Healthcare in Focus 2017

How does NSW compare?

Technical supplement

bureau of
health
information

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Introduction

This document is a supplement to the Bureau of Health Information's (BHI) eighth annual performance report, *Healthcare in Focus 2017: How does NSW compare?* It contains a description of the data sources and methods used to calculate the descriptive statistics and performance indicators included in the report. This supplement is technical in nature, and is intended for audiences interested in the creation and analysis of health performance information.

To produce the report, BHI used the following sources of data:

- The Organisation for Economic Cooperation and Development Health Statistics online database

- The Commonwealth Fund International Health Policy Survey 2017

- Australian Bureau of Statistics Patient Experience Survey 2016-17

- Australia and New Zealand Dialysis and Transplant Registry

- Productivity Commission Report on Government Services 2018

- Bureau of Health Information NSW Patient Survey Program 2015-2017

- Hospital Performance Dataset – linked admitted patient, emergency department presentation and fact of death data - NSW Ministry of Health Secure Analytics for Population Health Research and Intelligence

- NSW Perinatal Data Collection, NSW Ministry of Health Secure Analytics for Population Health Research and Intelligence

- NSW Ambulance Computer Aided Dispatch System

- NSW Health Emergency Department Data Collection, accessed via the Health Information Exchange

- NSW Health Transfer of Care Reporting System

- NSW Health Waiting List Collection On-line System

- NSW Ministry of Health, System Information and Analytics Branch, InforMH

- Health and healthcare performance data already published by governments or journal articles. The sources of these data are indicated where appropriate.

For the statistical analysis of data published in the report, BHI used SAS/STAT™ software.[1]

Data sources and methods

Organisation for Economic Cooperation and Development

The Organisation for Economic Cooperation and Development (OECD) is a comprehensive and consistent source of comparable international data on various economic and social topics, including healthcare.

The latest edition of the OECD's biennial report *Health at a Glance* was released in November 2017. The OECD Health Care Quality Indicators included in that report are based on specifications developed by the US Agency for Healthcare Research and Quality and are made available through the website *OECD Health Statistics* (**oecd-ilibrary.org/social-issues-migration-health/data/oecd-health-statistics_health-data-en**).

A subset of these OECD measures are presented in the report, with NSW results calculated based on specifications from the OECD,[2] and the Australian Institute for Health and Welfare (AIHW).[3] Details relevant to BHI's calculation of these indicators are provided in the 'Indicator specifications, by chapter' section.

Some of the OECD measures included in the report are about patient safety, including obstetric trauma, post-operative deep vein thrombosis and pulmonary embolism, and post-operative sepsis. These measures are not the same as the hospital-acquired complication measures developed by the Australian Commission on Safety and Quality in Health Care. BHI uses the OECD measures in this report so performance in NSW can be compared with other countries.

Statistical analysis

BHI calculated OECD indicators based on hospital episodes. An episode is a period of stay in hospital that ends in a discharge, transfer, type-change or death. The term 'episode' is used interchangeably with 'admission', 'separation', 'discharge' and 'hospitalisation' in other AIHW and OECD reports. A 'period of care' is not the same as an episode. Periods of care combine contiguous hospitalisation episodes within the same or different hospitals into a single period of care in order to follow an outcome of interest.

Statistics based on hospitalisations in NSW exclude episodes at Albury Base Hospital, since this facility is administered by the Victorian Department of Health and Human Services. Statistics based on the NSW population exclude non-residents of NSW.

Hospital-level results were calculated for some of the OECD measures to provide information on variation within NSW. Hospitals with fewer than 50 episodes (100 for obstetric trauma) were suppressed. Hospitals with 95% confidence intervals not overlapping the NSW 95% confidence interval were flagged as significantly different from NSW. This method is a relatively conservative way of identifying significant differences. The chance of making a type 1 error with this method is less than 0.05. If the data is normally distributed, the variance of both estimates are equal and the estimates are independent, the chance is 0.0056.[4]

The Commonwealth Fund International Health Policy Survey

The Commonwealth Fund is a philanthropic organisation in the United States. Each year, it commissions an international health policy survey of 11 countries to support the creation of public reports that benchmark the performance of comparable healthcare systems. The survey focuses on a different population each year, generally following a three-year cycle.

