IHACPA

# National Benchmarking Portal

## Technical Specifications

Version 3.0
December 2025

**National Benchmarking Portal – Technical Specifications — Version 3.0 December 2025**



# Contents

# 1. Introduction

This document specifies the data sources and preparation undertaken in the construction of the National Benchmarking Portal (NBP). The purpose of the NBP is to provide a tool for comparison between hospitals, local hospital networks, jurisdictions, and hospital peer groups throughout Australia. Consequently, the data chosen for inclusion in the NBP may be distinct from the data chosen for inclusion in other reference sources provided by the Independent Health and Aged Care Pricing Authority (IHACPA), such as the National Hospital Cost Data Collection (NHCDC) public sector report, or in constructing the National Efficient Price (NEP) Determination each year. The emphasis in constructing the NBP is providing the user with tools to understand the relationship between costs incurred at a particular hospital, or group of hospitals, and the activities performed therein. Therefore, the NBP allows the user to investigate the contributors to cost and to National Weighted Activity Units (NWAU), which are used to measure activity. This document, and the NBP will continue to be updated as techniques for measuring cost and activity change.

If you require any further information about the NBP, contact IHACPA at the following address enquiries.ihacpa@ihacpa.gov.au.

# 2. Data sources and classifications

This section outlines the sources used to produce the data included in the NBP and the classification methodologies that have been employed in describing and measuring those data.

## 2.1 Data sources

### 2.1.1 Activity data

Activity data describe the treatment provided within each admission, presentation, or service event at an Australian hospital, as well as some demographic information used to measure hospital activity. The Data Request Specifications (DRS) which list the fields submitted to IHACPA within each year's activity data are provided on IHACPA's website (IHACPA, 2025a).

NWAU is a standard unit for measuring hospital activity. IHACPA assigns an NWAU to each admission, presentation, or service event undertaken by a hospital, for the purposes of price setting in public hospitals under the National Health Reform Agreement (NHRA) (FFR, 2025). The NWAU assigned to a given episode of care is updated annually to maintain clinical currency.

For each pair of consecutive financial years, IHACPA determines an NWAU version which is used to measure growth in hospital activity between those years. This NWAU version is referred to as being 'native' to the second of those financial years and is given a numbered suffix to indicate this. For example, the NWAU version designed to measure growth in hospital activity between the 2018–19 and 2019–20 financial years is referred to as NWAU19. NWAU19 is the native NWAU version for the 2019–20 financial year.

The formula used to assign NWAU to an episode of care, presentation, or service event under a given NWAU version is released annually by IHACPA within the NEP Determination. Each year's Determination is available on IHACPA's website (IHACPA, 2025d). Calculators used to determine the NWAU of a given episode of care are also available on IHACPA's website (IHACPA, 2025g).

### 2.1.2 Cost data

The cost incurred by each hospital for undertaking each admission, presentation, or service event is provided to IHACPA separately to activity through the NHCDC. The DRS for each year's NHCDC report are available from IHACPA's website (IHACPA, 2025e).

## 2.2 Classifications

### 2.2.1 Classifications used for NWAU calculations

For each stream of care undertaken by hospitals, there is a classification system used to group similar records for the purpose of calculating NWAU. The classification systems used for the purpose of calculating NWAU in the years covered by the NBP are listed in Table 1.

In reading Table 1, note that the AR-DRG classification may be applied to all admitted episodes of care. Consequently, in instances where an admitted subacute or non-acute care record cannot be assigned an NWAU based on its AN-SNAP class, an NWAU value is calculated using the AR-DRG classification. Similarly, in instances where an admitted mental health phase cannot be assigned an NWAU based on its AMHCC class, the phases are rolled up to an episode and an NWAU value for the episode is calculated using the AR-DRG classification. Further details regarding NWAU calculations are provided in Section 3.

Table 1: Classifications used for NWAU calculations by stream and year

| Stream | Classification | Version |
|---|---|---|
| Admitted acute | Australian Refined Diagnosis Related Groups (AR-DRG) classification | 2017–18: Version 8.0<br>2018–19: Version 9.0<br>2019–20: Version 9.0<br>2020–21: Version 10.0<br>2021–22: Version 10.0<br>2022–23: Version 10.0 |
| Admitted mental health | Australian Refined Diagnosis Related Groups (AR-DRG) classification | 2017–18: Version 8.0<br>2018–19: Version 9.0<br>2019–20: Version 9.0<br>2020–21: Version 10.0<br>2021–22: Version 10.0<br>2022–23: Version 10.0 |
| | Australian Mental Health Care Classification (AMHCC) | 2022–23: Version 1.0 |
| Admitted subacute and non-acute care | Australian National Subacute and Non-Acute Patient (AN-SNAP) classification | Version 4.0 |
| Non-admitted | Tier 2 Non-Admitted Services classification | 2017–18: Version 4.1<br>2018–19: Version 5.0<br>2019–20: Version 6.0<br>2020–21: Version 7.0<br>2021–22: Version 7.0<br>2022–23: Version 7.0 |

| Stream | Classification | Version |
|---|---|---|
| Emergency department[1] | Urgency Related Groups (URG) classification | 2017–18: Version 1.4<br>2018–19: Version 1.4<br>2019–20: Version 1.4<br>2020–21: Version 1.4 |
| | Australian Emergency Care Classification (AECC) | 2021–22: Version 1.0<br>2022–23: Version 1.0 |

### 2.2.2 Classifications based on the AR-DRG classification

Several classification systems may be used for filtering the admitted care streams in the NBP, other than those used for the calculation of NWAU. These are described in Table 2.

