35	29.9	No	No	Yes
Lithgow Health Service C2 114 27 23.7 No No No Macksville District Hospital C2 12 2 16.7 No No No Maclean District Hospital C2 4 1 25 No No No Milton and Ulladulla Hospital C2 10 2 20 No No No Moree District Hospital C2 108 11 10.2 No No No Moruya District Hospital C2 65 18 27.7 No No No Mudgee District Hospital C2 108 30 27.8 No No No Muswellbrook District Hospital C2 102 17 16.7 No No No Narrabri District Hospital C2 129 33 25.6 No No No Parkes District Hospital C2 29 7 24.1 No No No	Kempsey Hospital	C2	31	6	19.4	No	No	No
Macksville District Hospital C2 12 2 16.7 No No No Maclean District Hospital C2 4 1 25 No No No Milton and Ulladulla Hospital C2 10 2 20 No No No Moree District Hospital C2 108 11 10.2 No No No Moruya District Hospital C2 65 18 27.7 No No No Mudgee District Hospital C2 108 30 27.8 No No No Yo Muswellbrook District Hospital C2 102 17 16.7 No Yo Yo 24.1 No	Kurri Kurri District Hospital	C2	95	21	22.1	No	No	No
Maclean District Hospital^ C2 4 1 25 No No No Milton and Ulladulla Hospital^ C2 10 2 20 No No No Moree District Hospital C2 108 11 10.2 No No No Moruya District Hospital C2 65 18 27.7 No No No Mudgee District Hospital C2 108 30 27.8 No No No Muswellbrook District Hospital C2 102 17 16.7 No No No Narrabri District Hospital C2 129 33 25.6 No No No No Parkes District Hospital^ C2 29 7 24.1 No No No Queanbeyan Health Service^ C2 12 1 8.3 No No No Singleton District Hospital C2 70 18 25.7 No No <	Lithgow Health Service	C2	114	27	23.7	No	No	No
Milton and Ulladulla Hospital C2 10 2 20 No No No Moree District Hospital C2 108 11 10.2 No	Macksville District Hospital	C2	12	2	16.7	No	No	No
Moree District Hospital C2 108 11 10.2 No No No Moruya District Hospital C2 65 18 27.7 No No No Mudgee District Hospital C2 108 30 27.8 No No Ye Muswellbrook District Hospital C2 102 17 16.7 No	Maclean District Hospital	C2	4	1	25	No	No	No
Moruya District Hospital C2 65 18 27.7 No No No Mudgee District Hospital C2 108 30 27.8 No No No Ye Muswellbrook District Hospital C2 102 17 16.7 No No <td>Milton and Ulladulla Hospital</td> <td>C2</td> <td>10</td> <td>2</td> <td>20</td> <td>No</td> <td>No</td> <td>No</td>	Milton and Ulladulla Hospital	C2	10	2	20	No	No	No
Mudgee District Hospital C2 108 30 27.8 No No Ye Muswellbrook District Hospital C2 102 17 16.7 No	Moree District Hospital	C2	108	11	10.2	No	No	No
Muswellbrook District Hospital C2 102 17 16.7 No No No Narrabri District Hospital C2 129 33 25.6 No No Ye Parkes District Hospital^ C2 29 7 24.1 No No<	Moruya District Hospital	C2	65	18	27.7	No	No	No
Narrabri District Hospital C2 129 33 25.6 No No Ye Parkes District Hospital C2 29 7 24.1 No	Mudgee District Hospital	C2	108	30	27.8	No	No	Yes
Parkes District Hospital Orange C2 29 7 24.1 No No No Queanbeyan Health Service Orange C2 12 1 8.3 No No </td <td>Muswellbrook District Hospital</td> <td>C2</td> <td>102</td> <td>17</td> <td>16.7</td> <td>No</td> <td>No</td> <td>No</td>	Muswellbrook District Hospital	C2	102	17	16.7	No	No	No
Queanbeyan Health Service ² C2 12 1 8.3 No No No No Singleton District Hospital C2 70 18 25.7 No	Narrabri District Hospital	C2	129	33	25.6	No	No	Yes
Singleton District Hospital C2 70 18 25.7 No No No Tumut Health Service C2 90 14 15.6 No No No Young Health Service C2 64 7 10.9 No No No Bowral and District Hospital C1 451 133 29.5 Yes Yes Yes	Parkes District Hospital [^]	C2	29	7	24.1	No	No	No
Tumut Health ServiceC2901415.6NoNoNoYoung Health ServiceC264710.9NoNoNoBowral and District HospitalC145113329.5YesYes	Queanbeyan Health Service [^]	C2	12	1	8.3	No	No	No
Young Health ServiceC264710.9NoNoNoBowral and District HospitalC145113329.5YesYes	Singleton District Hospital	C2	70	18	25.7	No	No	No
Bowral and District Hospital C1 451 133 29.5 Yes Yes Yes	Tumut Health Service	C2	90	14	15.6	No	No	No
	Young Health Service	C2	64	7	10.9	No	No	No
NSW Total 30,470 8,393 27.5%	Bowral and District Hospital	C1	451	133	29.5	Yes	Yes	Yes
	NSW Total		30,470	8,393	27.5%			

[^]All eligible patients sampled due to small patient population

^{*}Broken Hill Base Hospital had more than 30 responses, but had a response rate below 20% and is thus not reported

Weighting of data

Responses from the survey were weighted by stay type and by age strata (0–7, 8–13, 14–17) to ensure that results from respondents were representative of the overall patient population at the facility level. At the LHD and NSW levels, weights also ensure that the different sampling proportions used at the facility level are accounted for, so that LHD results are not unduly influenced by small facilities that had larger sampling proportions.