The 2017 International Health Policy Survey drew its sample from adults aged 65+ years. BHI, as a partner, invested in an additional sample to ensure the number of NSW participants was sufficient to compute robust estimates of performance measures for NSW and to make statistically valid comparisons with the countries participating in the survey.

Fieldwork in all countries took place between March and June 2017. The survey assessed people's experiences in the healthcare system including questions of access, cost and quality. Social Science Research Solutions (SSRS) produced a comprehensive methodological report that details the sample design, data collection, data processing and survey procedures used in conducting the survey.[5]

NSW results are based on the responses of 1,175 people. The combined response rate for NSW and Australia was 25%. Across countries, the number of respondents ranged from 500 to 7000 and response rates ranged from 15% to 52% (Figure 1). The final samples were weighted to be representative of the age, sex, education and regional profile of each country.

Statistical analysis

The performance of the NSW healthcare system is reported alongside Australia and 10 other countries. Reported percentages are the weighted estimates that are intended to reflect the views of the adult population aged 65+ years.

A main response category was determined for each question, and responses were dichotomised such that the response value of interest (for example 'always') was coded as 1, and all other values, excluding non-response categories, were coded as 0. Logistic regression was used to fit this binary variable on an explanatory variable for each country, with appropriate adjustment for survey weights using the SAS procedures SURVEYLOGISTIC for the analysis.[1] Any country values significantly different from the NSW value at a 5% significance level are noted with an asterisk (*) in the report. The NSW estimates are compared with the rest of Australia and each of the 10 other countries. Results are shown for all of Australia, any differences between Australia and NSW are based on comparisons with the rest of Australia.

Figure 1   The Commonwealth Fund International Health Policy Survey of Older Adults 2017, number of respondents and response rates, by country

Country	Number of respondents	Response rate
Australia (New South Wales n=1,175)	2,500	25%
Canada	4,549	23%
France	750	24%
Germany	751	19%
Netherlands	750	52%
New Zealand	500	26%
Norway	750	15%
Sweden	7,000	29%
Switzerland	3,238	45%
United Kingdom	753	22%
United States	1,392	19%

Australian Bureau of Statistics: Patient Experience Survey

The Australian Bureau of Statistics (ABS) conducts an annual Patient Experience Survey, a nation-wide survey of patients' experiences using the Australian healthcare system. The ABS provided BHI with a customised report on NSW results for 2016–17. The sample of 28,207 people aged 15+ years was weighted to represent the estimated population aged 15+ years in private dwellings in each state and territory. Further information on survey and analysis methods can be found in the ABS's survey methods documentation.[6] Estimates are noted as significantly different in the BHI report if the 95% confidence intervals of the two estimates do not overlap.

Australia and New Zealand Dialysis and Transplant Registry

The Australia and New Zealand Dialysis and Transplant Registry collects and reports the incidence, prevalence and outcome of dialysis treatment and kidney transplantation for patients with end stage kidney disease across Australia and New Zealand.

Productivity Commission: Report on Government Services

Each year the Australian Productivity Commission releases a *Report on Government Services* (RoGS).[7] The report includes information on the performance of healthcare services. Data from the report was included in *Healthcare in Focus 2017* and referenced wherever used.

Bureau of Health Information: NSW Patient Survey Program

BHI conducts a regular, comprehensive statewide patient experience survey program. The NSW Patient Survey Program collects information from patients across NSW about their experiences with a variety of healthcare services.

For this report, BHI used de-identified unit record data from the survey program. The Adult Admitted Patient Survey includes responses from 28,693 patients who were admitted to a NSW public hospital between January and December 2016 (adjusted response rate 42%). The Emergency Department Patient Survey includes responses from 17,940 patients who visited an emergency department in a NSW public hospital between July 2016 and June 2017 (adjusted response rate 39%). The Maternity Care Survey includes responses from 4,739 women who gave birth in a NSW public hospital during 2015 (response rate 36%). The BreastScreen NSW Client Experience Survey includes responses from 10,342 women collected during July and August 2017 (response rate 61%).

