

Potentially preventable hospitalisations (B) NT excluding dialysis

Key performance indicators 2017/18 – attribute sheets

Identification and definitional attributes	
Short name:	Potentially Preventable Hospitalisations (PPH), Excluding Dialysis
Indicator type:	SDA
Description:	Admission to hospital for a condition where the hospitalisation could have potentially been prevented and managed through the provision of appropriate non-hospital health services.
Definition:	The number of PPHs as a proportion of total separations for the following three broad categories: <ol style="list-style-type: none"> 1. Vaccine-preventable conditions 2. Chronic conditions 3. Acute conditions
Rationale:	<p>Hospitalisation can often be prevented through the provision of primary and community-based health services.</p> <p>Due to unavailability of comprehensive primary health care data, this indicator is a proxy measure of the prevalent number of cases in the community of conditions that are deemed preventable or treatable outside the acute hospital setting. It can also serve as a useful indicator of the availability and quality of non-hospital care.</p> <p>This indicator supports effective prevention strategies and management of Territorian health to avoid hospitalisation, improve a patient's quality of life, drive better clinical outcomes, and monitor the effectiveness of care pathways and support Territory-wide policy and planning.</p>
Calculation attributes	
Calculation:	The number of separations identified as one of the selected categories, presented as a percentage (%) of total separations. Formula: $(\text{Numerator} \div \text{Denominator}) \times 100$
Inclusions and exclusions:	<p>Inclusions:</p> <ul style="list-style-type: none"> • All Northern Territory (NT) public hospitals • Separations occurring within the reference period • Where a separation is identified within one of the selected categories, based on ICD-10-AM diagnosis codes and ACHI procedure codes • The categories of potentially preventable admissions are: <ul style="list-style-type: none"> ○ Vaccine preventable ○ Chronic ○ Acute <p>Exclusions:</p> <ul style="list-style-type: none"> • Non-NT residents and separations with no postcode or locality information [SA2 Short Code (Current)] not between 71000 and 79999 • Exclude DRG Code(Current) =L61Z • Episodes that are not part of the standard count (see note below) <ul style="list-style-type: none"> ○ Hospital boarders, [Type of Care] = 7

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	<ul style="list-style-type: none"> ○ Posthumous organ procurement, [Type of Care] = * ○ Unqualified newborns, [Type of Care] = 6 <p>Note – counting rule A: ‘Type of Care’ is the data item and associated codes from the local source information system (CareSys). Neither hospital boarders, nor organ donors declared brain dead, are admitted patients by National definition and are therefore never counted as separations although they are ‘registered’ by the hospital.</p> <p>Against the national standard definition of Newborn, the individual ‘qualified’ (acute) and ‘unqualified’ (requiring no additional treatment) components are combined into a single episode of care. As a result, this single episode of care can contain no or some qualified – or ‘acute’ - days.</p> <p>The NT is yet to combine the qualified and unqualified episodes into one episode of care. To avoid double-counting in local statistics, therefore, the unqualified episodes are excluded from consideration.</p>																														
Numerator:	Number of potentially preventable admissions (based on separation date) identified by selected ICD-10-AM/ACHI codes (in the edition relevant to the date of care) and specified criteria by age in months or years – appendix 1 .																														
Numerator variable/universe object:	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 50%;">Variable</th> <th style="text-align: left; width: 50%;">Universe Objects</th> </tr> </thead> <tbody> <tr> <td>Type of Care</td> <td>▢ Care Type Code (NMDS)</td> </tr> <tr> <td>Establishment</td> <td>▢ Establishment Abbr</td> </tr> <tr> <td>Patient episode commenced date</td> <td>▢ Admission Date</td> </tr> <tr> <td>Patient’s full date of birth</td> <td>▢ Date of birth</td> </tr> <tr> <td>Patient’s episode completed Yr/Month</td> <td>▢ Discharge Calendar Year/Month</td> </tr> <tr> <td>Patient’s episode completed date</td> <td>▢ Discharge Date</td> </tr> <tr> <td>Record Identifier</td> <td>▢ State Record ID (NMDS)</td> </tr> <tr> <td>Procedure codes</td> <td>▢ Procedure Array</td> </tr> <tr> <td>Diagnosis codes</td> <td>▢ Diagnosis Array</td> </tr> <tr> <td>Indigenous Status</td> <td>▢ Indigenous Status Ind</td> </tr> <tr> <td></td> <td>▢ Patient Age (Years)</td> </tr> <tr> <td></td> <td>▢ Qualified Days</td> </tr> <tr> <td></td> <td>▢ SA2 Full Code (Current)</td> </tr> <tr> <td></td> <td>▢ Episode Number</td> </tr> </tbody> </table> <p>Unique number for each episode of care With all the above objects, restricted to the relevant ICD-10-AM codes</p>	Variable	Universe Objects	Type of Care	▢ Care Type Code (NMDS)	Establishment	▢ Establishment Abbr	Patient episode commenced date	▢ Admission Date	Patient’s full date of birth	▢ Date of birth	Patient’s episode completed Yr/Month	▢ Discharge Calendar Year/Month	Patient’s episode completed date	▢ Discharge Date	Record Identifier	▢ State Record ID (NMDS)	Procedure codes	▢ Procedure Array	Diagnosis codes	▢ Diagnosis Array	Indigenous Status	▢ Indigenous Status Ind		▢ Patient Age (Years)		▢ Qualified Days		▢ SA2 Full Code (Current)		▢ Episode Number
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Scope:	All five Northern Territory public hospitals												
Reporting and data attributes													
Standard report name:	BI Report: SDA Dashboard - Shared SDA Reporting												
Standard report location:	Public Folders / Shared Folders / Shared Performance and Reporting / SDA Automation / Completed Reports												
Business intelligence universe:	SDA Reporting.unx												
Reporting level:	<p>This indicator can be represented as a whole of health total, or disaggregated by:</p> <ul style="list-style-type: none"> • Health Service • Hospital • Category of condition 												
Data source:	Admitted Patient Data Collection via the “Inpatient Activity” universe												
Period available:	Historical data is available from 01/07/2000												
Reporting frequency:	Monthly <input checked="" type="checkbox"/> Quarterly <input type="checkbox"/> Annually <input type="checkbox"/>												
Timeliness:	<p>Accurate reporting is available approximately six to seven weeks after the end of month. This is based on the requirement that episodes be coded within five weeks of discharge.</p> <p>This indicator is considered accurate when reporting five weeks after the end of month.</p>												
Unit of measure:	Percentage (%)												
Known data issues and limitations:	<p>Accurate reporting is dependent on separated and clinically coded episodes, available approximately six to seven weeks after the end of month.</p> <p>This indicator will not be comparable over time due to significant changes in the Australian Coding Standard for diabetes complications and viral hepatitis.</p> <p>This version of the definition should not be applied to data prior to 01/07/2013, at which time ICD-10-AM/ACHI/ACS 8th edition was implemented. Applying this definition will result in incomparable results.</p> <p>This definition will be subsequently updated when the national indicator definition is updated to reflect ICD-10-AM/ACHI 9th edition codes, which were implemented from 01/07/2015.</p> <p>Other contextual information:</p> <p>A single episode can be counted in more than one sub-category, especially within the ‘Vaccine’ and ‘Chronic’ categories. However, when rolling up to:</p> <ul style="list-style-type: none"> • Each ‘Category’, an episode is only counted once within each ‘Category’ • Overall, in total, an episode is only counted once. 												
Relational and compliance attributes													
Related national benchmark, target, relevant meteor references or reporting:	http://meteor.aihw.gov.au/content/index.phtml/itemId/600098												