The weights were calculated as follows:

$$w_{ijk} = \frac{N_{ijk}}{n_{ijk}} \tag{1}$$

where

 N_{ijk} denotes the population (i.e. total number of patients eligible for the survey) of the ith facility, jth age group, kth stay type and n_{ijk} denotes the number of respondents for the ith facility, jth age group, kth stay type. The eligible patient numbers are based on the number eligible following the second phase of screening undertaken by the Ministry of Health. The usual BHI policy is to aggregate across strata if the number of respondents is less than six in any stratum. For these two surveys many of these strata also had small numbers of eligible patients and often aggregating across strata resulted in much higher weights for the smaller of the two aggregated strata. Therefore it was decided use the weights as created using equation (1).

Analysis of weights

As part of the weighting process, an investigation of the weights was undertaken to ensure that undue weight was not applied to individual responses. The two most important factors considered were the ratio of the maximum to median weight, particularly at the facility level, and the design effect.

The design effect (DEFF) is calculated for each hospital, peer group, LHD and overall. The DEFF, estimated as (1+coefficient of variance (weights)²), measures the ratio of the variance of estimates obtained from the stratified sample compared to the variance expected for a simple random sample.

The range in DEFF at the hospital level (only including those that are reportable) is 1.01 to 1.66 for Admitted Children, 1.06 to 1.90 for Admitted Young People and 1.12 to 2.95 for both surveys combined. At LHD level the DEFF for both surveys combined ranges from 1.23 to 3.24. LHDs with a DEFF of more than two have at least 325 respondents. This size of DEFF is due to the LHD having hospitals with very small and very large volumes (A1 and C2).

No hospital has a ratio of maximum to median weight of greater than five within a survey or across both surveys.

Demographic characteristics of respondents to CYPS

One of the aims of weighting is to ensure that after weighting, the characteristics of the respondents closely reflect the characteristics of the patient population.

Table 5 shows the percentages by actual patient volumes as well as for the survey results, by various demographic breakdowns.

Two patient population figures are shown. The first column refers to the patient population prior to the phase 2 screening process. The second column refers to the eligible patient population, from which the sample was selected.

Table 5 Demographic characteristics of patients and CYPS respondents, January to December 2014

Demographic variable	Sub-group	% in patient population	% in MoH* eligible population	% unweighted	% weighted
	CCLHD	3.4	3.9	2.8	3.9
	FWLHD	0.3	0.3	0.5	0.3
	HNELHD	10.5	10.8	12.3	10.8
	ISLHD	3.8	3.7	4.9	3.7
	MLHD	2.9	2.8	4.5	2.8
LHD	MNCLHD	2.7	2.7	4.7	2.7
	NBMLHD	3.7	3.9	3.8	3.9
	NNSWLHD	4.8	4.6	6.9	4.6
	NSLHD	6.5	7.0	10.9	7.0
	SCHN	33.0	31.9	6.4	32.0
	SESLHD	3.7	4.0	7.2	4.0
	SNSWLHD	1.3	1.1	3.5	1.0
	SVHN	0.1	0.1	0.2	0.1
	SWSLHD	10.7	11.0	10.4	11.0
	SYDLHD	3.3	3.5	6.6	3.5
	WNSWLHD	3.7	3.8	7.0	3.8
	WSLHD	5.7	4.9	7.5	4.9
	Under eight years	61.8	62.2	49.2	62.2
Age group	8-13 years	20.2	20.9	25.4	20.8
	14-17 years	18.0	17.0	25.4	17.0
Stovetume	Overnight	66.3	68.6	69.4	68.6
Stay type	Same day	33.7	31.4	30.6	31.4
	A1	28.3	30.4	28.5	30.4
	A2	33.0	31.9	6.4	32.0
	A3	0.3	0.3	1.0	0.3
Peer group	В	28.2	28.8	43.8	28.8
	C1	7.1	6.2	14.0	6.2
	C2	3.1	2.3	6.3	2.3
Ahoriginal or	No	92.7	N/A [#]	95.7	96.3
Aboriginal or Torres Strait Islander	Yes	6.9	N/A [#]	3.9	3.4
	Unrecorded	0.3	N/A [#]	0.3	0.3
	Male	56.7	N/A [#]	56.3	57.0
Gender	Female	43.3	N/A [#]	43.4	42.7
	Unrecorded	0.0	N/A [#]	0.3	0.3

^{*}MoH = NSW Ministry of Health

^{*}Sample summaries provided by MoH are summarised only by strata variables. As gender and Aboriginal status are not strata variables, this information is not available at this point in the process.

Reporting

Confidentiality

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

Only aggregated data are published — unit record data 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. In addition, results are suppressed from being reported for hospitals or LHDs when the response rate is less than 20%, although the responses are included in higher-level aggregated results.

In the case of the Admitted Children and Young Patients Survey, these suppression rules resulted in the suppression of results for St Vincent's Hospital, Darlinghurst as it had less than 30 respondents in total. In addition, Broken Hill Base Hospital (and therefore Far West LHD) was suppressed as this facility had a response rate below 20%.

Statistical Analysis

Data were analysed for the entire period of January to December 2014. Analysis was undertaken in SAS V9.4 using the SURVEYFREQ procedure. Strata statement variables included: facility, age and stay type.

Results were weighted for all questions except for questions related to sociodemographic characteristics and self-reported health.

Prior to analysis, the responses from the two surveys were combined. The questions and responses for these 56 questions were exactly the same between the two surveys (see Appendix 3).

Results were generated for each question in the survey for NSW, LHD, peer group and hospital by the following age breakdowns:

- 0-17 years
- 0–7 years
- 8–17 years (parent/carer section)
- 8–17 years (self-reported section). The last two pages of the Admitted Young Patients Survey
 contained 14 questions (plus two free text boxes) that were designed to be completed by the young
 patient themselves.