Some survey results are presented by Aboriginality. The Adult Admitted Patient Survey 2016 includes responses from 766 Aboriginal patients, the Emergency Department Patient Survey 2016-17 includes responses from 548 Aboriginal patients, and the Maternity Care Survey 2015 includes responses from 134 Aboriginal patients.

Statistical analysis

Patient population estimates were calculated using sampling weights and the SAS procedure SURVEYFREQ.[1] Results for hospitals or subgroups with fewer than 30 respondents are suppressed. Statistically significant differences between a hospital and the NSW public hospital result or between two subgroups are noted if the 95% confidence intervals of the two estimates do not overlap.

Further details about the BHI Patient Survey Program are available at:
bhi.nsw.gov.au/nsw_patient_survey_program

NSW Ministry of Health: Hospital Performance Dataset

The Hospital Performance Dataset was accessed through Secure Analytics for Population Health Research and Intelligence (SAPHaRI), Centre for Epidemiology and Evidence, NSW Ministry of Health. The Hospital Performance Dataset contains records of admitted patient hospital episodes, emergency department presentations and death registrations in NSW. Each record has been assigned a unique person identifier, generated by the Centre for Health Record Linkage using probabilistic record linkage methods.

Data linkage allowed the computation of some indicators at a patient level of analysis, such as re-presentations to emergency departments. Further information on data linkage can be found at cherel.org.au. At the time of analysis, the most recent year of linked data available was the 2016–17 financial year.

Statistical analysis

Where hospital results are provided, hospitals with fewer than 50 episodes (100 for obstetric trauma) are suppressed, and statistically significant differences between a hospital and the NSW result are noted if the 95% confidence intervals of the two estimates do not overlap.

NSW Ministry of Health: Perinatal Data Collection

The Perinatal Data Collection (PDC) was accessed through Secure Analytics for Population Health Research and Intelligence (SAPHaRI), Centre for Epidemiology and Evidence, NSW Ministry of Health. The PDC is a statutory data collection of all live births, and stillbirths of at least 20 weeks gestation or at least 400 grams birth weight. It contains information on the mother and infant and the pregnancy, labour and delivery.

NSW Ambulance: Computer Aided Dispatch System

Ambulance activity data was provided from the NSW Ambulance Computer Aided Dispatch (CAD) system. The CAD system is used to manage and record ambulance activity and time points across the entire patient journey. The CAD system contains information from all ambulance local response areas in NSW.

NSW Health: Emergency Department Data Collection

The Emergency Department Data Collection (EDDC) was accessed via the Health Information Exchange, NSW Ministry of Health. The EDDC contains information on patient presentations to public hospital emergency departments in NSW.

NSW Health: Transfer of Care Reporting System

Transfer of care data was accessed via the Transfer of Care Reporting System (TCRS) portal. The TCRS incorporates data drawn from the NSW Ambulance information system and the EDDC.

NSW Health: Waiting List Collection On-line System

Elective surgery waiting list data was accessed via the Waiting List Collection On-line System (WLCOS). WLCOS includes information on the date a patient is listed for a surgical procedure, the type of procedure required, the specialty of the surgeon, the urgency category of their surgery and whether the patient is currently ready for surgery.

NSW Ministry of Health: InforMH

Information for Mental Health (InforMH) is a unit within the System Information and Analytics Branch at the NSW Ministry of Health. InforMH provided BHI with data on mental health hospitalisations and community care and is referenced wherever used.

Ambulance, emergency department and elective surgery measures

BHI, in conjunction with the NSW Ministry of Health and other agencies, has developed various measures of NSW ambulance activity, emergency department presentations, and elective surgery activity. These measures are published in the BHI report series *Healthcare Quarterly* and are available on BHI's online data portal Healthcare Observer. The measures from *Healthcare Quarterly* included in this annual performance report have been calculated for the 2016–17 financial year rather than for quarters.