Table 2: Classifications related to the AR-DRG classification

| Streams | Classification | Description |
|---|---|---|
| Admitted acute, and admitted mental health | Major Diagnostic Category (MDC) | A companion to the AR-DRG classification which describes the primary body system which is being treated in each hospital admission. It is generally a coarser classification than AR-DRG. |
| Admitted acute, and admitted subacute and non-acute care | Service Related Groups (SRG) Version 6.0 | A classification of admitted episodes of care developed by the NSW Ministry of Health[2]. This classification is designed to group episodes of care for the purpose of administration and planning, according to the services used during each episode of care. |

### 2.2.3 AIHW peer group

To enable users to identify and compare similar hospitals throughout Australia, IHACPA has classified each hospital according to the Australian Institute of Health and Welfare (AIHW) peer group (AIHW, 2015; AIHW, 2025a). Further detail regarding the assignment of peer groups to hospitals which could not be successfully matched to entries in these sources is available in Section 3.

### 2.2.4 ICD-10-AM codes

The International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM) is used to classify diseases and other health problems among patients in the admitted streams of care. Users may filter records according to primary diagnosis, as classified using the ICD-10-AM, on the NBP. The ICD-10-AM version used for each data year is listed in Table 3. More information is available via IHACPA's website (IHACPA, 2025c).

The Emergency Department ICD-10-AM Principal Diagnosis Short List (ED Short List) is used to classify diseases and other health problems which give rise to emergency department

[1] Due to the change in classification from URG to AECC, the visualisations on the NBP that display NWAU or costs measures across all data years are restricted to only show the years that have the same classification as the native year selected.
[2] The Service Related Groups Version 6.0 grouper was provided to IHACPA by the NSW Ministry of Health.

presentations. The user may filter emergency department records based on the ED Short List code corresponding to the primary cause for an emergency department presentation. The version used agrees with that used for admitted services, listed in Table 3. More information on the ED Short List is available via IHACPA's website (IHACPA, 2025b).

Table 3: ICD-10-AM and ED Short List version by year

| Year | Version |
|---|---|
| 2017–18 | 10.0 |
| 2018–19 | 10.0 |
| 2019–20 | 11.0 |
| 2020–21 | 11.0 |
| 2021–22 | 11.0 |
| 2022–23 | 12.0 |

# 3. Data preparation

The primary purpose of the NBP is to enable the benchmarking of hospitals and services between one establishment, local hospital network (LHN), or jurisdiction, to another. Consequently, data have been omitted if their inclusion would hamper accurate benchmarking, for example in instances where data are reported inconsistently across the nation. To ensure the reliability of the data presented in the NBP, the data is only included once a full cycle of the NHCDC and the NEP Determination for that relevant year is completed. This section outlines the preparation undertaken to produce the data presented in the NBP.

NWAU is calculated according to the year in which the separation occurred (the 'native' NWAU version) and the NWAU version applying to the subsequent year. The latter is used to measure growth from one year to the next. Each NWAU version is calculated according to the NEP Determination in which it is defined.

## 3.1 Activity data

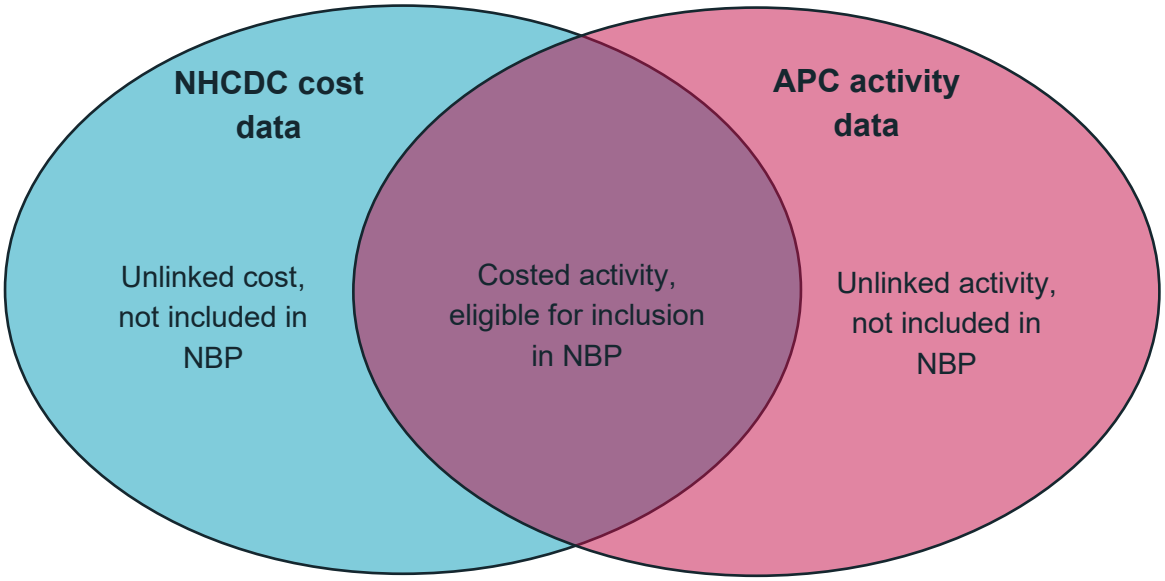
### 3.1.1 Admitted acute

For the purposes of this document, admitted acute care refers to admitted patients with an admitted patient care type[3] of 'Acute care', or 'Newborn care' as assigned in the Admitted patient care (APC) data set (IHACPA, 2025a). Records with a care type of 'Mental health care' are discussed in Section 3.1.3.