Table 6 Demographic characteristics of patients reported on Healthcare Observer, CYPS, Jan-Dec 2014

Characteristic	Comment
Age group	0–7, 8–17
Country of birth	Australia vs not Australia, based on administrative data
Gender	Self-reported. Where question on sex is missing or invalid, administrative data used
Health status	Parent-reported health status of patient
Long-standing health condition	Parent-reported long-standing health condition, dichotomised to at least one condition vs none reported
Language spoken at home (by parent)	English vs non-English, based on parent report
Quintile of socioeconomic disadvantage	Refer to the Data Dictionary: Quintile of socio-economic disadvantage
Rurality of hospital (NSW level only)	Based on Remoteness category of postcode of location of facility
Rurality of respondent (NSW level only)	Based on Remoteness category of postcode of respondent
Stay type	Overnight and Same Day

Unless otherwise specified, missing responses and those who responded 'Don't know/can't remember' to questions were excluded from analysis. Typically, performance-style questions exclude missing values and 'don't know/can't remember'-type responses. The exception is for 'don't know/can't remember' responses for questions that ask about a third party (e.g. if family had enough opportunity to talk to doctor) or that are over 10%. Meanwhile, questions that are not related to hospital performance include results for people who responded 'don't know/can't remember' and those who should have answered the question but did not. For a detailed breakdown of the amount of missing or 'Don't know' responses by question for each survey, refer to Appendix 2.

The BHI document, 'Guide to Interpreting Differences' (www.bhi.nsw.gov.au/nsw_patient_survey_program), provides information on understanding comparison of results. However, 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.

Calculation of percentages

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

Numerator

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

Denominator

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

Calculation

= numerator/denominator X100

Exclusions: Depending on the response options for a particular question, a number of exclusions can apply to the denominator:

- Response: '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) (see Appendix 2 for proportion of missing response and 'don't
 know/can't remember' by question)
- Response: invalid (i.e. respondent was meant to skip a question but did not)
- Response: where respondent indicated the question was 'not applicable' or the like
- Response: 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).

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 were developed, please see Appendix 4.

Appendix 1

Facilities included in the CYPS sampling frame

Table A1 Expected population versus actual eligible population by facility, CYPS 2014

Facility name	Peer Group	Expected 0–17yo patients in	Total eligible	Eligible versus expected
Bankstown/Lidcombe Hospital	A1	12 months 2,202	patients 2,064	patients 93.7%
Concord Hospital	A1	372	205	55.1%
Gosford Hospital	A1	4,214	3,900	92.5%
John Hunter Hospital	A1	6,827	6,123	89.7%
Liverpool Hospital	A1	3,559	3,349	94.1%
Nepean Hospital	A1	4,202	3,607	85.8%
Prince of Wales Hospital	A1	318	241	75.8%
Royal North Shore Hospital	A1	3,656	3,595	98.3%
Royal Prince Alfred Hospital	A1	1,719	1,538	89.5%
RPAH Institute of Rheumatology & Orthopaedics	A1	36	31	86.1%
St George Hospital	A1	2,320	2,211	95.3%
St Vincent's Hospital, Darlinghurst	A1	164	80	48.8%
Westmead Hospital	A1	1,956	1,642	83.9%
Wollongong Hospital	A1	3,551	2,764	77.8%
Sydney Children's Hospital	A2	15,139	10,744	71.0%
The Children's Hospital at Westmead	A2	25,303	22,165	87.6%
Calvary Mater Newcastle	A3	102	74	72.5%
Royal Hospital for Women	A3	42	20	47.6%
Sydney/Sydney Eye Hospital	A3	220	191	86.8%
Auburn Hospital	В	1,425	817	57.3%
Blacktown Hospital	В	937	553	59.0%
Campbelltown Hospital	B	4,524	4,108	90.8%
Canterbury Hospital	B	2,067	1,866	90.3%
Coffs Harbour Base Hospital	В	1,826	1,622	88.8%
Dubbo Base Hospital	В	1,903	1,561	82.0%
Fairfield Hospital	В	1,260	1,254	99.5%
Hornsby and Ku-Ring-Gai Hospital	В	1,923	1,703	88.6%
Lismore Base Hospital	В	2,188	1,911	87.3%
Maitland Hospital	В	1,890	1,621	85.8%
Manly District Hospital	В	270	85	31.5%
Manning Base Hospital	В	901	739	82.0%
Mona Vale and District Hospital	В	1,815	1,712	94.3%
Orange Health Service	В	1,639	1,364	83.2%
Port Macquarie Base Hospital	В	1,350	1,088	80.6%
Shoalhaven and District Memorial Hospital	В	1,223	964	78.8%
Sutherland Hospital	В	1,412	1,423	100.8%
Tamworth Base Hospital	В	1,764	1,216	68.9%
The Tweed Hospital	В	2,383	1,976	82.9%
Wagga Wagga Base Hospital	В	2,777	2,016	72.6%

Table A1 Expected population versus actual eligible population by facility, CYPS, 2014 (cont.)

Facility name	Peer Group	Expected 0–17yo patients in 12 months	Total eligible patients	Eligible versus expected patients
Wyong Hospital	В	586	77	13.1%
Armidale and New England Hospital	C1	663	500	75.4%
Bathurst Base Hospital	C1	911	649	71.2%
Bega District Hospital	C1	485	329	67.8%
Belmont Hospital	C1	82	58	70.7%
Bowral and District Hospital	C1	626	539	86.1%
Broken Hill Base Hospital	C1	395	330	83.5%
Goulburn Base Hospital	C1	674	498	73.9%
Grafton Base Hospital	C1	879	590	67.1%
Griffith Base Hospital	C1	831	656	78.9%
Mount Druitt Hospital	C1	3,131	2,023	64.6%
Murwillumbah District Hospital	C1	210	134	63.8%
Ryde Hospital	C1	100	69	69.0%
Shellharbour Hospital	C1	481	58	12.1%
Ballina District Hospital	C2	192	14	7.3%
Bateman's Bay District Hospital	C2	242	79	32.6%
Bellinger River District Hospital	C2	22	13	59.1%
Blue Mountains District Anzac Memorial Hospital	C2	378	313	82.8%
Bulli District Hospital	C2	54	33	61.1%
Camden Hospital	C2	34	1	2.9%
Casino and District Memorial Hospital	C2	223	150	67.3%
Cessnock District Hospital	C2	76	40	52.6%
Cooma Health Service	C2	146	106	72.6%
Cowra District Hospital	C2	164	113	68.9%
Deniliquin Health Service	C2	124	58	46.8%
Forbes District Hospital	C2	173	117	67.6%
Gunnedah District Hospital	C2	122	134	109.8%
Inverell District Hospital	C2	177	125	70.6%
Kempsey Hospital	C2	241	32	13.3%
Kurri Kurri District Hospital	C2	109	113	103.7%
Lithgow Health Service	C2	239	128	53.6%
Macksville District Hospital	C2	38	12	31.6%
Maclean District Hospital	C2	119	4	3.4%
Milton and Ulladulla Hospital	C2	100	10	10.0%
Moree District Hospital	C2	194	115	59.3%
Moruya District Hospital	C2	218	65	29.8%
Mudgee District Hospital	C2	206	116	56.3%
Muswellbrook District Hospital	C2	134	113	84.3%
Narrabri District Hospital	C2	204	137	67.2%
Parkes District Hospital	C2	67	29	43.3%
Queanbeyan Health Service	C2	130	12	9.2%
Singleton District Hospital	C2	121	72	59.5%
Tumut Health Service	C2	127	91	71.7%
Young Health Service	C2	164	65	39.6%