Indicator specifications, by chapter

Specifications for indicators calculated by BHI, by chapter

Indicator	Cohort description (numerator, denominator)	Further details (inclusions, exclusions, references)	Data source
Accessibility			
Percentage of priority category 1 responses with a call to ambulance arrival time within 30 minutes, by zone and local response area type	Denominator: The number of ambulances to first arrive at the scene of a priority 1 case	For further details, see the Healthcare Quarterly Technical Supplement	NSW Ambulance Computer Aided Dispatch System
	Numerator: Denominator cases where the time between the ambulance call and the first ambulance to arrive at the scene was within 30 minutes	bhi.nsw.gov.au/BHI_reports/healthcare_quarterly	
	Ambulance stations in NSW are located in geographical units called local response areas (LRAs). LRAs are organised into 18 metropolitan and regional zones. There are four main types of LRAs based on staffing and organisational arrangements: 24-hour, 24-hour (with on-call), non-24-hour and community and volunteer.		
	24-hour: Primarily situated in urban areas providing mostly urban, 24-hour operation. These are higher volume response areas, the majority with multiple vehicles and ambulance staff.		
	24-hour (with on-call): Primarily situated in regional areas providing 24-hour operation, supplemented with on-call staff.		
	Non-24-hour: Primarily situated in regional and rural areas providing 8, 12 or 16-hour operation with remaining time covered by on-call staff.		
	Community and volunteer: Members of community first responder programs are attached to emergency services, such as Fire Rescue NSW, NSW Rural Fire Service and the NSW State Emergency Service, and respond in their agency vehicle. Community-initiated groups (not attached to a response agency) can form a community first responder unit. Members agree to be available on a regular basis and respond from within the community in a private, or community-funded, vehicle.		
Percentage of patients transported to the ED by ambulance whose care was transferred within 30 minutes	Denominator: Ambulance arrivals to emergency departments where there is a match between ambulance and emergency department records in the Transfer of Care Reporting System portal	For further details, see the Healthcare Quarterly Technical Supplement	NSW Health Transfer of Care Reporting System
	Numerator: Denominator cases where the time from ambulance arrival at the ED and transfer of care from ambulance to ED staff is within 30 minutes	bhi.nsw.gov.au/BHI_reports/healthcare_quarterly	

Indicator	Cohort description (numerator, denominator)	Further details (inclusions, exclusions, references)	Data source
Percentage of emergency department patients whose treatment started on time, by triage category	Denominator: Emergency presentations to NSW public hospital emergency departments Numerator: Denominator cases starting treatment on time based on recommended timeframes for each triage category Triage 1: Resuscitation (within two minutes) Triage 2: Emergency (within 10 minutes) Triage 3: Urgent (within 30 minutes) Triage 4: Semi-urgent (within 60 minutes) Triage 5: Non-urgent (within 120 minutes) Time to treatment is calculated as the difference between presentation time and start of treatment time	For further details, see the Healthcare Quarterly Technical Supplement bhi.nsw.gov.au/BHI_reports/healthcare_quarterly	NSW Health Emergency Department Data Collection
Percentage of patients who spent four hours or less in the emergency department, for all patients and patients treated and admitted	Denominator: All presentations to NSW public hospital emergency departments Numerator: Denominator cases where the time between presentation at and departure from the ED was four hours or less Patients treated and admitted are patients with an ED mode of separation 'admitted to a ward/inpatient unit', 'admitted and discharged as an inpatient within ED', 'admitted and died in ED', 'admitted to a critical care ward', 'admitted via an operating theatre' or 'admitted – left at own risk'	For further details, see the Healthcare Quarterly Technical Supplement bhi.nsw.gov.au/BHI_reports/healthcare_quarterly	NSW Health Emergency Department Data Collection
Percentage of elective surgical procedures performed on time, by urgency category	Denominator: Patients removed from the elective surgery waiting list because they received their surgery Numerator: Denominator cases where the elective surgical procedure was performed 'on time', that is, within the clinically recommended time frame The maximum recommended times by which surgery should be performed are: 30 days for urgent, 90 days for semi– urgent, and 365 days for non–urgent procedures	For further details, see the Healthcare Quarterly Technical Supplement bhi.nsw.gov.au/BHI_reports/healthcare_quarterly	NSW Health Waiting List Collection On-line System
Median waiting times for elective surgical procedures, by urgency category, remoteness of residence and Aboriginality	Cohort: Patients removed from the elective surgery waiting list because they received their surgery Waiting time in days is calculated as the difference between a patient's listing date on the waiting list and date of their removal from the waiting list, excluding any days when the patient was not ready for care The postcode of patient residence was used to group patients into the Australian Statistical Geographic Standard (ASGS) remoteness categories	For further details, see the Healthcare Quarterly Technical Supplement bhi.nsw.gov.au/BHI_reports/healthcare_quarterly	NSW Health Waiting List Collection On-line System
Median waiting times for selected elective surgical procedures, by Aboriginality	Cohort: Patients removed from the elective surgery waiting list because they received their surgery Waiting time in days is calculated as the difference between a patient's listing date on the waiting list and date of their removal from the waiting list, excluding any days when the patient was not ready for care	For further details, see the Healthcare Quarterly Technical Supplement bhi.nsw.gov.au/BHI_reports/healthcare_quarterly	NSW Health Waiting List Collection On-line System