Cost data for this stream of care are contained in the NHCDC (IHACPA, 2025e). Cost data which cannot be linked to a record in the APC data set are not included in the admitted acute stream of the NBP, nor are APC records with no matching cost data. This is illustrated in Figure 1.

[3] AIHW METeOR 711010.

Figure 1: Overview of NBP data




In keeping with the methodology used by IHACPA to set the NEP and to produce the NHCDC public sector report, patients who are separated from hospital after a very long stay are not included in the NBP. Here, the definition of a 'very long stay' patient is a patient admitted before the financial year preceding the one in which they are separated from hospital. For example, if a patient is discharged from hospital in 2018–19 then their record is not included in the NBP if they were admitted before July 1, 2017.

To ensure that the NBP is a useful tool for comparing activity from one hospital to another, IHACPA has restricted data appearing on the NBP to those which may appropriately have their activity measured using the NWAU formulas in IHACPA's NEP Determinations. This means that records are included only if they were reported by a hospital which was funded through activity based funding (ABF) in the year of reporting.

Similarly, records assigned to one of the error AR-DRG classes 960Z (Ungroupable), 961Z (Unacceptable principal diagnosis), or 963Z (Neonatal diagnosis not consistent w age/ weight) do not appear in the NBP. Records within these classes receive no NWAU because they contain insufficient or contradictory data.

Finally, records only appear in the NBP if their funding source is in-scope for funding under the NHRA. In the admitted acute stream this means that records included in the NBP are funded either through the jurisdiction's health service budget (other than instances where no charge is raised due to hospital decision), through contracted care, through private health insurance or are self-funded.

Table 4 summarises the records not included in the NBP in the admitted acute stream. The table uses the following key:

- NA: NHCDC records to which no matching activity data could be found.
- LS: Very long stay records.
- HO: Records reported by hospitals which were not funded through ABF in the given reporting year. This excludes records in the category NA or LS above.

- OS: Records without the requisite AR-DRG information to allow for pricing, or a funding source which is out of scope under the NHRA. This excludes records in the categories NA, LS, or HO above.

Table 4: Summary of admitted acute NHCDC records not included in the NBP

| Reason for removal from admitted acute data | | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| 2017–18 | NA | 0 | 0 | 0 | 0 | 131 | 34 | 0 | 0 | **165** |
| | LS | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | **5** |
| | HO | 0 | 66 | 60,314 | 0 | 12,776 | 3,814 | 2,121 | 0 | **79,091** |
| | OS | 40,870 | 37,979 | 23,179 | 9,193 | 19,314 | 4,309 | 2,571 | 4,461 | **141,876** |
| 2018–19 | NA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| | LS | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | **8** |
| | HO | 3,602 | 60 | 60,493 | 0 | 12,008 | 4,033 | 2,196 | 0 | **82,392** |
| | OS | 37,039 | 38,683 | 21,120 | 9,873 | 19,235 | 4,103 | 2,641 | 4,013 | **136,707** |
| 2019–20 | NA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| | LS | 3 | 3 | 0 | 1 | 1 | 0 | 0 | 0 | **8** |
| | HO | 0 | 63 | 53,270 | 0 | 11,148 | 3,652 | 2,424 | 0 | **70,557** |
| | OS | 33,455 | 36,994 | 20,329 | 9,349 | 19,194 | 3,395 | 2,761 | 4,050 | **129,527** |
| 2020–21 | NA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| | LS | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 2 | **6** |
| | HO | 3,003 | 44 | 53,840 | 0 | 11,622 | 3,674 | 2,590 | 0 | **74,773** |
| | OS | 31,865 | 34,428 | 21,918 | 9,580 | 16,097 | 7,343 | 2,737 | 4,046 | **128,014** |
| 2021–22 | NA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| | LS | 5 | 3 | 2 | 0 | 2 | 0 | 1 | 0 | **13** |
| | HO | 0 | 33 | 57,795 | 0 | 10,933 | 3,292 | 2,208 | 0 | **74,261** |
| | OS | 27,505 | 33,348 | 20,739 | 8,978 | 10,724 | 3,994 | 2,195 | 3,917 | **111,400** |
| 2022–23[5] | NA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A | **0** |
| | LS | 2 | 3 | 1 | 0 | 1 | 0 | 0 | N/A | **7** |
| | HO | 0 | 954 | 59,087 | 2,002 | 11,022 | 3,174 | 0 | N/A | **76,239** |
| | OS | 30,865 | 37,298 | 20,587 | 9,682 | 11,929 | 7,367 | 2,857 | N/A | **120,585** |

Table 5 summarises the number of records included in the NBP by jurisdiction.

[5] ACT did not submit 2022–23 cost data, across all streams.

Table 5: Summary of admitted acute NHCDC records included in the NBP

| | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| **2017–18** | 1,594,703 | 1,637,352 | 1,317,043 | 370,579 | 499,319 | 113,356 | 161,010 | 104,674 | **5,798,036** |
| **2018–19** | 1,622,774 | 1,685,834 | 1,397,356 | 378,034 | 516,202 | 119,858 | 169,027 | 104,498 | **5,993,583** |
| **2019–20** | 1,564,738 | 1,634,623 | 1,435,617 | 378,157 | 534,558 | 116,497 | 173,690 | 103,884 | **5,941,764** |
| **2020–21** | 1,592,647 | 1,624,835 | 1,550,624 | 395,256 | 582,120 | 121,775 | 174,446 | 115,769 | **6,157,472** |
| **2021–22** | 1,462,093 | 1,649,070 | 1,544,022 | 400,887 | 566,652 | 142,768 | 164,911 | 108,578 | **6,038,981** |
| **2022–23** | 1,634,429 | 1,751,779 | 1,592,554 | 409,364 | 596,957 | 147,258 | 177,068 | 0 | **6,309,409** |

Using the in-scope data, IHACPA calculates the native NWAU value for each admitted acute episode. To measure growth, IHACPA also calculates, for each record, the NWAU native to the subsequent and previous year of that record. The variables used to determine each record's NWAU are determined by data in the APC data set or are drawn from the relevant NEP Determination.