Appendix 2

Missing and 'Don't know' responses

Table A2 Proportion of 'Don't know' and missing responses, by question, 0–7 years, Jan–Dec 2014

Question number	Question text	Missing %	Don't know %	Missing + Don't know %*
1	Was your child's stay in hospital planned in advance or an emergency?	0.63		0.63
2	From the time a doctor said your child would need to go to hospital, how long did they have to wait to be admitted?	3.4	3.31	6.71
3	Do you think the amount of time your child waited to go to hospital was \ldots ?	2.8	1.95	4.75
4	Before your child's arrival, how much information about their hospital stay was given to you?	2.72	2.97	5.69
5	When your child arrived in hospital did they spend time in the emergency department?	0.46	1.24	1.7
6	Were the emergency department staff polite and courteous?	1.04	0.21	1.25
7	Do you think the amount of time your child spent in the emergency department was?	1.25	1.07	2.32
8	Were the staff you saw on your arrival to hospital polite and courteous?	0.76		0.76
9	Do you think the time your child had to wait from arrival at hospital until they were taken to their room or ward was?	1.29	1.75	3.04
10	For <u>most</u> of your child's stay in hospital, what type of room or ward were they in?	1.14	2.28	3.42
11	Was the room or ward suitable for someone your child's age?	0.46		0.46
12	Were there things for your child to do (such as books, games and toys)?	0.9	1.72	2.62
13	How clean were the wards or rooms your child stayed in while in hospital?	0.24	0.48	0.72
14	How clean were the toilets and bathrooms that your child used while in hospital?	0.92	4.26	5.18
15	Did you see the health professionals wash their hands, or use hand gel to clean their hands, before touching your child?	0.53	12.96	13.49
16	Was your child given enough privacy during their hospital stay?	0.8		0.8
17	Was your child ever bothered by noise in the hospital?	0.8		0.8
18	Did your child have any hospital food during this visit?	0.36		0.36
19	How would you rate the hospital food?	0.69		0.69
20	Did your child have any special dietary needs (e.g. vegetarian, diabetic, food allergies, religious, cultural, or related to their treatment)?	0.79		0.79
21	Was the hospital food suitable for their dietary needs?	0.62	0.62	1.24

Table A2 Proportion of 'Don't know' and missing responses, by question, 0-7 years, Jan-Dec 2014 (cont.)

Question number	Question text	Missing %	Don't know %	Missing + Don't know %*
22	If you needed to talk to a doctor, did you get the opportunity to do so?	0.17		0.17
23	In your opinion, did the doctors who treated your child know enough about their medical history?	0.48		0.48
24	Did you have confidence and trust in the doctors treating your child?	0.44		0.44
25	Were the doctors polite and courteous?	0.44		0.44
26	Were the doctors kind and caring towards your child?	0.48		0.48
27	In your opinion, did the nurses who treated your child know enough about their care and treatment?	0.27		0.27
28	Did you have confidence and trust in the nurses treating your child?	0.24		0.24
29	Were the nurses polite and courteous?	0.27		0.27
30	Were the nurses kind and caring towards your child?	0.19		0.19
31	Which, if any, of the following <u>other</u> health professionals did your child receive care or treatment from during this hospital stay?	4.36		4.36
32	Were these other health professionals polite and courteous?	1.59		1.59
33	Did you have confidence and trust in these <u>other</u> health professionals treating your child?	1.92		1.92
34	Did the health professionals introduce themselves to your child?	1.33	2.66	3.99
35	Did the health professionals explain things in a way <u>your child</u> could understand?	0.73	0.87	1.6
36	Did the health professionals explain things in a way you could understand?	0.41		0.41
37	During your child's stay in hospital, how much information about their condition or treatment was given to you?	0.61		0.61
38	Did you receive contradictory information from health professionals in the hospital – for example, different opinions on your child's treatment?	0.9		0.9
39	Did you have worries or fears about your child's condition or treatment while in hospital?	0.8		0.8
40	Did a health professional discuss your worries or fears about your child with you?	2.5		2.5
41	Did <u>your child</u> have worries or fears about their condition or treatment while in hospital?	1.36	0.7	2.06
42	Did a health professional discuss your child's worries or fears with them?	1.99	2.65	4.64
43	Were you involved, as much as you wanted to be, in decisions about your child's care and treatment?	0.8		0.8
44	Were you allowed to remain with your child when they were being treated (excluding surgery)?	0.44	0.56	1
45	How would you rate how well the health professionals worked together?	0.27		0.27
46	Did you feel your child was treated with respect and dignity while they were in the hospital?	0.22		0.22
47	Were your child's cultural or religious beliefs respected by the hospital staff?	1.02		1.02
48	While in hospital, did you receive, or see, any information about patients' rights, including how to comment or complain?	0.48	39.44	39.92

Table A2 Proportion of 'Don't know' and missing responses, by question, 0-7 years, Jan-Dec 2014 (cont.)