Indicator	Cohort description (numerator, denominator)	Further details (inclusions, exclusions, references)	Data source
Appropriateness			
Percentage of hip fracture surgery initiated within two calendar days of hospital admission, for patients aged 65+ years	Denominator: Hospital episodes for patients aged 65+ years with principal diagnosis ICD-10-AM codes S72.0, S72.1 or S72.2 who were surgically treated Numerator: Denominator cases who were surgically treated within two calendar days of admission, i.e. the procedure date was the same as, one day after, or two days after the admission date	Specifications based on OECD definition, see oecd.org/els/health-systems/Definitions-of-Health-Care-Quality-Indicators.pdf Excludes: • Episodes where the hip fracture occurred during the episode • Episodes with missing or invalid procedure date (in the data source used by BHI, procedure date is not available for secondary procedures, so BHI only included episodes where the surgery was recorded as the principal procedure)	NSW Ministry of Health Hospital Performance Dataset
Number of knee arthroscopy procedures by age and osteoarthritis diagnosis	Cohort: Hospital episodes with a knee arthroscopy ACHI procedure code: 49557-00, 49503-00, 49560-03, 49562-01, 49561-01, 49557-02, 49558-00, 49558-01 Osteoarthritis diagnosis was based on ICD-10-AM code M17 in any diagnosis field (principal or secondary) in any episode with a three-year look back from the date of the knee arthroscopy procedure		NSW Ministry of Health Hospital Performance Dataset
Percentage of infants breastfeeding at hospital discharge, by mother's Aboriginality	Denominator: All live births in NSW Numerator: Full breastfeeding (babies who were breastfed or received expressed milk), any breastfeeding (babies who received breastmilk and infant formula) or infant formula only	Excludes: • Stillbirths	NSW Ministry of Health Perinatal Data Collection
Percentage of patients who discharged themselves at their own risk against the advice of the hospital, by Aboriginality	Denominator: All hospital episodes Numerator: Denominator cases where the mode of separation was 'discharged at own risk'	Rates were age-sex standardised to the 2001 Australian standard population	NSW Ministry of Health Hospital Performance Dataset