Before including admitted acute data in the NBP, any principal diagnoses recorded in the APC data set which could not be identified in the ICD-10-AM codes are replaced with the value 'Missing', to allow for coarser aggregation of data. Table 6 summarises the small number of records impacted by year.

Table 6: Summary of episodes with missing or invalid principal diagnoses in the admitted acute stream

| Missing or invalid principal diagnosis | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| **2017–18** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| **2018–19** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | **1** |
| **2019–20** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| **2020–21** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| **2021–22** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| **2022–23** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A | **0** |

After renaming any ICD-10-AM codes to 'Missing' when necessary, admitted acute records with common data are aggregated into a single record, before being included in the NBP. Records are aggregated together in this process if they have the same values for all variables in the admitted acute NBP dimensions list, provided in Appendix A). Variables which are not in the NBP dimensions list, for example, cost and NWAU, are summed when performing the aggregation.

### 3.1.2 Admitted subacute and non-acute

Admitted subacute and non-acute care refers to admitted patient records with an admitted patient care type[6] of 'Rehabilitation care', 'Palliative care', 'Geriatric evaluation and management', 'Psychogeriatric care', or 'Maintenance care' as assigned in the APC data set. Cost data which cannot be linked to a record in the APC data are not included in the NBP, nor are APC records with no matching NHCDC data.

The selection of records for this stream is the same as that within the admitted acute stream, apart from palliative care data. Some palliative care cost and activity records are reported to IHACPA at the level of a 'phase', which is a clinically meaningful period within an episode of care[7] via the palliative care phase-level (PCC) activity data set (IHACPA, 2025a). Each palliative care phase-level record in the PCC data set matches a unique episode in the APC. To view phase-level data, the user may choose to view palliative care phases on the NBP to compare statistics among records reported at the phase level. However, if the user chooses to view all records from within the admitted subacute and non-acute care stream, phase-level palliative care records are aggregated into their respective episodes so that these episodes may be compared fairly to other admitted subacute and non-acute care records. The dimensions by which admitted subacute and non-acute episodes and phases are aggregated are distinct from those in the admitted acute stream and can be found in Appendix A).

Records in the NHCDC data set which do not link to an APC or PCC record are not included in the NBP. Furthermore, if a phase-level NHCDC record matches a phase-level PCC activity record which cannot be linked to an APC episode then that record is not included in the NBP. This is done to ensure that the records being compared within the NBP are defined using the most complete data possible.

The treatment of 'very long stay' episodes in the admitted subacute and non-acute care stream is the same as that in the admitted acute stream. That is, if an episode has an admission date before the financial year prior to the year of its separation, then it is removed from the NBP data set. Similarly for palliative care phases, if a phase has a phase start date before the financial year prior to the year of its phase end date, then it is removed.

Records from hospitals which are not funded through ABF and those with funding sources that are out-of-scope under the NHRA are removed from the admitted subacute and non-acute stream. The funding sources included in the NBP for subacute and non-acute records are the same as those in the admitted acute stream.

Records with an admitted patient care type 'Psychogeriatric care' or 'Geriatric evaluation and management' which pertain to a person under the age of 18 are removed on the basis that the price assigned to such a patient is based on the care of geriatric patients and is therefore not useful for benchmarking the care of a non-adult.

Episode-level data with an error AN-SNAP class are removed unless they have a valid AR-DRG class with version appropriate to the year of reporting, because the admitted acute NWAU

[6] AIHW METeOR 711010.

[7] AIHW METeOR 681549.

calculator[8] is used as a fallback for calculating the NWAU of admitted subacute and non-acute records.

If one or more palliative care phases within an episode of care have an error AN-SNAP class, then the costs for these phases are summed and matched to an episode-level record if possible. This episode-level record must now meet the same criteria as any other episode-level record in order to appear on the NBP in the admitted subacute and non-acute stream. However, at the phase level, only the phases that have an error AN-SNAP class do not appear on the NBP in the palliative care phases stream.

Table 7 and Table 9 summarise the admitted subacute and non-acute records removed from the NBP, at the episode level (including rolled-up phases) and phase level respectively. The following abbreviations are used:

- NA: NHCDC records to which no matching activity data could be found.
- LS: Very long stay episodes or phases.
- HO: Records reported by hospitals which were not funded through ABF in the given reporting year. This excludes records in the category NA or LS above.
- OS: Records without the requisite AN-SNAP or AR-DRG information to allow for pricing, those with a funding source which is out-of-scope under the NHRA, or patients under the age of 18 with an admitted patient care type of ‘Psychogeriatric care’ or ‘Geriatric evaluation and management’. This excludes records in the categories NA, LS, or HO above.

[8] For the purposes of the NBP, only admitted acute episodes receive the Hospital acquired complication (HAC) and the Avoidable hospital readmission (AHR) adjustments. Hence, admitted subacute and non-acute episodes would not receive these adjustments in their fallback NWAU.

