

Admitted Children and Young Patients Survey 2017

Technical Supplement

December 2018

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Please note that there is the potential for minor revisions of information in this report. Please check the online version at bhi.nsw.gov.au for any amendments.

The NSW Patient Survey Program

The NSW Patient Survey Program began surveying patients in NSW public facilities from 2007. From 2007 to mid-2012, the program was coordinated by the NSW Ministry of Health using questionnaires obtained under license from NRC Picker. Responsibility for the Patient Survey Program was transferred from the NSW Ministry of Health to the Bureau of Health Information (BHI) in July 2012. BHI has a contract with Ipsos Social Research Institute to support data collection, while BHI conducts all survey analysis.

The aim of the survey 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) as well as in some private hospitals. 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 CYPS 2017.

This survey is unique in the NSW Patient Survey Program. In 2014, two different questionnaires were used. Since 2015, the survey has included three different questionnaires, based 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, asking about both the parent's and child's experiences of care. The second questionnaire, for patients aged 8–15 years, was designed to be completed by both the parent and the child. The first section of the questionnaire was designed for the parent alone, or the parent and child together. The second section was designed to be completed directly by patients aged 8–15 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 which can often differ. The third questionnaire was sent directly to patients aged 16–17 years and the parent is not required to respond to any questions. As many questions as possible were kept consistent between the three surveys to facilitate comparisons of the three groups and allow aggregate reporting of all patients aged 0–17 years.

For information on changes to the questionnaires between 2016 and 2017, please refer to the Development Report at bhi.nsw.gov.au/nsw_patient_survey_program

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 the BHI Guide to Interpreting Survey Differences at bhi.nsw.gov.au/nsw_patient_survey_program

Organisational roles in producing survey samples

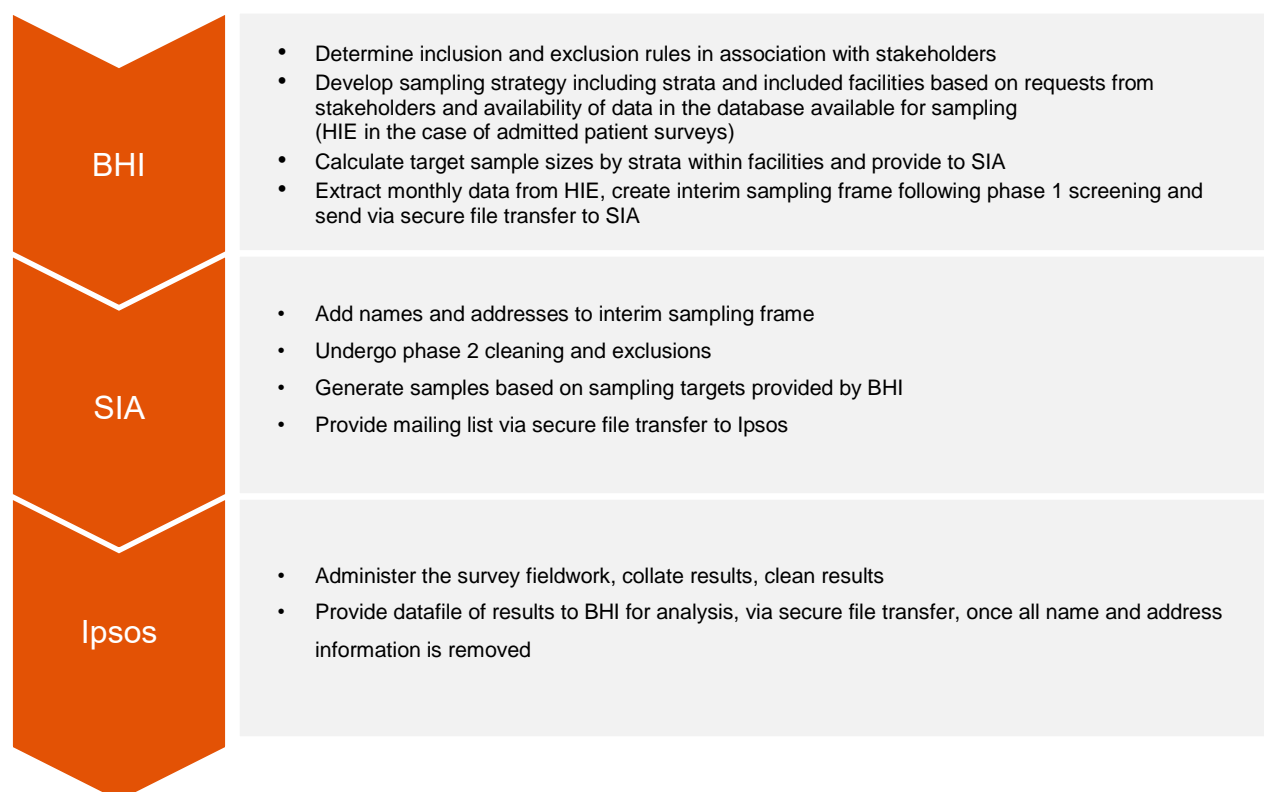
The survey program assures patients that their responses will be confidential and that staff at hospitals will not be able to determine who gave which response. BHI does this through a number of mechanisms, including:

- data suppression (results for 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 is a collaboration between BHI, Ipsos and the NSW Ministry of Health's System Information and Analytics (SIA) branch (see Figure 1). All surveys of admitted patients use data from the Health Information Exchange (HIE).

BHI has access to de-identified unit record data from selected tables of the HIE database. Use of an encrypted patient number allows deduplication of patients within a hospital. For this survey, 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, January to December 2017



Inclusion criteria

Phase 1 screening

Admitted patient data pass through two phases of screening. Phase 1 screening is conducted by BHI.

Inclusions

- admitted patients aged 0–17 years
- admitted to any hospital in peer groups A–C.

Exclusions

- persons aged 18 years and over
- all unqualified babies (babies born without complication and in hospital for birth)
- patients who died during their hospital admission – mode of separation of 6 (death with autopsy) or 7 (death without autopsy)
- patients receiving acute and post-acute care (APAC) services
- patients who are not receiving either acute or rehabilitation care in hospital (episode of care types 1 and 2)
- patients who were admitted to a psychiatric unit during the hospital stay
- patients with a personal history of self-harm (ICD-10 Z91.5) or who have intentionally self-harmed (ICD-10 X60-X84, Y87.0, Y34)
- patients with a family history of mental or behavioural disorders (ICD-10 Z81.8) and patients who have expressed suicidal ideation (ICD-10 R45.81)
- patient recorded with maltreatment syndromes (ICD-10 T74) in any diagnosis field, including neglect or abandonment, physical abuse, sexual abuse, psychological abuse, other maltreatment syndromes and maltreatment syndrome, unspecified
- patients who gave birth during their admission (ICD-10 Z37.0, Z37.2, O80-O84, or procedure codes of 90467, 90468, 90469, 90470 or 16520)
- patients who experienced a stillbirth (ICD-10 Z37.1, Z37.3, Z37.4, Z37.6, Z37.7)
- patients who experienced pregnancy with an abortive outcome (ICD-10 O00-O08)
- patients admitted for a termination of pregnancy procedure (ICD-10 35643-03, 35640-03)
- patients admitted for same day haemodialysis – code 13100-00 in any procedure fields
- same day patients who stayed for less than three hours
- same day patients transferred to another hospital
- patients recorded as receiving contraceptive management (ICD-10 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.