Indicator	Cohort description (numerator, denominator)	Further details (inclusions, exclusions, references)	Data source
Effectiveness			
Percentage of patients aged 50+ years admitted to hospital with a fall-related fracture, who returned to hospital with a subsequent fall-related fracture within two years	Denominator: Patients aged 50+ years with an acute fall-related fracture episode that were discharged from hospital between July 2013 and June 2015 Numerator: Denominator cases with a subsequent acute emergency fall-related fracture episode within two years of the index fracture discharge For both the numerator and the denominator, a fall-related fracture episode was defined as fracture principal diagnosis and fall secondary/external diagnosis Transfers and type changes associated with the index fracture episode were treated as part of the same period of care Subsequent fractures were attributed to the facility where patients were last discharged from in their index period of care	Specifications based on methods developed by Queensland Health, see **health.qld.gov.au/__data/assets/pdf_file/0026/144782/statbite63.pdf** Excludes: • Patients who died during their index period of care or had no subsequent fracture recorded and died within two years of their index period of care.	NSW Ministry of Health Hospital Performance Dataset
Unadjusted rate of obstetric trauma, per 100 vaginal deliveries, with and without instrument	Denominator: Vaginal deliveries for females aged 15+ years ICD-10-AM diagnosis codes for vaginal delivery: O80, O81, O83, O84.0, O84.1, O84.81, O84.82, O84.9 Numerator: Denominator cases with ICD-10-AM diagnosis codes O70.2 or O70.3 (third or fourth degree perineal tear) or ACHI procedure codes 90480-00, 90480-01 or 16573-00 (suture of obstetric laceration or suture of third or fourth degree perineal tear)	Specifications based on OECD definition, see **oecd.org/els/health-systems/Definitions-of-Health-Care-Quality-Indicators.pdf** ACHI procedure codes for instrument-assisted delivery: 90468-00, 90468-01, 90468-02, 90468-03, 90468-04, 90468-05, 90469-00, 90469-01, 90470-01, 90470-02, 90470-04, 90474-00, 90475-00	NSW Ministry of Health Hospital Performance Dataset; OECD Health Statistics
Unadjusted rate of post-operative deep vein thrombosis, per 100,000 hip and knee surgical episodes	Denominator: Hip and knee surgical episodes with an ICD-10-AM code for an operating room procedure, for patients aged 15+ years Numerator: Denominator cases with secondary diagnosis ICD-10-AM codes I80.1, I80.2, I80.3, I80.8, I80.9, or I82.8 If a patient has both deep vein thrombosis and pulmonary embolism it is assigned to pulmonary embolism More information on hip and knee procedure codes available upon request	Specifications based on OECD definition, see **oecd.org/els/health-systems/Definitions-of-Health-Care-Quality-Indicators.pdf** Excludes: • Episodes with principal diagnosis of deep vein thrombosis • Episodes where a procedure for 'interruption of vena cava' (ACHI procedure code 34800-00, 35330-00, 35330-01) is the only operating room procedure • Pregnancy, childbirth and puerperium episodes • Episodes with length of stay less than 2 days	NSW Ministry of Health Hospital Performance Dataset; OECD Health Statistics