Table 7: Summary of admitted subacute and non-acute episode-level NHCDC records not included in the NBP

| Reason for removal from admitted subacute and non-acute episode-level data | | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| 2017–18 | NA | 0 | 0 | 0 | 0 | 7 | 331 | 1 | 0 | **339** |
| | LS | 3 | 2 | 17 | 0 | 3 | 0 | 2 | 0 | **27** |
| | HO | 0 | 1 | 2,946 | 0 | 722 | 508 | 45 | 0 | **4,222** |
| | OS | 3,057 | 1,705 | 1,190 | 393 | 577 | 139 | 41 | 217 | **7,319** |
| 2018–19 | NA | 0 | 1 | 0 | 0 | 765 | 362 | 0 | 28 | **1,156** |
| | LS | 3 | 2 | 9 | 1 | 3 | 0 | 5 | 0 | **23** |
| | HO | 26 | 4 | 2,851 | 0 | 276 | 338 | 53 | 0 | **3,548** |
| | OS | 2,839 | 1,468 | 1,165 | 367 | 462 | 174 | 55 | 301 | **6,831** |
| 2019–20 | NA | 209 | 1 | 0 | 0 | 10 | 882 | 3 | 15 | **1,120** |
| | LS | 7 | 3 | 9 | 0 | 1 | 1 | 1 | 2 | **24** |
| | HO | 0 | 4 | 2,039 | 0 | 330 | 473 | 45 | 0 | **2,891** |
| | OS | 2,458 | 1,306 | 1,072 | 342 | 447 | 99 | 47 | 258 | **6,029** |
| 2020–21 | NA | 19 | 0 | 139 | 13,934 | 55 | 915 | 833 | 248 | **16,143** |
| | LS | 6 | 2 | 15 | 1 | 0 | 0 | 0 | 0 | **24** |
| | HO | 1,310 | 2 | 2,953 | 0 | 312 | 376 | 51 | 0 | **5,004** |
| | OS | 2,103 | 981 | 1,281 | 384 | 438 | 116 | 35 | 241 | **5,579** |
| 2021–22 | NA | 0 | 0 | 0 | 2,149 | 1,528 | 959 | 37 | 0 | **4,673** |
| | LS | 4 | 5 | 8 | 0 | 4 | 1 | 4 | 2 | **28** |
| | HO | 0 | 8 | 3,038 | 0 | 280 | 351 | 35 | 0 | **3,712** |
| | OS | 1,634 | 835 | 1,244 | 418 | 410 | 99 | 39 | 245 | **4,924** |
| 2022–23 | NA | 0 | 14,249 | 90 | 0 | 2,030 | 292 | 68 | N/A | **16,729** |
| | LS | 10 | 9 | 24 | 0 | 1 | 1 | 0 | N/A | **45** |
| | HO | 0 | 3 | 3,482 | 14 | 262 | 411 | 0 | N/A | **4,172** |
| | OS | 1,718 | 768 | 1,734 | 489 | 439 | 130 | 46 | N/A | **5,324** |

Table 8 contains a summary of the episode-level (including rolled-up phases) admitted subacute and non-acute records included in the NBP.

Table 8: Summary of admitted subacute and non-acute episode-level NHCDC records included in the NBP

| | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| **2017–18** | 62,283 | 43,811 | 40,506 | 9,805 | 10,619 | 2,533 | 965 | 4,507 | **175,029** |
| **2018–19** | 64,147 | 44,638 | 42,076 | 10,941 | 11,109 | 2,653 | 1,122 | 5,267 | **181,953** |
| **2019–20** | 59,578 | 42,754 | 39,237 | 11,808 | 11,374 | 2,465 | 1,171 | 4,885 | **173,272** |
| **2020–21** | 56,347 | 37,080 | 44,700 | 11,456 | 11,646 | 2,423 | 1,110 | 5,006 | **169,768** |
| **2021–22** | 47,471 | 37,521 | 59,923 | 14,328 | 11,224 | 2,481 | 1,233 | 4,486 | **178,667** |
| **2022–23** | 59,504 | 39,854 | 61,138 | 17,435 | 11,682 | 3,218 | 1,217 | 0 | **194,048** |

Table 9: Summary of admitted palliative care phase-level NHCDC records not included in the NBP

| Reason for removal from admitted palliative care phase-level data | | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| 2017–18 | NA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| | LS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| | HO | 0 | 0 | 811 | 0 | 0 | 0 | 0 | 0 | **811** |
| | OS | 1,204 | 475 | 323 | 72 | 0 | 0 | 0 | 231 | **2,305** |
| 2018–19 | NA | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | **2** |
| | LS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| | HO | 0 | 0 | 856 | 0 | 0 | 0 | 0 | 0 | **856** |
| | OS | 1,142 | 409 | 366 | 163 | 0 | 31 | 0 | 0 | **2,111** |
| 2019–20 | NA | 209 | 0 | 0 | 0 | 0 | 527 | 3 | 0 | **739** |
| | LS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| | HO | 0 | 0 | 185 | 0 | 0 | 0 | 0 | 0 | **185** |
| | OS | 1,093 | 309 | 141 | 77 | 0 | 31 | 36 | 0 | **1,687** |
| 2020–21 | NA | 0 | 0 | 139 | 0 | 0 | 607 | 12 | 0 | **768** |
| | LS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| | HO | 8 | 0 | 777 | 0 | 0 | 0 | 0 | 0 | **785** |
| | OS | 1,043 | 231 | 228 | 0 | 0 | 22 | 35 | 0 | **1,559** |
| 2021–22 | NA | 0 | 0 | 0 | 0 | 0 | 668 | 36 | 0 | **704** |
| | LS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| | HO | 0 | 0 | 896 | 0 | 0 | 0 | 0 | 0 | **896** |
| | OS | 837 | 219 | 475 | 50 | 0 | 25 | 20 | 0 | **1,626** |
| 2022–23 | NA | 0 | 0 | 90 | 0 | 0 | 9 | 22 | N/A | **121** |
| | LS | 0 | 0 | 1 | 0 | 0 | 0 | 0 | N/A | **1** |
| | HO | 0 | 0 | 1,240 | 0 | 0 | 0 | 0 | N/A | **1,240** |
| | OS | 893 | 254 | 527 | 233 | 0 | 59 | 31 | N/A | **1,997** |