Where patients had multiple visits within the sampling month, their most recent hospital stay was retained for sampling. The questionnaire instructs the patient 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 SIA, who add patient name and address information. Data then undergo a second phase of screening. This review results in 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

Patients meeting the following exclusion criteria are removed in this phase:

- invalid address (including those with addresses listed as hotels, motels, nursing homes, community services, Mathew 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 currently underway
- recorded as deceased 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 are 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 were further stratified by the following variables:

- Age (0–7, 8–15 or 16–17 years) based on the age variable. Each of these age groups coincides with a different questionnaire (see note below)
- Stay type: same day or overnight admission, based on the start and end times of the last hospital stay in the month.

Sample sizes were calculated at the facility and age group level. Simple random sampling without replacement was applied within each stay type stratum.

Calculation of sample sizes and reporting frequency

Monthly sample sizes were determined prior to the commencement of the survey year. These calculations were based on data extracted from the HIE for the previous 12-month period, using the inclusion and exclusion criteria described in Phase 1 screening (see page 3).

The three tertiary paediatric facilities were sampled to allow for quarterly reporting whereas all other facilities were sampled for annual reporting.

Equation 1 was used to estimate the sample size per year.

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

Where:

s_i = desired sample size for facility-age group i

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

N_i = patient population of facility-age group i

P = expected proportion giving 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)

R_i = number of reporting periods per year for facility-age group i . (Four for the three paediatric hospitals and one for other hospitals).

Sample sizes were calculated for each age group separately, and allocated proportionately across each stratum of stay type.

Sample sizes were adjusted to account for expected response rates. For this survey, the expected response rate was 30% for all age groups. For many of the general hospitals the required sample size exceeds the eligible population in which case all eligible patients are sampled. Although many of these hospitals may not have sufficient responses for reporting at the hospital level, they are included in the results at the LHD level.

Monthly survey targets were provided to SIA after dividing the adjusted sample size evenly by 12, and applying a minimum monthly sample size of at least four to each sampling stratum. For each month of sampling, SIA randomly selects patients within each facility and stratum, with the aim of achieving the targets provided by BHI.

Data management

Data collection

Upon completion of a survey questionnaire, the respondent either mails a paper-based questionnaire or submits the survey responses online to Ipsos. If a paper form is returned, Ipsos scans in the answers electronically and manually enters free text fields.

All text entry fields are checked for potential identifiers (names of patients, names of doctors, telephone numbers, etc.) and any that are found are replaced with 'XXXX'.

Following this, each record is checked for any errors in completion. Where necessary, adjustments are made, such as removing responses where the patient has not correctly followed questionnaire instructions or where the respondent has provided multiple answers to a single response question.

At the end of this process, Ipsos uses 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 does BHI, who analyse the data, have access to the names and contact details of respondents. This ensures that respondent answers remain confidential and identifying data can never be publicly released.

Data analysis

Completeness of survey questionnaires

Survey completeness is a measure of how many questions each respondent answered as a proportion of all questions in the questionnaire. The level of survey completeness was high overall, with respondents answering, on average, at least 80% of questions (Table 1). Almost all respondents answered at least half of the questions.

Table 1. Survey completeness and response rate by age group, CYPS, January to December 2017

Survey	Number of questions (excluding free-text questions)	Average number answered	Response rate
0–7 years	90	72	26%
8–15 years	92	76	28%
16–17 years	81	66	21%

Response rate

Response rate is calculated as the number of eligible responses divided by the number of eligible mailed surveys. The overall response rate was 26%. By age group, this ranged from 21% to 28% (Table 1). Response rates at the hospital and local health district (LHD) levels are provided in Tables 3 and 4 respectively, later in the document. 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.

Weighting of data

Responses from the survey were weighted to improve the representativeness of the sample and reduce potential bias of the results. At the LHD and NSW level, 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 hospitals that had larger sampling proportions.

For each reporting period, responses were weighted to match the population by stay type (same day or overnight) and age group within each facility. Weights were calculated as follows.

An initial weight was calculated for respondents in each stratum using Equation 2.

$$w_i = \frac{N_i}{n_i} \quad (2)$$

Where:

N_i = total number of patients eligible for the survey in the i^{th} stratum
 n_i = number of respondents in the i^{th} stratum.

If the stratum cell size was five or fewer, cells were aggregated across stay types prior to weighting, provided the aggregation did not increase the weights allocated to the cell with the small sample size. Weights were not aggregated across age strata as each age stratum is sent a different survey. For paediatric specialist hospitals, weights were created for each quarter of data. For general hospitals, weighting was undertaken once the four quarters of data were aggregated.

Table 2 provides details of facilities that were not represented in one or more age groups either because there were no eligible patients in the specific age group ('Not sampled'), or there were no respondents for that age group ('No responses'). Note that, although they were included in the scope for the CYPs, Macksville, Maclean and Kurri Kurri hospitals are not represented in any of the results.

All other facilities are included in all three age strata.

Table 2. Facilities included in survey scope where specific age groups are excluded due to no eligible patients or no respondents, CYPs, January to December 2017

Facility name	0-7	8-15	16-17
St Vincent's Hospital Sydney	Not sampled	No responses	
Concord Repatriation General Hospital	No responses		
Ryde Hospital	Not sampled		
Prince of Wales Hospital	Not sampled		
Ballina District Hospital	No responses		
Kempsey District Hospital		No responses	No responses
Macksville District Hospital	No responses	Not sampled	No responses
Maclean District Hospital	Not sampled	No responses	No responses
Murwillumbah District Hospital	Not sampled		
Byron Central Hospital	Not sampled	Not sampled	
Batemans Bay District Hospital			No responses
Moruya District Hospital	No responses		
Queanbeyan Hospital and Health Service	No responses	Not sampled	
Milton Ulladulla Hospital	Not sampled		
Cessnock Hospital	Not sampled	No responses	
Kurri Kurri Hospital	Not sampled	Not sampled	No responses
Calvary Mater Newcastle	Not sampled	No responses	
Belmont Hospital	No responses		

Note:

Not sampled: no eligible population in this age group.

No responses: surveys were mailed, however there were no responses from this age group

Assessment of weights

Weights were assessed to ensure that undue emphasis is not applied to individual responses. The ratio of the maximum to median weight at the facility level was reviewed. For this survey, this ranged from 1.0 to 1.7, with a median of 1.6.

The design effect (DEFF) estimates the increase in variance of estimates due to the complex sample design over that of a simple random sample. It is estimated as $(1 + \text{coefficient of variance (weights)}^2)$. Sample sizes, response rates and DEFFs for hospitals is shown in Table 3 and LHDs in Table 4.

A DEFF of two indicates that the variance of estimates will be double the sample variance that would have been obtained if simple random sampling had been done. Generally speaking, LHDs with the largest DEFFs are those that have the greatest range in patient volumes across the facilities within the LHD. The standard errors at the LHD level are fairly small because of the sample sizes at that level. Therefore the increase in standard errors caused by the survey design (and leading to a larger DEFF at LHD level) is more than offset by the fact that each facility that is sampled has sufficient sample size to allow facility-level reporting. In addition, the estimates at the LHD level have appropriate distribution of respondents between large and small facilities.