Question number	Question text	Missing %	Don't know %	Missing + Don't know %*
49	Not including the reason your child came to hospital, during their hospital stay, or soon afterwards, did they experience any of the following complications or problems?	1.31		1.31
50	Was the impact of this complication or problem?	2.11		2.11
51	In your opinion, were members of the hospital staff open with you about this complication or problem?	3.69		3.69
52	How much information were you given about the hospital facilities available to you and your child?	0.36		0.36
53	Did you (the patient's parent or carers) make use of the overnight facilities at the hospital?	1.24		1.24
54	How would you rate the overnight facilities for parents or carers at the hospital?	0.71		0.71
55	Were facilities available for parents and carers to make drinks or food?	1.04	11.65	12.69
56	Was there a problem finding parking near the hospital?	0.63		0.63
57	If your child was in pain, did the doctors and nurses do everything they could to help with their pain?	0.58		0.58
58	During your child's stay in hospital, did they have any tests, X-rays or scans?	0.53		0.53
59	Did a health professional discuss the purpose with you and/or your child?	1.32	1.04	2.36
60	Did your child receive test, X-ray or scan results while they were still in hospital?	2.08		2.08
61	Did a health professional explain the test, X-ray or scan results in a way that you could understand?	1.37		1.37
62	Did you feel involved in decisions about your child's discharge from hospital?	0.68		0.68
63	At the time your child was discharged, did you feel that they were well enough to leave the hospital?	0.87		0.87
64	Thinking about when your child left hospital, were you given enough information about how to manage their care at home?	0.56		0.56
65	Thinking about when your child left hospital, were adequate arrangements made by the hospital for any services they needed?	0.73		0.73
66	Did hospital staff tell you who to contact if you were worried about your child's condition or treatment after they left hospital?	0.36	7.95	8.31
67	Was your child given or prescribed medication to take at home?	0.39	3.2	3.59
68	Did a health professional in the hospital explain the purpose of this medication in a way you could understand?	1.4		1.4
69	Did a health professional in the hospital tell you about medication side effects to watch for?	1.75		1.75
70	Did you receive a copy of a letter from the hospital doctors to your family doctor (GP)?	0.8	15.75	16.55
71	On the day your child left hospital, was their discharge delayed?	0.58		0.58
72	How long was the delay?	0.57	5.67	6.24
73	Did a member of staff explain the reason for the delay?	0.57		0.57
74	What were the main reasons for the delay?	1.7		1.7
75	Overall, how would you rate the care your child received while in hospital?	0.51		0.51

Table A2 Proportion of 'Don't know' and missing responses, by question, 0-7 years, Jan-Dec 2014 (cont.)

Question number	Question text	Missing %	Don't know %	Missing + Don't know %*
76	How well organised was the care your child received in hospital?	0.36		0.36
77	If asked about your child's hospital experience by friends and family how would you respond?	0.92		0.92
78	Did you want to make a complaint about something that happened in hospital?	0.48		0.48
79	Why didn't you make a complaint?	1.45		1.45
80	Did the care and treatment received in hospital help your child?	0.41		0.41
81	Is the problem your child went to hospital for?	0.8		0.8
82	In the <u>week before</u> your child's hospital stay, how difficult was it for them to carry out their normal daily activities (e.g. physical activity, play, going to school or day-care)?	2.74		2.74
83	About one month after your child's discharge from hospital, how difficult was it for them to carry out their normal daily activities?	1.55		1.55
84	What is your gender? (parent/carer)	0.68		0.68
85	What is the highest level of education you (the parent/carer) have completed?	1.53		1.53
86	Which language do you (the parent/carer) mainly speak at home?	0.9		0.9
87	Was an interpreter provided when you (the parent/carer) or your child needed one?	0.7		0.7
88	What year was your child born? #	2.2		2.2
89	What is your child's gender?#	0.15		0.15
90	Which, if any, of the following long-standing conditions does your child have?	1.24		1.24
91	In general, how would you rate your child's health?	0.36		0.36
92	Is your child of Aboriginal origin, Torres Strait Islander origin, or both?	0.36		0.36
93	Who completed this questionnaire?	0.31		0.31
94	Do you give permission for the Bureau of Health Information to link your survey answers to health records relating to your child?	0.7		0.7

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

Some questions are missing from the above table. These questions are free text optional questions and are not applicable to this analysis

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

Table A3 Proportion of 'Don't know' and missing responses, by question, 8–17 years, Jan–Dec 2014

Question number	Question text	•	Don't know	Missing +
1	Was your child's stay in hospital planned in advance or an emergency?	0.87		0.87
2	From the time a doctor said your child would need to go to hospital, how long did they have to wait to be admitted?		2.17	4.93
3	Do you think the amount of time your child waited to go to hospital was \ldots ?	2.17	0.86	3.03
4	Before your child's arrival, how much information about their hospital stay was given to you?	1.84	2.5	4.34
5	When your child arrived in hospital did they spend time in the emergency department?	0.98	1.99	2.97
6	Were the emergency department staff polite and courteous?	0.23	0.42	0.65
7	Do you think the amount of time your child spent in the emergency department was?	0.57	1.59	2.16
8	Were the staff you saw on your arrival to hospital polite and courteous?	1.02		1.02
9	Do you think the time your child had to wait from arrival at hospital until they were taken to their room or ward was?	1.4	2.29	3.69
10	For <u>most</u> of your child's stay in hospital, what type of room or ward were they in?	2.65	4.85	7.5
11	How clean were the wards or rooms your child stayed in while in hospital?	0.66	0.63	1.29
12	How clean were the toilets and bathrooms that your child used while in hospital?	0.75	3.21	3.96
13	Did you see the health professionals wash their hands, or use hand gel to clean their hands, before touching your child?	0.75	14.11	14.86
14	Was your child given enough privacy during their hospital stay?	0.96		0.96
15	Did your child have any special dietary needs (e.g. vegetarian, diabetic, food allergies, religious, cultural, or related to their treatment)?	1.03		1.03
16	Was the hospital food suitable for their dietary needs?	2.7		2.7
17	If you needed to talk to a doctor, did you get the opportunity to do so?	0.66		0.66
18	In your opinion, did the doctors who treated your child know enough about their medical history?	1.13		1.13
19	Did you have confidence and trust in the doctors treating your child?	0.89		0.89
20	Were the doctors polite and courteous?	1.88		1.88
21	In your opinion, did the nurses who treated your child know enough about their care and treatment?	0.7		0.7
22	Did you have confidence and trust in the nurses treating your child?	0.66		0.66
23	Were the nurses polite and courteous?	0.7		0.7
24	Which, if any, of the following <u>other</u> health professionals did your child receive care or treatment from during this hospital stay?	4.38		4.38
25	Were these other health professionals polite and courteous?	0.85		0.85
26	Did you have confidence and trust in these <u>other</u> health professionals treating your child?	1.03		1.03
27	Did the health professionals explain things in a way you could understand?	0.61		0.61