Table 10 contains a summary of the admitted palliative care phases included in the NBP. Data are drawn from NHCDC records which could be matched to phase-level palliative care activity and for which that activity is priced at the phase level on the NBP.

Table 10: Summary of admitted palliative care phase-level NHCDC records included in the NBP

| | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| **2017–18** | 29,895 | 14,606 | 11,214 | 3,242 | 0 | 0 | 0 | 1,894 | **60,851** |
| **2018–19** | 31,457 | 15,542 | 11,839 | 3,204 | 0 | 652 | 0 | 0 | **62,694** |
| **2019–20** | 31,481 | 15,183 | 6,461 | 3,520 | 0 | 700 | 1,012 | 0 | **58,357** |
| **2020–21** | 29,640 | 14,738 | 8,897 | 0 | 0 | 604 | 1,222 | 0 | **55,101** |
| **2021–22** | 27,245 | 15,522 | 14,500 | 2,868 | 0 | 688 | 1,132 | 0 | **61,955** |
| **2022–23** | 34,117 | 15,570 | 15,055 | 3,164 | 0 | 657 | 1,089 | 0 | **69,652** |

IHACPA has attempted to provide information about palliative care episodes at the phase level where those data are available. However, to allow for accurate benchmarking between records with data reported at the phase level and those with data reported at the episode level, IHACPA also collates phases belonging to a common episode and presents this information at the episode level. When considering cost data, this involves summing the cost of constituent phases to obtain the cost of an episode. When obtaining activity data for such an episode, information is copied from the APC record to which the phase-level data is matched. This process results in the loss of more granular information contained in phase-level reporting. For example, this aggregation generally results in the loss of the AN-SNAP class, which is determined at the phase level for palliative care records.

IHACPA calculates the native NWAU for every record in the admitted subacute and non-acute care stream. Records with cost reported at the phase level have their NWAU calculated using the admitted subacute and non-acute care NWAU formula obtained from IHACPA's NEP Determination (IHACPA, 2025d). If an episode records an NWAU of zero using the admitted subacute and non-acute care calculator, then IHACPA obtains the NWAU for that record from the admitted acute NWAU formula.

Palliative care phases have NWAU calculated at the phase level using the admitted subacute and non-acute care NWAU formula for the relevant year. If one or more palliative care phase within an episode records zero NWAU due to the presence of an error AN-SNAP class then IHACPA calculates the NWAU for that episode as though the costs were reported at the episode level. If there is no such error AN-SNAP class then the NWAU of the episode to which the palliative phases belong is calculated by summing the NWAU of each phase within the episode.

Before uploading to the NBP, any principal diagnoses recorded in the APC data set which could not be identified with valid ICD-10-AM codes were replaced with the value 'Missing', to allow for coarser aggregation of data. Table 11 shows the number of episode-level records impacted by year.

Table 11: Summary of episodes with missing or invalid principal diagnoses in the admitted subacute and non-acute care stream

| Missing or invalid principal diagnosis | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| **2017–18** | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **11** |
| **2018–19** | 18 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | **19** |
| **2019–20** | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **2** |
| **2020–21** | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **3** |
| **2021–22** | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **18** |
| **2022–23** | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **21** |

After renaming any ICD-10-AM codes to 'Missing' if necessary, admitted subacute and non-acute care records with common data are aggregated into a single record, before being included in the NBP. Records are aggregated together in this process if they have the same values for all variables in the admitted subacute and non-acute NBP dimensions list in Appendix A). Variables which are not in the NBP dimensions list, for example, cost and NWAU, are summed when performing the aggregation.

### 3.1.3 Admitted mental health

The admitted mental health stream refers to admitted patient records with an admitted patient care type[9] of 'Mental health care' in the APC data set (IHACPA, 2025a), or records in the mental health care episode (MHCE) or mental health care phase (MHCP) activity data sets (IHACPA, 2025a) with an admitted setting. Records with cost data which cannot be linked to a record in the APC, MHCE or MHCP data sets or records in the APC, MHCE or MHCP data sets with no matching NHCDC data, are not included in the NBP.

Cost and activity records in the admitted mental health care stream may be submitted at the episode or phase level, in the same manner as palliative care records. Each admitted mental health care episode is recorded in the APC data set and in the MHCE activity data set. Records which correspond to the same admission are identified via a linking key provided in the APC and MHCE data sets. Furthermore, each episode may be matched with one or many phases, which are reported in the MHCP activity data set. In this context, a 'phase' refers to a period within an admitted episode of care, defined in terms of the clinical goal of that period of care[10]. MHCP records are linked to the MHCE record to which they belong via a linking key present in both data sets. Cost data for these records may be reported so that it links to MHCP, MHCE, or APC activity records.