Table 3. Sample size, response rates and design effects (DEFF), by hospital, CYPs, January to December 2017

Name	Peer Group†	Surveys mailed	Survey responses	Response rate	DEFF
Bankstown-Lidcombe Hospital	A1	912	202	22%	1.1
Concord Repatriation General Hospital	A1	185	46	25%	1.1
Gosford Hospital	A1	1081	278	26%	1.3
John Hunter Children's Hospital	A1	3369	874	26%	1.1
Liverpool Hospital	A1	1118	263	24%	1.7
Nepean Hospital	A1	1142	274	24%	1.5
Prince of Wales Hospital	A1	214	62	29%	1.0
Royal North Shore Hospital	A1	1159	388	33%	1.4
Royal Prince Alfred Hospital	A1	926	313	34%	1.2
St George Hospital	A1	956	278	29%	1.5
St Vincent's Hospital Sydney	A1	76	20	26%	1.0
Westmead Hospital	A1	1102	295	27%	1.1
Wollongong Hospital	A1	1031	278	27%	1.3
Sydney Children's Hospital, Randwick	A2	3321	1036	31%	1.2
The Children's Hospital at Westmead	A2	3653	1041	28%	1.3
Calvary Mater Newcastle	A3	36	6	17%	1.0
Royal Hospital for Women	A3	95	18	19%	1.1
Sydney Hospital and Sydney Eye Hospital	A3	207	59	29%	1.1
Auburn Hospital	B	717	164	23%	1.1
Blacktown Hospital	B	531	120	23%	1.0

Campbelltown Hospital	B	1102	221	20%	1.5
Canterbury Hospital	B	878	239	27%	1.2
Coffs Harbour Health Campus	B	886	211	24%	1.1
Dubbo Base Hospital	B	868	170	20%	1.3
Fairfield Hospital	B	828	174	21%	1.0
Hornsby Ku-ring-gai Hospital	B	910	295	32%	1.1
Lismore Base Hospital	B	906	196	22%	1.1
Maitland Hospital	B	845	199	24%	1.1
Manly Hospital	B	77	23	30%	1.0
Manning Hospital	B	635	161	25%	1.1
Mona Vale Hospital	B	820	261	32%	1.3
Orange Health Service	B	849	189	22%	1.1
Port Macquarie Base Hospital	B	791	172	22%	1.2
Shoalhaven District Memorial Hospital	B	726	152	21%	1.1
Sutherland Hospital	B	786	239	30%	1.1
Tamworth Hospital †	B	856	152	18%	1.3
The Tweed Hospital	B	961	250	26%	1.2
Wagga Wagga Rural Referral Hospital	B	992	230	23%	1.2
Wyong Hospital †	B	296	55	19%	1.0
Armidale Hospital	C1	504	110	22%	1.0
Bathurst Health Service	C1	696	156	22%	1.0
Belmont Hospital	C1	53	11	21%	1.0
Bowral and District Hospital	C1	492	142	29%	1.0
Broken Hill Health Service †	C1	305	45	15%	1.1
Goulburn Base Hospital and Health Service	C1	529	130	25%	1.0
Grafton Base Hospital	C1	549	117	21%	1.0
Griffith Base Hospital	C1	544	130	24%	1.0
Hawkesbury District Health Services	C1	618	155	25%	1.0
Mount Druitt Hospital	C1	751	191	25%	1.5
Murwillumbah District Hospital	C1	28	8	29%	1.3
Ryde Hospital	C1	75	27	36%	1.0
Shellharbour Hospital	C1	64	18	28%	1.1
South East Regional Hospital	C1	457	141	31%	1.0
Ballina District Hospital	C2	25	8	32%	1.1
Batemans Bay District Hospital	C2	58	7	12%	1.3
Blue Mountains District Anzac Memorial Hospital	C2	369	92	25%	1.0
Byron Central Hospital	C2	11	1	9%	*
Casino & District Memorial Hospital	C2	105	19	18%	1.0
Cessnock Hospital	C2	14	2	14%	1.0
Cooma Hospital and Health Service	C2	85	26	31%	1.1
Cowra Health Service	C2	101	20	20%	1.1
Deniliquin Hospital and Health Services	C2	52	16	31%	1.0
Gunnedah Hospital	C2	86	13	15%	1.1
Inverell Hospital	C2	100	23	23%	1.1

Kempsey District Hospital	C2	29	1	3%	*
Kurri Kurri Hospital	C2	1	0	0%	
Lachlan Health Service - Forbes	C2	70	19	27%	1.2
Lithgow Hospital	C2	135	26	19%	1.0
Macksville District Hospital	C2	8	0	0%	
Maclean District Hospital	C2	4	0	0%	
Milton Ulladulla Hospital	C2	7	2	29%	1.0
Moree Hospital	C2	123	21	17%	1.1
Moruya District Hospital	C2	64	10	16%	1.0
Mudgee Health Service	C2	89	21	24%	1.1
Muswellbrook Hospital	C2	109	19	17%	1.1
Narrabri Hospital	C2	98	14	14%	1.1
Queanbeyan Hospital and Health Service	C2	19	3	16%	1.0
Singleton Hospital	C2	51	12	24%	1.1
Young Health Service	C2	74	14	19%	1.4

Note:

* These facilities only had one respondent and therefore a DEFF is unable to be created.

† Results of the analyses should be interpreted with caution as response rate was less than 20%. This applies to facilities with 30 or more respondents.

‡ Facilities in B1 and B2 peer groups are combined for reporting into a single B peer group in this report

Table 4. Sample size, response rates and design effects (DEFF), by LHD and overall, CYPS, January to December 2017

Name	Surveys mailed	Survey responses	Response rate	DEFF
NSW	44395	11374	26%	1.6
Central Coast	1377	333	24%	1.4
Far West †	305	45	15%	1.1
Hunter New England	6880	1617	24%	1.2
Illawarra Shoalhaven	1828	450	25%	1.3
Murrumbidgee	1662	390	23%	1.3
Mid North Coast	1714	384	22%	1.1
Nepean Blue Mountains	2264	547	24%	1.8
Northern NSW	2589	599	23%	1.2
Northern Sydney	3041	994	33%	1.4
Sydney Children's Health Network	6974	2077	30%	1.4
South Eastern Sydney	2258	656	29%	1.4
Southern NSW	1212	317	26%	1.1
St Vincent's Health Network	76	20	26%	1.0
South Western Sydney	4452	1002	23%	1.9
Sydney	1989	598	30%	1.3
Western NSW	2673	575	22%	1.3
Western Sydney	3101	770	25%	1.4

†Results of the analyses should be interpreted with caution as response rate was less than 20%.

Comparing weighted and unweighted patient characteristics

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 demographic characteristics of respondents against the patient population. The four columns denote:

1. % in patient population – the patient population prior to the phase 2 screening process
2. % in eligible population – final sampling frame from which the sample is drawn. Limited demographic variables are available at this level
3. % in respondents – respondents to survey, not adjusted for unequal sampling
4. % in respondents (weighted) – respondents to survey, adjusted by weighting to be representative of the patient population.

Table 5 Demographic characteristics of patient population vs respondents, CYPS, January to December 2017

Demographic variable	Sub-group	% in patient population	% in eligible population	% in respondents (unweighted)	% in respondents (weighted)
LHD	Central Coast	4	4	3	4
	Far West	0	0	0	0
	Hunter New England	11	11	14	11
	Illawarra Shoalhaven	4	4	4	4
	Mid North Coast	3	3	3	3
	Murrumbidgee	3	3	3	3
	Nepean Blue Mountains	4	5	5	5
	Northern NSW	5	5	5	5
	Northern Sydney	7	7	9	7
	South Eastern Sydney	4	4	6	4
	South Western Sydney	11	11	9	11
	Southern NSW	1	1	3	1
	St Vincent's Health Network	0	0	0	0
	Sydney	4	4	5	4
	Sydney Children's Hospitals Network	31	29	18	29
	Western NSW	4	4	5	4
	Western Sydney	5	4	7	4
Peer group	A1	29	31	31	31
	A2	31	29	18	29
	A3	0	0	1	0
	B*	30	31	34	31
	C1	7	7	12	7
	C2	2	2	3	2
Age stratum	0–7	62	63	43	63
	8–15	29	29	40	29
	16–17	9	8	16	8

* Facilities in B1 and B2 peer groups are combined for reporting into a single B peer group in this report

Demographic variable	Sub-group	% in patient population	% in eligible population	% in respondents (unweighted)	% in respondents (weighted)
Stay type	Overnight	66	68	68	69
	Same day	34	32	32	31
Aboriginal status	Not Aboriginal	92	.	96	96
	Aboriginal and/or Torres Strait Islander	8	.	4	4
Gender	Male	57	.	57	57
	Female	43	.	43	43

Reporting

Statistical analysis

Data were analysed for the period from January to December 2017 combined. Analysis was undertaken in SAS V9.4 using the SURVEYFREQ procedure, with facility, age group and stay type as strata. Results were obtained for each individual survey question, and also aggregated across surveys where questions were considered sufficiently similar. Results were weighted for all questions, with the exception of questions related to socio-demographic characteristics and self-reported health.