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Accountability Attributes	
Data Custodian:	Manager, Acute Care Information Unit
Data Steward:	Chief Data Officer
Data Owner:	Senior Director, System Performance and Grants

Appendix 1: Potentially preventable hospitalisations

Note: Where codes provided below at the 3 char level it is implied that all 4 or 5 char codes for that 3-char code are used (where they exist).

Vaccine-preventable conditions	
Influenza and pneumonia	J10, J11, J13, J14 in any diagnosis code position. Excludes infants under 2 months.
Other vaccine-preventable conditions	A08.0, A35, A36, A37, A80, B01, B05, B06, B16.1, B16.9, B18.0, B18.1, B26, G00.0 in any diagnosis code position.
Chronic conditions	
Asthma	J45, J46 as principal diagnosis only AND excluding children aged less than 4 years (at admission).
Congestive cardiac failure (CCF)	I50, I11.0, J81 as principal diagnosis only AND excluding cases with the following cardiac procedure codes: Blocks 600-606, 608-650, 653-657, 660-664, 666, 669-682, 684-691, 693, 705-707, 717 and codes 33172-00[715], 33827-01[733], 34800-00[726], 35412-00[11], 38721-01[733], 90217-02[734], 90215-02[732].
Diabetes complications	E10; E11; E13; E14 as principal diagnosis
COPD	J41; J42; J43; J44 as principal diagnosis OR J20 as principal diagnosis with additional diagnosis of J41; J42; J43; J44
Bronchiectasis	J47, J20 as principal diagnosis only OR J20 as principal diagnosis with additional diagnoses of J47.
Angina	I20; I24.0; I24.8; I24.9 as principal diagnosis AND excluding cases with procedure codes in the Congestive cardiac failure (CCF) category above.
Iron deficiency anaemia	D50.1; D50.8; D50.9 as principal diagnosis.
Hypertension	I10; I11.9 as principal diagnosis AND excluding cases with procedure codes in the Congestive cardiac failure (CCF) category above.
Nutritional deficiencies	E40; E41; E42; E43; E55.0; E64.3 as principal diagnosis.
Rheumatic heart disease	I00; I01; I02; I05; I06; I07; I08; I09 as principal diagnosis.
Acute conditions	
Pneumonia (not vaccine preventable)	J15.3; J15.4; J15.7; J16.0 as principal diagnosis AND excluding cases where 'age at admission' < 2 months
Urinary tract infections, including Pyelonephritis	N10; N11; N12; N13.6; N15.1; N15.9; N28.9; N39.0; N39.9 as principal diagnosis.
Perforated/bleeding ulcer	K25.0; K25.1; K25.2; K25.4; K25.5; K25.6; K26.0; K26.1; K26.2; K26.4; K26.5; K26.6; K27.0; K27.1; K27.2; K27.4; K27.5; K27.6; K28.0; K28.1; K28.2; K28.4; K28.5; K28.6 as principal diagnosis.
Cellulitis	L02; L03; L04; L08; L88; L98.0; L98.3 as principal diagnosis AND excluding cases with any procedure in blocks 1820 to 2016, OR excluding cases if procedure

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	code 30064-00; 30223-01, 30223-02; 30216-00,30216-01; 30216-02; 30676-00; 34528-02; 39127-00; 90660-00, 90661-00 is the only listed procedure
Pelvic inflammatory disease	N70; N73; N74 as principal diagnosis.
Ear, nose and throat infections	H66; J02; J03; J06; J31.2 as principal diagnosis.
Dental conditions	K02; K03; K04; K05; K06; K08; K09.8; K09.9, K12; K13; K14.0 as principal diagnosis.
Convulsions and epilepsy	G40; G41; R56 as principal diagnosis.
Eclampsia	O15 as principal diagnosis.
Gangrene	170.24, E09.52 as principal diagnosis OR R02 in any diagnosis position.