To view phase-level data, the user may choose to view admitted mental health phases on the NBP to compare statistics among records reported at the phase level. However, if the user chooses to view all records from within the admitted mental health stream, phase-level records are aggregated

[9] AIHW METeOR 711010.

[10] AIHW METeOR 682464.

into their respective episodes so that these episodes may be compared fairly to other admitted mental health care records. The dimensions on which admitted mental health stream data are aggregated can be found in Appendix A).

At the episode level, cost data must match an APC record to be included in the NBP, to ensure that there is sufficient data for each record to allow for effective benchmarking. If an admitted mental health care episode-level record in the NHCDC matches to a record in the MHCE activity data set, then that MHCE record must also link to an APC activity record to be included. At the phase level, cost data must match an MHCP record to be included in the NBP.

Episode-level records that have a ‘very long’ length of stay are managed in the same manner as described for the admitted subacute and non-acute care stream. That is, if an episode has an admission date before the financial year prior to the year of its separation, then it is removed. At the phase level, if a phase has a phase start date before the financial year prior to the year of its phase end date, then it is removed.

Using the same conventions as in the admitted acute stream, records do not appear in the admitted mental health stream within the NBP if they are not appropriate for benchmarking purposes. Specifically, this means that records are not included if they are submitted by hospitals which are not funded through ABF, or if they have a funding source which is out-of-scope under the NHRA. The funding sources for admitted mental health records which are included in the NBP are the same as those for the admitted acute stream. Furthermore, for episode-level records, if they are assigned one of the error AR-DRG classes 960Z (Ungroupable), 961Z (Unacceptable principal diagnosis), or 963Z (Neonatal diagnosis not consistent w age/ weight), then they are not included on the NBP.

Table 12 and Table 14 summarise the admitted mental health episodes and phases removed from the NBP, respectively. The following abbreviations are used:

- NA: NHCDC records to which no matching activity data could be found.
- LS: Very long stay episodes or phases.
- HO: Records reported by hospitals which were not funded through ABF in the given reporting year. This excludes records in the category NA or LS above.
- OS: Records with a funding source which is out of scope under the NHRA, or episodes without the requisite AR-DRG information to allow for pricing. This excludes records in the categories NA, LS, or HO above.

Table 12: Summary of admitted mental health care episode-level NHCDC records not included in the NBP

| Reason for removal from admitted mental health care episode-level data | | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| 2017–18 | NA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| | LS | 1 | 17 | 26 | 3 | 0 | 5 | 0 | 0 | **52** |
| | HO | 0 | 0 | 526 | 0 | 0 | 609 | 0 | 0 | **1,135** |
| | OS | 292 | 492 | 212 | 371 | 83 | 16 | 30 | 68 | **1,564** |
| 2018–19 | NA | 1,433 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **1,433** |
| | LS | 34 | 16 | 21 | 3 | 16 | 7 | 0 | 7 | **104** |
| | HO | 2 | 0 | 2,176 | 0 | 0 | 626 | 0 | 0 | **2,804** |
| | OS | 3,630 | 593 | 235 | 543 | 223 | 120 | 47 | 47 | **5,438** |
| 2019–20 | NA | 124 | 0 | 1,116 | 0 | 0 | 8 | 0 | 0 | **1,248** |
| | LS | 13 | 25 | 26 | 12 | 25 | 9 | 0 | 3 | **113** |
| | HO | 0 | 0 | 394 | 0 | 0 | 527 | 0 | 0 | **921** |
| | OS | 282 | 764 | 121 | 624 | 266 | 86 | 40 | 45 | **2,228** |
| 2020–21 | NA | 162 | 0 | 295 | 0 | 0 | 0 | 0 | 0 | **457** |
| | LS | 8 | 28 | 41 | 0 | 15 | 1 | 0 | 3 | **96** |
| | HO | 0 | 759 | 440 | 0 | 0 | 40 | 0 | 0 | **1,239** |
| | OS | 204 | 720 | 191 | 156 | 208 | 51 | 23 | 60 | **1,613** |
| 2021–22 | NA | 155 | 0 | 18 | 151 | 0 | 0 | 0 | 0 | **324** |
| | LS | 12 | 33 | 24 | 1 | 28 | 0 | 0 | 4 | **102** |
| | HO | 0 | 575 | 241 | 0 | 1 | 14 | 0 | 0 | **831** |
| | OS | 194 | 611 | 198 | 402 | 214 | 45 | 26 | 36 | **1,726** |
| 2022–23 | NA | 95 | 473 | 0 | 0 | 0 | 0 | 0 | N/A | **568** |
| | LS | 19 | 22 | 34 | 18 | 14 | 13 | 0 | N/A | **120** |
| | HO | 0 | 452 | 273 | 27 | 0 | 542 | 0 | N/A | **1,294** |
| | OS | 201 | 615 | 222 | 578 | 295 | 37 | 45 | N/A | **1,993** |

Table 13 summarises the admitted mental health care records included in the NBP. Data are drawn from NHCDC data which could be matched to episode-level admitted mental health activity.