BHI only publishes results that include a minimum of 30 respondents for any question at reporting level (hospital or LHD or NSW). This is to ensure there are enough respondents for reliable estimates to be calculated. This also ensures that confidentiality and privacy are protected. For hospitals or LHDs where there were too few respondents, results are suppressed.

Levels of reporting are shown in Table 6.

Table 6. Levels of reporting, CYPS, January to December 2017

Grouping	Reporting frequency	NSW	General hospitals	Peer group	LHD	Paediatric hospitals
All patients	Annual	✓	✓	✓	✓	✓
	Quarterly					✓
Age group: self-reported – administrative data used where question on year of birth was missing or invalid	Annual	✓	✓	✓	✓	✓
Gender: self-reported – administrative data used where question on gender was missing or invalid		✓	✓	✓	✓	✓
Main language spoken at home		✓	✓	✓	✓	
Self-reported health status		✓	✓	✓	✓	✓
Stay type: same day and overnight		✓	✓	✓	✓	✓
Quintile of disadvantage: based on the Australian Bureau of Statistics Index of Relative Socio-demographic Disadvantage		✓	✓	✓	✓	✓
Country of birth: from administrative data		✓	✓	✓	✓	✓
Rurality of patient residence: based on ARIA+ [#] category of postcode of respondent residence – outer regional, remote and very remote combined		✓	✓	✓	✓	✓

Results for the three paediatric specialist facilities are reportable at the quarterly level for the period from January 2015 to December 2017, where questions were comparable across years. For these quarterly results, only questions related to hospital performance are reported in Healthcare Observer (bhi.nsw.gov.au/healthcare_observer). Results for general hospitals are reported only for 2017 as a whole. Although a similar survey was undertaken in 2014, substantial changes in the survey methodology mean that the results are not comparable. See page 1 for further information.

[#] Accessibility/Remoteness Index of Australia is the standard Australian Bureau of Statistics measure of remoteness. For more information refer to www.abs.gov.au/websitedbs/d3310114.nsf/home/remoteness+structure

Unless otherwise specified, missing responses and those who responded 'Don't know/can't remember' to questions were excluded from analysis. For a detailed breakdown of the amount of missing or 'Don't know' responses by question, refer to Appendix 1. Typically, performance-type 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', who selected a 'Not applicable' type response, and those who should have answered the question but did not (a 'missing response').

Confidence intervals can be displayed in Healthcare Observer, BHI's website interactive tool, for all performance-type questions. The BHI document, *Guide to Interpreting Survey Differences*, provides information for comparing 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.

Some results are calculated indirectly from respondents' answers to a survey question. See Appendix 2 for details on how response options were grouped for each of these derived measures.

Appendix 1: Percentage of missing and 'Don't know' responses

Tables 7 to 9 show unweighted proportions of responses for 'don't know/can't remember' and where respondents have not responded to a question to which they were meant to respond.

Table 7. Proportion of 'Don't know' and missing responses, by question, 0–7 years CYPS, January to December 2017

Question text (0–7 years)		Missing (%)	Don't know (%)	Missing + Don't know (%)*
1	Was your child's stay in hospital planned in advance or an emergency?	0.6		0.6
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?	2.4	4.4	6.8
3	Do you think the amount of time your child waited to go to hospital was...?	2.3	2.3	4.6
4	Before your child's arrival, how much information about their hospital stay was given to you?	2.3	3.2	5.5
5	When your child arrived in hospital did they spend time in the emergency department?	0.5	1.3	1.9
6	Were the emergency department staff polite and courteous?	1.7	0.2	1.9
7	Do you think the amount of time your child spent in the emergency department was...?	1.8	1.3	3.2
8	Were the staff you met on your arrival to hospital polite and courteous?	0.8		0.8
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...?	1.2	1.8	2.9
10	For most of your child's stay in hospital, what type of room or ward were they in?	1.2	2.0	3.2
11	Was the room or ward suitable for someone your child's age?	0.8		0.8
12	Were there things for your child to do (such as books, games and toys)?	1.0	2.3	3.3
13	How clean were the wards or rooms your child stayed in while in hospital?	0.7	0.5	1.2
14	How clean were the toilets and bathrooms that your child used while in hospital?	1.5	4.3	5.7
15	Did you see the health professionals wash their hands, or use hand gel to clean their hands, before touching your child?	0.7	12.6	13.3
16	Was your child given enough privacy during their hospital stay?	1.0		1.0
17	Was your child ever bothered by noise in the hospital?	1.1		1.1
18	Did your child have any hospital food during this stay?	0.8		0.8
19	How would you rate the hospital food?	1.1		1.1
20	Did your child have any special dietary needs (e.g. vegetarian, diabetic, food allergies, religious, cultural, or related to their treatment)?	1.2		1.2
21	Was the hospital food suitable for their dietary needs?	0.9	2.4	3.3
22	If you needed to talk to a doctor, did you get the opportunity to do so?	0.2		0.2
23	In your opinion, did the doctors who treated your child know enough about their medical history?	0.6		0.6

Question text (0–7 years)		Missing (%)	Don't know (%)	Missing + Don't know (%)*
24	Did you have confidence and trust in the doctors treating your child?	0.4		0.4
25	Were the doctors kind and caring towards your child?	0.4		0.4
26	In your opinion, did the nurses who treated your child know enough about their care and treatment?	0.3		0.3
27	Did you have confidence and trust in the nurses treating your child?	0.3		0.3
28	Were the nurses kind and caring towards your child?	0.3		0.3
29	Did the health professionals introduce themselves to your child?	1.5	3.0	4.5
30	Did the health professionals explain things in a way your child could understand?	0.8	1.0	1.8
31	Did the health professionals explain things in a way you [the parent/carer] could understand?	0.4		0.4
32	During your child's stay in hospital, how much information about their condition or treatment was given to you?	0.5		0.5
33	Did you receive contradictory information from health professionals in the hospital - for example, different opinions on your child's treatment?	0.8		0.8
34	Did you have worries or fears about your child's condition or treatment while in hospital?	0.5		0.5
35	Did a health professional discuss your worries or fears about your child with you?	1.5		1.5
36	Did your child have worries or fears about their condition or treatment while in hospital?	1.3	0.7	2.0
37	Did a health professional discuss your child's worries or fears with them?	1.6	2.1	3.7
38	Were you involved, as much as you wanted to be, in decisions about your child's care and treatment?	0.6		0.6
39	Were you allowed to remain with your child when they were being treated (excluding surgery)?	0.6	0.5	1.1
40	How would you rate how well the health professionals worked together?	0.6		0.6
41	Did you feel your child was treated with respect and dignity while they were in the hospital?	0.4		0.4
42	Were your child's cultural or religious beliefs respected by the hospital staff?	1.1		1.1
43	While in hospital, did you receive or see any information about how to comment or complain about your child's care?	0.5	37.8	38.3
44	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?	1.6		1.6
45	Was the impact of this complication or problem...?	0.8		0.8
46	In your opinion, were members of the hospital staff open with you about this complication or problem?	1.2		1.2
47	How much information were you given about the hospital facilities available to you and your child?	0.5		0.5
48	Did you (the patient's parents or carers) make use of the overnight facilities at the hospital?	1.0		1.0
49	How would you [the parent/carer] rate the overnight facilities for parents or carers at the hospital?	1.7		1.7
50	Were facilities available for parents and carers to make drinks or food?	0.8	13.2	14.0
51	Was there a problem finding parking near the hospital?	0.4		0.4