Table A3 Proportion of 'Don't know' and missing responses, by question, 8–17 years, Jan–Dec 2014 (continued)

Question number	Question text	Missing %	Don't know %	Missing + Don't know %*
28	During your child's stay in hospital, how much information about their condition or treatment was given to you?	0.59		0.59
29	Did you receive contradictory information from health professionals in the hospital – for example, different opinions on your child's treatment?	1.1		1.1
30	Did you have worries or fears about your child's condition or treatment while in hospital?	0.8		0.8
31	Did a health professional discuss your worries or fears about your child with you?	2.3		2.3
32	Were you involved, as much as you wanted to be, in decisions about your child's care and treatment?	0.84		0.84
33	Were you allowed to remain with your child when they were being treated (excluding surgery)?	1.22	1.01	2.23
34	How would you rate how well the health professionals worked together?	0.47		0.47
35	Did you feel your child was treated with respect and dignity while they were in the hospital?	0.52		0.52
36	Were your child's cultural or religious beliefs respected by the hospital staff?	1.27		1.27
37	While in hospital, did you receive, or see, any information about patients' rights, including how to comment or complain?	0.77	37.44	38.21
38	Not including the reason your child came to hospital, during their hospital stay, or soon afterwards, did they experience any of the following complications or problems?	1.71		1.71
39	Was the impact of this complication or problem?	0.55		0.55
40	In your opinion, were members of the hospital staff open with you about this complication or problem?	4.06		4.06
41	How much information were you given about the hospital facilities available to you and your child?	0.73		0.73
42	Did you (the patient's parent or carers) make use of the overnight facilities at the hospital?	1.66		1.66
43	How would you rate the overnight facilities for parents or carers at the hospital?	2.08		2.08
44	Were facilities available for parents and carers to make drinks or food?	1.38	16.3	17.68
45	Was there a problem finding parking near the hospital?	0.68		0.68
46	During your child's stay in hospital, did they have any tests, X-rays or scans?	0.75		0.75
47	Did a health professional discuss the purpose with you and/or your child?	2.09	1.69	3.78
48	Did your child receive test, X-ray or scan <u>results</u> while they were still in hospital?	2.32		2.32
49	Did a health professional explain the test, X-ray or scan results in a way that you could understand?	1.19		1.19
50	Did you feel involved in decisions about your child's discharge from hospital?	0.61		0.61
51	At the time your child was discharged, did you feel that they were well enough to leave the hospital?	0.94		0.94
52	Thinking about when your child left hospital, were you given enough information about how to manage their care at home?	0.59		0.59
53	Thinking about when your child left hospital, were adequate arrangements made by the hospital for any services they needed?	0.73		0.73

Table A3 Proportion of 'Don't know' and missing responses, by question, 8–17 years, Jan–Dec 2014 (continued)

Question number	Gilestion text		Don't know %	Missing + Don't know %*	
54	Did hospital staff tell you who to contact if you were worried about your child's condition or treatment after they left hospital?	0.56	9.21	9.77	
55	Was your child given or prescribed medication to take at home?		2.91	3.43	
56	Did a health professional in the hospital explain the purpose of this medication in a way you could understand?	1.03		1.03	
57	Did a health professional in the hospital tell you about medication side effects to watch for?	1.45		1.45	
58	Did you receive a copy of a letter from the hospital doctors to your family doctor (GP)?	0.94	15.55	16.49	
59	On the day your child left hospital, was their discharge delayed?	0.63		0.63	
60	How long was the delay?	1.43	5.14	6.57	
61	Did a member of staff explain the reason for the delay?	1.55		1.55	
62	What were the main reasons for the delay?	1.91		1.91	
63	Overall, how would you rate the care your child received while in hospital?	0.73		0.73	
64	How well organised was the care your child received in hospital?	0.54		0.54	
65	If asked about your child's hospital experience by friends and family how would you respond?	0.84		0.84	
66	Did you want to make a complaint about something that happened in hospital?	1.45		1.45	
67	Why didn't you make a complaint?	1.94		1.94	
68	Did the care and treatment received in hospital help your child?	0.7		0.7	
69	Is the problem your child went to hospital for?	1.27		1.27	
70	In the <u>week before</u> your child's hospital stay, how difficult was it for them to carry out their normal daily activities (e.g. physical activity, play, going to school or day-care)?	2.16		2.16	
71	About one month after your child's discharge from hospital, how difficult was it for them to carry out their normal daily activities?	0.87		0.87	
72	Gender of parent/carer	0.54		0.54	
73	What is the highest level of education you (the parent/carer) have completed?	1.81		1.81	
74	Which language do you (the parent/carer) mainly speak at home?	0.87		0.87	
75	Was an interpreter provided when you (the parent/carer) or your child needed one?	0.8		0.8	
76	What year was your child born?#	3.0		3.0	
77	What is your child's gender?#	0.45		0.45	
78	Which, if any, of the following long-standing conditions does your child have?	1.22		1.22	

Table A3 Proportion of 'Don't know' and missing responses, by question, 8–17 years, Jan–Dec 2014 (continued)