Indicator	Cohort description (numerator, denominator)	Further details (inclusions, exclusions, references)	Data source
Unadjusted rate of pulmonary embolism, per 100,000 hip and knee surgical episodes	Denominator: Hip and knee surgical episodes with an ICD-10-AM code for an operating room procedure, for patients aged 15+ years Numerator: Denominator cases with secondary diagnosis ICD-10-AM codes I26.0, I26.9 More information on hip and knee procedure codes available upon request	Specifications based on OECD definition, see oecd.org/els/health-systems/Definitions-of-Health-Care-Quality-Indicators.pdf Excludes: • Episodes with principal diagnosis of pulmonary embolism • Episodes where a procedure for 'interruption of vena cava' (ACHI procedure code 34800-00, 35330-00, 35330-01) is the only operating room procedure • Pregnancy, childbirth and puerperium episodes • Episodes with length of stay less than 2 days	NSW Ministry of Health Hospital Performance Dataset; OECD Health Statistics
Unadjusted rate of post-operative sepsis, per 100,000 abdominal surgical episodes	Denominator: Abdominal surgical episodes with an ICD-10-AM code for an operating room procedure, for patients aged 15+ years Numerator: Denominator cases with secondary diagnosis ICD-10-AM codes A40.0, A40.1, A40.2, A40.3, A40.8, A40.9, A41.0, A41.1, A41.2, A41.3, A41.4, A41.5, A41.8, A41.9, R57.2, R57.8, R65.0, R65.1 or T81.1 More information on abdominal procedure codes available upon request	Specifications based on OECD definition, see oecd.org/els/health-systems/Definitions-of-Health-Care-Quality-Indicators.pdf Excludes: • Episodes with principal diagnosis sepsis or infection • Immunocompromised patients • Cancer patients • Pregnancy, childbirth and puerperium episodes • Episodes with length of stay less than 3 days	NSW Ministry of Health Hospital Performance Dataset; OECD Health Statistics
Unadjusted rate of foreign body left in during procedure, per 100,000 episodes	Denominator: Acute hospital episodes for patients aged 15+ years Numerator: Denominator cases with secondary diagnosis ICD-10-AM codes T81.5, T81.6, Y61.0, Y61.1, Y61.2, Y61.3, Y61.4, Y61.5, Y61.6, Y61.7, Y61.8, Y61.9	Specifications based on OECD definition, see oecd.org/els/health-systems/Definitions-of-Health-Care-Quality-Indicators.pdf Excludes: • Episodes with principal diagnosis foreign body left during procedure • Same-day episodes	NSW Ministry of Health Hospital Performance Dataset; OECD Health Statistics
Diabetes hospitalisation, by Aboriginality, age-sex standardised rates per 100,000 population	Cohort: ABS estimated resident population aged 15+ years for NSW and hospital episodes for patients aged 15+ years with a principal diagnosis of diabetes (ICD-10-AM E10, E11, E13, E14) Diabetes hospitalisation rates are age-sex standardised to the 2010 OECD standard population aged 15+ years	Specifications based on OECD definition, see oecd.org/els/health-systems/Definitions-of-Health-Care-Quality-Indicators.pdf Excludes: • Non-NSW residents • Pregnancy, childbirth, puerperium and newborn episodes • Same-day episodes • Episodes where the patient transferred in from another hospital • Episodes where the patient died in hospital	NSW Ministry of Health Hospital Performance Dataset; OECD Health Statistics
Percentage of emergency department presentations where the patient did not wait or left at their own risk, by Aboriginality	Denominator: Emergency presentations to NSW public hospital emergency departments Numerator: Denominator cases with mode of separation did not wait or left at own risk	Excludes: • Non-emergency presentations	NSW Ministry of Health Hospital Performance Dataset

Indicator	Cohort description (numerator, denominator)	Further details (inclusions, exclusions, references)	Data source
Percentage of emergency department presentations where the patient did not wait or left at their own risk, that were followed by a re-presentation within 48 hours, by Aboriginality	Denominator: Emergency presentations to NSW public hospital emergency departments where the patient did not wait or left at their own risk Numerator: Denominator cases where the patient re-presented to any NSW public hospital emergency department within 48 hours of the departure time of the previous presentation	Excludes: • Non-emergency presentations	NSW Ministry of Health Hospital Performance Dataset

Definitions and derived data items

Data item	Description
Aboriginality	Some indicators are presented by Aboriginality. For indicators calculated using the NSW Ministry of Health Hospital Performance Dataset, Aboriginality was based on the 'Enhanced Reporting of Aboriginality' variable. For indicators calculated using other datasets, the Indigenous status variable in each dataset was used.
Length of stay	An episode's length of stay is calculated as the difference between the episode end date and the episode start date minus total episode leave days. This definition is specified in the AIHW Health Minimum dataset. The quantity is derived in SAPHaRI datasets.
NSW resident	NSW residents are identified in administrative data collections using the data field 'state of residence'. The data recorded in this field is taken directly from the relevant table in the Health Information Exchange data warehouse. Surveys use sampling methods that ensure persons surveyed are usual residents of NSW.
Period of care	Periods of care combine contiguous hospitalisation episodes within the same or different hospitals (via transfer) into a single period of care in order to follow an outcome of interest.
Same day discharge/ day only admission	A same day discharge is identified by equal episode start and end dates.

References

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