Question text (0–7 years)		Missing (%)	Don't know (%)	Missing + Don't know (%)*
52	If your child was in pain, did the doctors and nurses do everything they could to help with their pain?	0.4		0.4
53	During your child's stay in hospital, did they have any tests, X-rays or scans?	0.4		0.4
54	Did a health professional discuss the purpose [of tests, x-rays or scans] with you and/or your child?	0.9	1.0	1.9
55	Did your child receive test, X-ray or scan results while they were still in hospital?	1.3		1.3
56	Did a health professional explain the test, X-ray or scan results in a way that you [the parent/carer] could understand?	0.5		0.5
57	Did you feel involved in decisions about your child's discharge from hospital?	0.6		0.6
58	At the time your child was discharged, did you feel that they were well enough to leave the hospital?	0.6		0.6
59	Thinking about when your child left hospital, were you given enough information about how to manage their care at home?	0.4		0.4
60	Thinking about when your child left hospital, were adequate arrangements made by the hospital for any services they needed?	0.5		0.5
61	Did hospital staff tell you who to contact if you were worried about your child's condition or treatment after they left hospital?	0.4	8.0	8.4
62	Was your child given or prescribed any new medication to take at home?	0.3	3.0	3.4
63	Did a health professional in the hospital explain the purpose of this medication in a way you [the parent/carer] could understand?	0.7		0.7
64	Did a health professional in the hospital tell you about medication side effects to watch for?	1.1		1.1
65	Did the hospital provide you with a document summarising the care your child received in hospital (e.g. a copy of the letter to your GP or a discharge summary)?	0.6	11.2	11.8
66	On the day your child left hospital, was their discharge delayed?	0.6		0.6
67	How long was the delay? [in discharge]	0.5	6.9	7.4
68	Did a member of staff explain the reason for the delay?	1.2		1.2
69	What were the main reasons for the delay?	2.2	4.6	6.8
70	Overall, how would you rate the care your child received while in hospital?	0.4		0.4
71	How well organised was the care your child received in hospital?	0.3		0.3
72	If asked about your child's hospital experience by friends and family how would you respond?	0.5		0.5
73	Did you want to make a complaint about something that happened in hospital?	0.6		0.6
74	Why didn't you make a complaint?	1.2		1.2
75	Did the care and treatment received in hospital help your child?	0.5		0.5
76	Is the problem your child went to hospital for...?	1.2		1.2
77	In the week before your child's hospital stay, how difficult was it for them to carry out their normal daily activities?	2.5		2.5
78	About one month after your child's discharge from hospital, how difficult was it for them to carry out their normal daily activities?	1.5		1.5
79	Gender of parent/carer	0.6		0.6

Question text (0–7 years)		Missing (%)	Don't know (%)	Missing + Don't know (%)*
80	Highest level of education completed by parent/carer	1.2		1.2
81	Language mainly spoken at home by parent/carer	1.2		1.2
82	Did you (the parent/carer) need, or would you have liked, to use an interpreter at any stage while you were in hospital?	1.0		1.0
83	Did the hospital provide an interpreter when you needed one?	0.8		0.8
84	What year was your child born?	5.2		5.2
85	What is your child's gender?	0.3		0.3
86	Which, if any, of the following long-standing conditions does your child have?	1.5		1.5
87	In general, how would you rate your child's health?	0.5		0.5
88	Aboriginal and/or Torres Strait Islander origin of patient	0.5		0.5
89	Who completed this survey?	0.3		0.3
90	Do you give permission for the Bureau of Health Information to link answers from this survey to health records related to your child?	1.0		1.0

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

Table 8. Proportion of 'Don't know' and missing responses, by question, 8–15 years CYPS, January to December 2017

Question text (8–15 years)		Missing (%)	Don't know (%)	Missing + Don't know (%) ^a
1	Was your child's stay in hospital planned in advance or an emergency?	0.7		0.7
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?	3.1	3.1	6.2
3	Do you think the amount of time your child waited to go to hospital was...?	3.0	2.0	4.9
4	Before your child's arrival, how much information about their hospital stay was given to you?	2.6	2.4	5.0
5	When your child arrived in hospital did they spend time in the emergency department?	0.7	1.2	1.9
6	Were the emergency department staff polite and courteous?	2.1	0.4	2.5
7	Do you think the amount of time your child spent in the emergency department was...?	2.5	1.0	3.5
8	Were the staff you met on your arrival to hospital polite and courteous?	0.7		0.7
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...?	1.2	1.4	2.6
10	For most of your child's stay in hospital, what type of room or ward were they in?	2.1	3.5	5.6
11	How clean were the wards or rooms your child stayed in while in hospital?	0.8	0.5	1.3
12	How clean were the toilets and bathrooms that your child used while in hospital?	0.7	2.3	3.0
13	Did you see the health professionals wash their hands, or use hand gel to clean their hands, before touching your child?	0.7	14.0	14.7
14	Was your child given enough privacy during their hospital stay?	0.7		0.7
15	Did your child have any special dietary needs (e.g. vegetarian, diabetic, food allergies, religious, cultural, or related to their treatment)?	1.0		1.0
16	Was the hospital food suitable for their dietary needs?	2.9		2.9
17	If you needed to talk to a doctor, did you get the opportunity to do so?	0.8		0.8
18	In your opinion, did the doctors who treated your child know enough about their medical history?	1.1		1.1
19	Did you have confidence and trust in the doctors treating your child?	0.9		0.9
20	In your opinion, did the nurses who treated your child know enough about their care and treatment?	0.4		0.4
21	Did you have confidence and trust in the nurses treating your child?	0.7		0.7
22	Did the health professionals explain things in a way you [the parent/carer] could understand?	0.4		0.4
23	During your child's stay in hospital, how much information about their condition or treatment was given to you?	0.6		0.6
24	Did you receive contradictory information from health professionals in the hospital - for example, different opinions on your child's treatment?	0.9		0.9
25	Did you have worries or fears about your child's condition or treatment while in hospital?	0.5		0.5
26	Did a health professional discuss your worries or fears about your child with you?	2.7		2.7
27	Were you involved, as much as you wanted to be, in decisions about your child's care and treatment?	0.5		0.5
28	Were you allowed to remain with your child when they were being treated (excluding surgery)?	0.4	0.4	0.8