Question number	Question text	Missing %	Don't know %	Missing + Don't know %*
79	In general, how would you rate your child's health?	0.61		0.61
80	Is your child of Aboriginal origin, Torres Strait Islander origin, or both?	0.54		0.54
81	Who completed the survey up to this point?	0.73		0.73
82	Do you give permission for the Bureau of Health Information to link your survey answers to health records relating to your child?	1.74		1.74
85	Did the doctors and nurses introduce themselves to you?			3.21
86	Were the doctors kind and caring?	3.31		3.31
87	Were the <u>nurses</u> kind and caring?	3.24		3.24
88	Did the doctors and nurses explain things in a way you could understand?	3.35		3.35
89	Did a doctor or nurse discuss your worries or fears with you?	3.47		3.47
90	If you were in pain, did the doctors and nurses do everything they could to help with your pain?	3.28		3.28
91	How would you rate the hospital food?	3.66		3.66
92	Did the hospital room suit someone your age?	3.66		3.66
93	Were there things for you to do (such as books, games and toys)?	5.18	14.72	19.9
94	Were you given enough privacy during your hospital stay?	3.75		3.75
95	Were you ever bothered by noise in the hospital?	3.82		3.82
96	Were you involved, as much as you wanted to be, in decisions about your care and treatment?	3.99		3.99
97	Overall, how would you rate the care you received while in hospital?	3.68		3.68
100	Who completed this section?	4.22		4.22

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

Some questions are missing from the above table. These questions are free text optional questions and are not applicable to this analysis

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

Appendix 3

Linked questions between the 0-7 years and 8-17 years questionnaires

The Admitted Children and Young Patients survey is comprised of two different questionnaires, one for patients aged 0–7 years, and a second for patients aged 8–17. Across the two survey instruments however, 56 questions are considered directly comparable and are reported as an aggregate result across both surveys. Table A4 indicates which questions are aggregated between the two survey instruments.

This table only outlines directly comparable questions and does not investigate whether derived data can be compared across survey instruments.

Table A4 Comparable questions between the 0-7 years and 8-17 years questionnaires, 2014

Questio	n number	Question Text			
Admitted Children	Admitted Young Patients	·			
2	2	From the time a doctor said your child would need to go to hospital, how long did they have to wait to be admitted?			
3	3	Do you think the amount of time your child waited to go to hospital was?			
4	4	Before your child's arrival, how much information about their hospital stay was given to you?			
6	6	Were the emergency department staff polite and courteous?			
7	7	Do you think the amount of time your child spent in the emergency department was?			
8	8	Were the staff you saw on your arrival to hospital polite and courteous?			
9	9	Do you think the time your child had to wait from arrival at hospital until they were taken to their room or ward was?			
13	11	How clean were the wards or rooms your child stayed in while in hospital?			
14	12	How clean were the toilets and bathrooms that your child used while in hospital?			
15	13	Did you see the health professionals wash their hands, or use hand gel to clean their hands, before touching your child?			
16	14	Was your child given enough privacy during their hospital stay?			
22	17	If you needed to talk to a doctor, did you get the opportunity to do so?			
23	18	In your opinion, did the doctors who treated your child know enough about their medical history?			
24	19	Did you have confidence and trust in the doctors treating your child?			
25	20	Were the doctors polite and courteous?			
27	21	In your opinion, did the nurses who treated your child know enough about their care and treatment?			
28	22	Did you have confidence and trust in the nurses treating your child?			
29	23	Were the nurses polite and courteous?			
32	25	Were these other health professionals polite and courteous?			
33	26	Did you have confidence and trust in these other health professionals treating your child?			
36	27	Did the health professionals explain things in a way you could understand?			

Table A4 Comparable questions between the 0–7 years and 8–17 years questionnaires, 2014 (continued)

Question number

Question Text

Admitted Children	Admitted Young Patients	
37	28	During your child's stay in hospital, how much information about their condition or treatment was given to you?
38	29	Did you receive contradictory information from health professionals in the hospital – for example, different opinions on your child's treatment?
40	31	Did a health professional discuss your worries or fears about your child with you?
43	32	Were you involved, as much as you wanted to be, in decisions about your child's care and treatment?
44	33	Were you allowed to remain with your child when they were being treated (excluding surgery)?
45	34	How would you rate how well the health professionals worked together?
46	35	Did you feel your child was treated with respect and dignity while they were in the hospital?
47	36	Were your child's cultural or religious beliefs respected by the hospital staff?
48	37	While in hospital, did you receive, or see, any information about patients' rights, including how to comment or complain?
51	40	In your opinion, were members of the hospital staff open with you about this complication or problem?
52	41	How much information were you given about the hospital facilities available to you and your child?
54	43	How would you rate the overnight facilities for parents or carers at the hospital?
55	44	Were facilities available for parents and carers to make drinks or food?
56	45	Was there a problem finding parking near the hospital?
59	47	Did a health professional discuss the purpose with you and/or your child?
61	49	Did a health professional explain the test, X-ray or scan results in a way that you could understand?
62	50	Did you feel involved in decisions about your child's discharge from hospital?
63	51	At the time your child was discharged, did you feel that they were well enough to leave the hospital?
64	52	Thinking about when your child left hospital, were you given enough information about how to manage their care at home?
65	53	Thinking about when your child left hospital, were adequate arrangements made by the hospital for any services they needed?
66	54	Did hospital staff tell you who to contact if you were worried about your child's condition or treatment after they left hospital?
68	56	Did a health professional in the hospital explain the purpose of this medication in a way you could understand?
69	57	Did a health professional in the hospital tell you about medication side effects to watch for?
70	58	Did you receive a copy of a letter from the hospital doctors to your family doctor (GP)?
71	59	On the day your child left hospital, was their discharge delayed?
73	61	Did a member of staff explain the reason for the delay?
75	63	Overall, how would you rate the care your child received while in hospital?
76	64	How well organised was the care your child received in hospital?
77	65	If asked about your child's hospital experience by friends and family how would you respond?
78	66	Did you want to make a complaint about something that happened in hospital?