Question text (8–15 years)		Missing (%)	Don't know (%)	Missing + Don't know (%)*
29	How would you rate how well the health professionals worked together?	0.6		0.6
30	Did you feel your child was treated with respect and dignity while they were in the hospital?	0.5		0.5
31	Were your child's cultural or religious beliefs respected by the hospital staff?	1.1		1.1
32	While in hospital, did you receive or see any information about how to comment or complain about your child's care?	0.5	36.6	37.2
33	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?	2.5		2.5
34	Was the impact of this complication or problem...?	2.0		2.0
35	In your opinion, were members of the hospital staff open with you about this complication or problem?	1.4		1.4
36	How much information were you given about the hospital facilities available to you and your child?	0.8		0.8
37	Did you (the patient's parents or carers) make use of the overnight facilities at the hospital?	1.5		1.5
38	How would you [the parent/carer] rate the overnight facilities for parents or carers at the hospital?	2.2		2.2
39	Were facilities available for parents and carers to make drinks or food?	1.0	12.8	13.8
40	Was there a problem finding parking near the hospital?	0.9		0.9
41	During your child's stay in hospital, did they have any tests, X-rays or scans?	0.7		0.7
42	Did a health professional discuss the purpose [of tests, x-rays or scans] with you and/or your child?	0.2	0.9	1.1
43	Did your child receive test, X-ray or scan results while they were still in hospital?	0.5		0.5
44	Did a health professional explain the test, X-ray or scan results in a way that you [the parent/carer] could understand?	2.5		2.5
45	Did you feel involved in decisions about your child's discharge from hospital?	0.6		0.6
46	At the time your child was discharged, did you feel that they were well enough to leave the hospital?	0.7		0.7
47	Thinking about when your child left hospital, were you given enough information about how to manage their care at home?	0.6		0.6
48	Thinking about when your child left hospital, were adequate arrangements made by the hospital for any services they needed?	0.7		0.7
49	Did hospital staff tell you who to contact if you were worried about your child's condition or treatment after they left hospital?	0.6	8.6	9.1
50	Was your child given or prescribed any new medication to take at home?	0.4	3.2	3.6
51	Did a health professional in the hospital explain the purpose of this medication in a way you [the parent/carer] could understand?	1.2		1.2
52	Did a health professional in the hospital tell you about medication side effects to watch for?	1.5		1.5
53	Did the hospital provide you with a document summarising the care your child received in hospital (e.g. a copy of the letter to your GP or a discharge summary)?	0.6	11.3	11.9
54	On the day your child left hospital, was their discharge delayed?	0.6		0.6
55	How long was the delay? [in discharge]	0.6	6.2	6.8
56	Did a member of staff explain the reason for the delay?	0.8		0.8

Question text (8–15 years)		Missing (%)	Don't know (%)	Missing + Don't know (%)*
57	What were the main reasons for the delay?	1.8	5.0	6.8
58	Overall, how would you rate the care your child received while in hospital?	0.5		0.5
59	How well organised was the care your child received in hospital?	0.5		0.5
60	If asked about your child's hospital experience by friends and family how would you respond?	0.7		0.7
61	Did you want to make a complaint about something that happened in hospital?	0.8		0.8
62	Why didn't you make a complaint?	0.6		0.6
63	Did the care and treatment received in hospital help your child?	0.7		0.7
64	Is the problem your child went to hospital for...?	1.1		1.1
65	In the week before your child's hospital stay, how difficult was it for them to carry out their normal daily activities?	2.0		2.0
66	About one month after your child's discharge from hospital, how difficult was it for them to carry out their normal daily activities?	1.1		1.1
67	Gender of parent/carer	0.5		0.5
68	Highest level of education completed by parent/carer	1.4		1.4
69	Language mainly spoken at home by parent/carer	1.1		1.1
70	Did you (the parent/carer) need, or would you have liked, to use an interpreter at any stage while you were in hospital?	1.5		1.5
71	Did the hospital provide an interpreter when you needed one?	3.7		3.7
72	What year was your child born?	8.2		8.2
73	What is your child's gender?	0.4		0.4
74	Which, if any, of the following long-standing conditions does your child have?	2.4		2.4
75	In general, how would you rate your child's health?	0.5		0.5
76	Aboriginal and/or Torres Strait Islander origin of patient	0.7		0.7
77	Who completed the survey up to this point?	0.5		0.5
80^	Do you give permission for the Bureau of Health Information to link answers from this survey to health records related to your child?	7.2		7.2
81	Did the doctors and nurses introduce themselves to you?	3.3		3.3
82	Were the doctors kind and caring?	3.5		3.5
83	Were the nurses kind and caring?	3.3		3.3
84	Did the doctors and nurses explain things in a way you could understand?	3.4		3.4
85	Did a doctor or nurse discuss your worries or fears with you?	3.5		3.5
86	If you were in pain, did the doctors and nurses do everything they could to help with your pain?	3.3		3.3

Question text (8–15 years)		Missing (%)	Don't know (%)	Missing + Don't know (%) [*]
87	How would you rate the hospital food?	3.7		3.7
88	Did the hospital room suit someone your age?	3.7		3.7
89	Were there things for you to do (such as books, games and toys)?	4.5	13.4	17.9
90	Were you given enough privacy during your hospital stay?	3.9		3.9
91	Were you ever bothered by noise in the hospital?	4.0		4.0
92	Were you involved, as much as you wanted to be, in decisions about your care and treatment?	4.3		4.3
95	Overall, how would you rate the care you received while in hospital?	3.8		3.8
96	Who completed this section?	4.7		4.7

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

[^] Full text response questions that occur at this point in this questionnaire are excluded from this table.

Percentages are unweighted

Table 9. Proportion of 'Don't know' and missing responses, by question, 16–17 years CYPS, January to December 2017

Question text (16–17 years)		Missing (%)	Don't know (%)	Missing + Don't know (%) ^a
1	Was your stay in hospital planned in advance or an emergency?	1.0		1.0
2	From the time a doctor said you would need to go to hospital, how long did you have to wait to be admitted?	3.7	8.6	12.2
3	Do you think the amount of time you waited to go to hospital was...?	3.8	2.7	6.5
4	Before your arrival, how much information about your hospital stay was given to you?	3.8	4.7	8.6
5	When you arrived in hospital did you spend time in the emergency department?	1.0	3.8	4.8
6	Were the emergency department staff polite and courteous?	1.8	1.7	3.5
7	Do you think the amount of time you spent in the emergency department was...?	1.9	4.5	6.4
8	Were the staff you met on your arrival to hospital polite and courteous?	0.6		0.6
9	Do you think the time you had to wait from arrival at hospital until you were taken to your room or ward was...?	1.0	4.6	5.6
10	For most of your stay in hospital, what type of room or ward were you in?	2.5	11.3	13.8
11	Was the room or ward suitable for someone your age?	1.8		1.8
12	Were there things for you to do (such as books and games)?	3.5	13.7	17.1
13	How clean were the wards or rooms you stayed in while in hospital?	1.0	4.0	5.0
14	How clean were the toilets and bathrooms that you used while in hospital?	1.5	4.4	5.9
15	Did you see the health professionals wash their hands, or use hand gel to clean their hands, before touching you?	1.5	14.7	16.2
16	Were you given enough privacy during your hospital stay?	1.4		1.4
17	Were you ever bothered by noise in the hospital?	1.6		1.6
18	How would you rate the hospital food?	1.7		1.7
19	Did you have any special dietary needs (e.g. vegetarian, diabetic, food allergies, religious, cultural, or related to your treatment)?	2.5		2.5
20	Was the hospital food suitable for your dietary needs?	2.2		2.2
21	If you needed to talk to a doctor, did you get the opportunity to do so?	0.7		0.7
22	In your opinion, did the doctors who treated you know enough about your medical history?	0.7		0.7
23	Did you have confidence and trust in the doctors treating you?	0.4		0.4
24	Were the doctors kind and caring towards you?	0.6		0.6
25	In your opinion, did the nurses who treated you know enough about your care and treatment?	0.4		0.4
26	Did you have confidence and trust in the nurses treating you?	0.3		0.3
27	Were the nurses kind and caring towards you?	0.3		0.3
28	Did the health professionals explain things in a way you could understand?	0.3		0.3

Question text (16–17 years)		Missing (%)	Don't know (%)	Missing + Don't know (%)*
29	During your stay in hospital, how much information about your condition or treatment was given to you?	0.4		0.4
30	Did you receive contradictory information from health professionals in the hospital - for example, different opinions on your treatment?	0.8		0.8
31	Did you have worries or fears about your condition or treatment while in hospital?	0.9		0.9
32	Did a health professional discuss your worries or fears with you?	2.5		2.5
33	Did the health professionals introduce themselves to you?	1.0		1.0
34	Were you involved, as much as you wanted to be, in decisions about your care and treatment?	1.2		1.2
35	Was a family member or carer allowed to remain with you when you were being treated (excluding surgery)?	0.8	1.2	2.0
36	How would you rate how well the health professionals worked together?	0.8		0.8
37	Did you feel you were treated with respect and dignity while you were in the hospital?	0.7		0.7
38	Were your cultural or religious beliefs respected by the hospital staff?	1.4		1.4
39	While in hospital, did you receive or see any information about how to comment or complain about your care?	0.9	37.2	38.1
40	Not including the reason you came to hospital, during your hospital stay, or soon afterwards, did you experience any of the following complications or problems?	2.8		2.8
41	Was the impact of this complication or problem...?	2.2		2.2
42	In your opinion, were members of the hospital staff open with you about this complication or problem?	2.7		2.7
43	How much information were you given about the hospital facilities available to you?	1.1		1.1
44	Were facilities available for parents and carers to make drinks or food?	0.8	24.9	25.7
45	If you were in pain, did the doctors and nurses do everything they could to help with your pain?	0.8		0.8
46	During your stay in hospital, did you have any tests, X-rays or scans?	0.9		0.9
47	Did a health professional discuss the purpose of these tests, X-rays or scans with you?	1.5	2.4	3.9
48	Did you receive test, X-ray or scan results while you were still in hospital?	1.5		1.5
49	Did a health professional explain the test, X-ray or scan results in a way that you could understand?	1.3		1.3
50	Did you feel involved in decisions about your discharge from hospital?	0.4		0.4
51	At the time you were discharged, did you feel that you were well enough to leave the hospital?	0.3		0.3
52	Thinking about when you left hospital, were you given enough information about how to manage your care at home?	0.3		0.3
53	Thinking about when you left hospital, were adequate arrangements made by the hospital for any services you needed?	0.5		0.5
54	Did hospital staff tell you who to contact if you were worried about your condition or treatment after you left hospital?	0.3	13.1	13.4
55	Were you given or prescribed any new medication to take at home?	0.4	4.6	4.9
56	Did a health professional in the hospital explain the purpose of this medication in a way you could understand?	1.6		1.6

Question text (16–17 years)		Missing (%)	Don't know (%)	Missing + Don't know (%)*
57	Did a health professional in the hospital tell you about medication side effects to watch for?	1.9		1.9
58	Did the hospital provide you with a document summarising the care you received in hospital (e.g. a copy of the letter to your GP or a discharge summary)?	0.8	18.9	19.7
59	On the day you left hospital, was your discharge delayed?	0.8		0.8
60	How long was the delay? [in discharge]	0.4	6.4	6.8
61	Did a member of staff explain the reason for the delay?	1.3		1.3
62	What were the main reasons for the delay?	2.0	6.4	8.3
63	Overall, how would you rate the care you received while in hospital?	0.5		0.5
64	How well organised was the care you received in hospital?	0.5		0.5
65	If asked about your hospital experience by friends and family how would you respond?	0.6		0.6
66	Did you want to make a complaint about something that happened in hospital?	0.8		0.8
67	Why didn't you make a complaint?	1.8		1.8
68	Did the care and treatment received in hospital help you?	0.6		0.6
69	Is the problem you went to hospital for...?	0.9		0.9
70	In the week before your hospital stay, how difficult was it for you to carry out your normal daily activities?	2.3		2.3
71	About one month after your discharge from hospital, how difficult was it for you to carry out your normal daily activities?	1.3		1.3
72	What year were you born?	23.6		23.6
73	What is your gender?	0.2		0.2
74	Language mainly spoken at home by patient	0.4		0.4
75	Did you need, or would you have liked, to use an interpreter at any stage while you were in hospital?			
76	Did the hospital provide an interpreter when you needed one?	0.6		0.6
77	Which, if any, of the following long-standing conditions do you have?	0.0		0.0
78	In general, how would you rate your health?	2.5		2.5
79	Aboriginal and/or Torres Strait Islander origin of patient	0.4		0.4
80	Who completed this survey?	0.6		0.6
81	Do you give permission for the Bureau of Health Information to link answers from this survey to health records related to you?	3.6		3.6

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

Appendix 2: 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 *Data Dictionary: Quintile of disadvantage*).

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.

Exclusions

For derived measures, the following are excluded:

- Response: 'don't know/can't remember' or similar non-committal response.
- 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.

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

Table 10. Derived measures for the CYPS questionnaire 2017, 0–7 and 8–15 years

Derived measure	Actual question text (0–7 years/8–15 years)	Derived measure categories	Actual question responses
Parent/carer needed to talk to a doctor	Q22/Q17. If you needed to talk to a doctor, did you get the opportunity to do so?	<ul style="list-style-type: none"> • Needed to talk to doctor • No need to talk to doctor 	<ul style="list-style-type: none"> • Yes, always • Yes, sometimes • No, I did not get the opportunity • I had no need to talk to a doctor
Parent/carer wanted information about patient's condition or treatment during stay	Q32/Q23. During your child's stay in hospital, how much information about their condition or treatment was given to you?	<ul style="list-style-type: none"> • Wanted information • Not applicable 	<ul style="list-style-type: none"> • Not enough • The right amount • Too much • Not applicable to my situation
Parent/carer wanted to be involved in decisions about child's care and treatment	Q38/Q27. Were you involved, as much as you wanted to be, in decisions about your child's care and treatment?	<ul style="list-style-type: none"> • Wanted involvement • Not applicable 	<ul style="list-style-type: none"> • Yes, definitely • Yes, to some extent • No • I did not want or need to be involved • Not applicable to our situation
Patient had cultural or religious beliefs to consider	Q42/Q31. Were your child's cultural or religious beliefs respected by the hospital staff?	<ul style="list-style-type: none"> • Has beliefs to consider • Beliefs not an issue 	<ul style="list-style-type: none"> • Yes, always • Yes, sometimes • No, my child's beliefs were not respected • My child's beliefs were not an issue
Patient experienced complication or problem during or shortly after hospital stay	Q44/Q33. 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?	<ul style="list-style-type: none"> • Experienced complication • None reported 	<ul style="list-style-type: none"> • An infection • Uncontrolled bleeding • A negative reaction to medication • Complications as a result of an operation or surgical procedure • Complications as a result of tests, x-rays or scans • A blood clot • A pressure wound or bed sore • A fall • Any other complication or problem • <u>None</u> of these • Missing
Complication or problem occurred during hospital stay	Q46/Q35. In your opinion, were members of the hospital staff open with you about this complication or problem?	<ul style="list-style-type: none"> • Occurred in hospital • Occurred after left 	<ul style="list-style-type: none"> • Yes, completely • Yes, to some extent • No • Not applicable, as it happened after my child left