Table A4 Comparable questions between the 0–7 years and 8–17 years questionnaires, 2014 (continued)

Question number

Question Text

Admitted Children	Admitted Young Patients	
80	68	Did the care and treatment received in hospital help your child?
81	69	Is the problem your child went to hospital for?
82	70	In the week before your child's hospital stay, how difficult was it for them to carry out their normal daily activities (e.g. physical activity, play, going to school or day-care)?
83	71	About one month after your child's discharge from hospital, how difficult was it for them to carry out their normal daily activities?
87	75	Was an interpreter provided when you (the parent/carer) or your child needed one?

Appendix 4: 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, please see the appropriate Data Dictionary for this measure).

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 (see definitions below).

Results are weighted as described in this report.

Numerator

The number of survey respondents who selected a specific response option or specific response options to a certain question, minus exclusions.

Denominator

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

Inclusions

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

Derived Measure	Original Question		Derived Measure Categories		Original Question Responses		
Parent/carer needed to talk	If you needed to talk to a	•	Needed to talk to	•	Yes, always		
to a doctor	doctor, did you get the		doctor	•	Yes, sometimes		
	opportunity to do so?			•	No, I did not get the opportunity		
		•	No need to talk to doctor	•	I had no need to talk to a doctor		
Had hospital food [Young	How would you rate the hospital food? [Young patient self-completion, 8–17 year olds]	•	Had hospital food	•	Very good		
patient self-completion,				•	Good		
8–17 year olds]				•	Not good or bad		
				•	Bad		
				•	Very bad		
		•	Didn't have hospital food	•	I did not have any hospital food		

Derived Measure	Original Question	Derived Measure Categories	Original Question Responses
Parent/carer wanted	During your child's stay	 Wanted information 	Not enough
information about child's	in hospital, how much information about their		The right amount
condition or treatment	condition or treatment		Too much
	was given to you?	Not applicable	 Not applicable to our situation
Child had worries or fears	Did a doctor or nurse	 Had worries or fear 	, , ,
while in hospital [Young	discuss your worries or		Yes, sort of
patient self-completion, 8–17 year olds]	fears with you? [Young patient self-completion,		 No, no-one discussed my worries and fears with me
	8–17 year olds]	No worries or fears	 I did not have any worries or fears
Parent/carer wanted involvement in decision about child's care and	Were you involved, as much as you wanted to be, in decisions about	Wanted involvement	t • Yes, definitely
treatment	your child's care and treatment?		Yes, to some extent
			• No
	-	Didn't want involvement	I did not want or need to be involved
			Not applicable to our situation
Child wanted to be involved in decisions about care and		Wanted involvement	Yes, definitely
treatment [Young patient self-completion, 8–17 year olds]			Yes, sort of
			• No
	_	Didn't want involvement	I did not want or need to be involved
			I was not well enough
Child had cultural or religious beliefs to consider		Had beliefs to consider	Yes, always
	beliefs respected by the hospital staff?		Yes, sometimes
			No, my child's beliefs were not respected
	_	Beliefs not an issue	 My child's beliefs were not an issue

Derived Measure	Original Question	Derived Measure Categories	Original Question Responses
Child experienced pain during stay [0–7 year olds only]	If your child was in pain, did the doctors and nurses do everything they could to help with their pain? [0–7 year olds]	Had pain	Yes, definitely
			Yes, to some extent
			• No
	-	Didn't have pain	My child was not in pain
Child experienced pain during stay [Young patient self-completion, 8–17 year olds]	If you were in pain, did the doctors and nurses do everything they could to help with your pain? [Young patient self-completion, 8–17 year olds]	Had pain	Yes, definitely
			Yes, sort of
			• No
	-	Wasn't in pain	I was not in any pain
Parent/carer wanted to be involved in decisions about child's discharge	Did you feel involved in decisions about your child's discharge from hospital?	Wanted involvement	Yes, definitely
			Yes, to some extent
			No, I did not feel involved
		 Didn't want involvement 	I did not want or need to be involved
Parent/carer needed information on how to manage child's care at home	Thinking about when your child left hospital, were you given enough information about how to manage their 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
Child needed services after discharge	Thinking about when your child left hospital, were adequate arrangements made by the hospital for any services they needed?	Needed services	Yes, completely
			Yes, to some extent
			No, arrangements were not adequate
		Didn't need service	s • It was not necessary

Derived Measure	Original Question	Derived Measure Categories	Original Question Responses
Parent/carer or child needed interpreter	Was an interpreter provided when you [the parent/carer] or your child needed one?	 Needed an interpreter 	Yes, always
			Yes, sometimes
			No, an interpreter was needed but not provided
		Didn't need interpreter	 No, an interpreter was not needed
Parent/carer needed parking	Was there a problem finding parking near the hospital?	Needed parking	Yes, a big problem
			Yes, a small problem
			No problem
		Didn't need parking	Not applicable — did not need parking
Parent/carer needed	How much information were you given about the hospital facilities available to you and your child?	 Needed 	Not enough
information about		information	The right amount
hospital facilities			Too much
available to them and their child		 Not applicable 	 Not applicable to our situation
Child needed things to do (e.g. books, games and toys) [0–7 year olds]	Were there things for your child to do (such as books, games and toys)? [0–7 year olds]	Needed things to do	There were plenty of things for my child to do
			 There were some things, but not enough
			 There was nothing for my child's age group
		Notes all alla	There was nothing for children to do
	Not including the reason your child came to hospital, during their hospital stay, or soon afterwards, did they experience any of the following complications or problems?	Not applicable	Not applicable to my child's stay
		 None reported 	None of theseMissing
		Experienced	Each individual complication:
		(individual	An infection
		complication)	 Uncontrolled bleeding
			 A negative reaction to
			medication
			 Complication as a result
			of surgery
			 Complication as a result of tests/procedures
			o A blood clot
			 A pressure wound or bed sore
			o A fall
			 Any other complication or problem

Exclusions

For derived measures, the following are excluded:

- Response: '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)
- Response: invalid (i.e. respondent was meant to skip a question but did not)
- Response: 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.