Derived measure	Actual question text (0–7 years/8–15 years)	Derived measure categories	Actual question responses
Parent/carer needed information about the hospital facilities	Q47/Q36. How much information were you given about the hospital facilities available to you and your child?	<ul style="list-style-type: none"> • Needed information • Not applicable 	<ul style="list-style-type: none"> • Not enough • The right amount • Too much • Not applicable to our situation
Parent/carer needed parking	Q51/Q40. Was there a problem finding parking near the hospital?	<ul style="list-style-type: none"> • Needed parking • Didn't need parking 	<ul style="list-style-type: none"> • Yes, a big problem • Yes, a small problem • No problem • Not applicable – did not need parking
Patient experienced pain during stay (0-7 years)	Q52*. If your child was in pain, did the doctors and nurses do everything they could to help with their pain?	<ul style="list-style-type: none"> • Had pain • Didn't have pain 	<ul style="list-style-type: none"> • Yes, definitely • Yes, to some extent • No • My child was not in pain
Patient experienced pain during stay (8-15 years)	Q86*. If you were in pain, did the doctors and nurses do everything they could to help with your pain?	<ul style="list-style-type: none"> • Had pain • Didn't have pain 	<ul style="list-style-type: none"> • Yes, definitely • Yes, sort of • No • I was not in any pain
Parent/carer wanted to be involved in decisions about their child's discharge	Q57/Q45. Did you feel involved in decisions about your child's discharge from hospital?	<ul style="list-style-type: none"> • Wanted involvement • Didn't want involvement 	<ul style="list-style-type: none"> • Yes, definitely • Yes, to some extent • No, I did not feel involved • I did not want or need to be involved
Parent/carer needed information about how to manage child's care at home	Q59/Q47. Thinking about when your child left hospital, were you given enough information about how to manage their care at home?	<ul style="list-style-type: none"> • Needed information • Didn't need information 	<ul style="list-style-type: none"> • Yes, completely • Yes, to some extent • No, I was not given enough • I did not need this type of information
Patient needed services after discharge	Q60/Q48. Thinking about when your child left hospital, were adequate arrangements made by the hospital for any services they needed?	<ul style="list-style-type: none"> • Needed services • Didn't need services 	<ul style="list-style-type: none"> • Yes, completely • Yes, to some extent • No, arrangements were not adequate • It was not necessary
Patient had hospital food (8-15 years)	Q87*. How would you rate the hospital food?	<ul style="list-style-type: none"> • Had hospital food • Didn't have hospital food 	<ul style="list-style-type: none"> • Very good • Good • Not good or bad • Bad • Very bad • I did not have any hospital food

Derived measure	Actual question text (0–7 years/8–15 years)	Derived measure categories	Actual question responses
Patient has long-standing health condition	Q86/Q74. Which, if any, of the following long-standing conditions does your child have?	• Has long-standing condition	<ul style="list-style-type: none"> • Deafness or severe hearing impairment • Blindness or severe vision impairment • A long-standing illness (e.g. cancer, diabetes, respiratory disease) • A long-standing physical condition • A learning disability • A mental health condition (e.g. depression, eating disorder) • A neurological condition (e.g. ADHD)
		• None reported	<ul style="list-style-type: none"> • None of these • Missing
Patient wanted involvement in decisions about their care and treatment (8-15 years)	Q92*. Were you involved, as much as you wanted to be, in decisions about your care and treatment?	• Wanted involvement	<ul style="list-style-type: none"> • Yes, definitely • Yes, sort of • No
		• Didn't want involvement	<ul style="list-style-type: none"> • I did not want or need to be involved • I was not well enough
Patient had worries or fears while in hospital (8-15 years)	Q85*. Did a doctor or nurse discuss your worries or fears with you?	• Yes	<ul style="list-style-type: none"> • Yes, completely • Yes, sort of • No, no-one discussed my worries and fears with me
		• No	<ul style="list-style-type: none"> • I did not have any worries or fears

* Only included in one questionnaire.

Table 11. Derived measures for the CYPS questionnaire 2017, 16–17 years

Derived measure	Actual question text (16–17 years)	Derived measure categories	Actual question responses
Patient had hospital food	Q18. How would you rate the hospital food?	<ul style="list-style-type: none"> Had hospital food Didn't have hospital food 	<ul style="list-style-type: none"> Very good Good Not good or bad Bad Very bad I did not have any hospital food
Patient needed to talk to a doctor	Q21. If you needed to talk to a doctor, did you get the opportunity to do so?	<ul style="list-style-type: none"> Needed to talk to doctor No need to talk to doctor 	<ul style="list-style-type: none"> Yes, always Yes, sometimes No, I did not get the opportunity I had no need to talk to a doctor
Patient wanted information about condition or treatment during stay	Q29. During your stay in hospital, how much information about your condition or treatment was given to you?	<ul style="list-style-type: none"> Wanted information Not applicable 	<ul style="list-style-type: none"> Not enough The right amount Too much Not applicable to my situation
Patient wanted involvement in decisions about their care and treatment?	Q34. Were you involved, as much as you wanted to be, in decisions about your care and treatment?	<ul style="list-style-type: none"> Wanted involvement Didn't want involvement 	<ul style="list-style-type: none"> Yes, definitely Yes, to some extent No I did not want or need to be involved Not applicable to my situation
Patient had cultural or religious beliefs to consider	Q38. Were your cultural or religious beliefs respected by the hospital staff?	<ul style="list-style-type: none"> Has beliefs to consider Beliefs not an issue 	<ul style="list-style-type: none"> Yes, always Yes, sometimes No, my beliefs were not respected My beliefs were not an issue
Patient experienced complication or problem during or shortly after hospital stay	Q40. Not including the reason you came to hospital, during your hospital stay, or soon afterwards, did you experience any of the following complications or problems?	<ul style="list-style-type: none"> Experienced complication None reported 	<ul style="list-style-type: none"> An infection Uncontrolled bleeding A negative reaction to medication Complications as a result of an operation or surgical procedure Complications as a result of tests, X-rays or scans A blood clot A pressure wound or bed sore A fall Any other complication or problem None of these Missing
Complication or problem occurred during hospital stay	Q42. In your opinion, were members of the hospital staff open with you about this complication or problem?	<ul style="list-style-type: none"> Occurred in hospital Occurred after left 	<ul style="list-style-type: none"> Yes, completely Yes, to some extent No Not applicable, as it happened after I left
Patient needed information about the hospital facilities	Q43. How much information were you given about the hospital facilities available to you?	<ul style="list-style-type: none"> Needed information Not applicable 	<ul style="list-style-type: none"> Not enough The right amount Too much Not applicable to my situation

Derived measure	Actual question text (16–17 years)	Derived measure categories	Actual question responses
Patient experienced pain during stay	Q45. If you were in pain, did the doctors and nurses do everything they could to help with your pain?	<ul style="list-style-type: none"> • Had pain • Didn't have pain 	<ul style="list-style-type: none"> • Yes, definitely • Yes, to some extent • No • I was not in any pain
Patient wanted to be involved in decisions about their discharge	Q50. Did you feel involved in decisions about your discharge from hospital?	<ul style="list-style-type: none"> • Wanted involvement • Didn't want involvement 	<ul style="list-style-type: none"> • Yes, definitely • Yes, to some extent • No, I did not feel involved • I did not want or need to be involved
Patient needed information about how to manage care at home	Q52. Thinking about when you left hospital, were you given enough information about how to manage your care at home?	<ul style="list-style-type: none"> • Needed information • Didn't need information 	<ul style="list-style-type: none"> • Yes, completely • Yes, to some extent • No, I was not given enough • I did not need this type of information
Patient needed services after discharge	Q53. Thinking about when you left hospital, were adequate arrangements made by the hospital for any services you needed?	<ul style="list-style-type: none"> • Needed services • Didn't need services 	<ul style="list-style-type: none"> • Yes, completely • Yes, to some extent • No, arrangements were not adequate • It was not necessary
Patient has long-standing health condition	Q77. Which, if any, of the following long-standing conditions do you have?	<ul style="list-style-type: none"> • Has long-standing condition • None reported 	<ul style="list-style-type: none"> • Deafness or severe hearing impairment • Blindness or severe vision impairment • A long-standing illness (e.g. cancer, diabetes, respiratory disease) • A long-standing physical condition • A learning disability • A mental health condition (e.g. depression, eating disorder) • A neurological condition (e.g. ADHD) • <u>None</u> of these • Missing