Table 13: Summary of admitted mental health care episode-level NHCDC records included in the NBP

| | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| **2017–18** | 34,793 | 22,990 | 32,377 | 7,073 | 10,192 | 200 | 1,070 | 2,120 | **110,815** |
| **2018–19** | 37,456 | 25,576 | 31,184 | 13,024 | 11,784 | 3,272 | 1,188 | 2,271 | **125,755** |
| **2019–20** | 36,042 | 25,449 | 19,377 | 12,827 | 12,693 | 2,654 | 1,306 | 2,378 | **112,726** |
| **2020–21** | 35,556 | 25,377 | 23,266 | 6,188 | 12,631 | 3,246 | 1,354 | 2,562 | **110,180** |
| **2021–22** | 31,372 | 24,750 | 23,265 | 5,878 | 12,243 | 3,086 | 1,306 | 2,421 | **104,321** |
| **2022–23** | 34,140 | 23,182 | 27,948 | 13,857 | 12,141 | 3,053 | 1,468 | 0 | **115,789** |

Table 14: Summary of admitted mental health care phase-level NHCDC records not included in the NBP

| Reason for removal from admitted mental health care episode-level data | | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| 2017–18 | NA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| | LS | 0 | 2 | 5 | 0 | 0 | 0 | 0 | 0 | **5** |
| | HO | 0 | 0 | 46 | 0 | 0 | 0 | 0 | 0 | **46** |
| | OS | 3,559 | 1,618 | 1,179 | 1,265 | 300 | 0 | 0 | 3,531 | **11,452** |
| 2018–19 | NA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| | LS | 39 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | **41** |
| | HO | 0 | 0 | 1,818 | 0 | 0 | 24 | 0 | 0 | **1,842** |
| | OS | 2,779 | 1,609 | 2,231 | 1,471 | 195 | 10 | 0 | 0 | **8,295** |
| 2019–20 | NA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| | LS | 21 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | **23** |
| | HO | 0 | 0 | 1,093 | 0 | 0 | 0 | 0 | 0 | **1,093** |
| | OS | 768 | 929 | 1,403 | 1,383 | 0 | 0 | 0 | 0 | **4,483** |
| 2020–21 | NA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| | LS | 9 | 3 | 25 | 0 | 0 | 0 | 0 | 0 | **37** |
| | HO | 0 | 759 | 401 | 0 | 0 | 41 | 0 | 0 | **1,201** |
| | OS | 589 | 1,319 | 499 | 0 | 0 | 0 | 0 | 0 | **2,407** |
| 2021–22 | NA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| | LS | 16 | 5 | 13 | 34 | 0 | 0 | 0 | 0 | **68** |
| | HO | 0 | 575 | 99 | 0 | 0 | 14 | 0 | 0 | **688** |
| | OS | 520 | 1,193 | 400 | 755 | 0 | 0 | 0 | 0 | **2,868** |
| 2022–23 | NA | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| | LS | 28 | 29 | 70 | 4 | 0 | 0 | 0 | N/A | **131** |
| | HO | 0 | 459 | 144 | 0 | 0 | 0 | 0 | N/A | **603** |
| | OS | 451 | 1,589 | 251 | 1,351 | 0 | 0 | 0 | N/A | **3,642** |

Table 15 summarises the admitted mental health phases included in the NBP.

Table 15: Summary of admitted mental health care phase-level NHCDC records included in the NBP

| | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| **2017–18** | 32,533 | 21,262 | 16,548 | 6,401 | 7,287 | 0 | 0 | 2,443 | **86,474** |
| **2018–19** | 36,609 | 23,861 | 17,538 | 6,153 | 9,104 | 135 | 0 | 2 | **93,402** |
| **2019–20** | 36,755 | 17,064 | 7,745 | 5,888 | 0 | 0 | 0 | 0 | **67,452** |
| **2020–21** | 35,798 | 24,392 | 5,662 | 0 | 0 | 0 | 0 | 0 | **65,852** |
| **2021–22** | 31,661 | 23,739 | 15,264 | 5,729 | 0 | 0 | 0 | 0 | **76,393** |
| **2022–23** | 34,981 | 22,124 | 23,641 | 7,784 | 0 | 0 | 0 | 0 | **88,530** |

IHACPA calculates the native NWAU for every record in the admitted mental health stream. Prior to NEP 2022–23, admitted mental health care is priced using AR-DRGs. Hence, the admitted acute NWAU calculator is used for calculating NWAU17, NWAU18, NWAU19, NWAU20, and NWAU21 at the episode level. Consequently, phases are aggregated to episodes for NWAU calculation, and costs reported at the phase level are summed and allocated to the matching episode-level activity record before uploading.

From NEP 2022–23, admitted mental health phases are priced using AMHCC. Hence, the admitted mental health NWAU calculator is used for calculating NWAU22 at the phase level. The admitted mental health NWAU formula can be obtained from IHACPA's NEP Determination (IHACPA, 2025d). If one or more admitted mental health phase within an episode records zero NWAU then IHACPA calculates the NWAU for that episode as though the costs were reported at the episode level, through the admitted acute NWAU calculator. Otherwise, the NWAU of the episode to which the admitted mental health phases belong to is calculated by summing the NWAU of each phase within the episode.

Before uploading to the NBP, any principal diagnoses recorded in the APC data set which could not be identified with valid ICD-10-AM codes were replaced with the value 'Missing', to allow for coarser aggregation of data. Table 16 shows the number of episode-level records impacted by year.

Table 16: Summary of episodes with missing or invalid principal diagnoses in the admitted mental health care stream

| Missing or invalid principal diagnosis | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| **2017–18** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| **2018–19** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| **2019–20** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| **2020–21** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| **2021–22** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| **2022–23** | 0 | 0 | 17,479 | 0 | 0 | 0 | 0 | N/A | **17,479** |

After renaming any ICD-10-AM codes to ‘Missing’ if necessary, admitted mental health care records with common data are aggregated into a single record, before being included in the NBP. Records are aggregated together in this process if they record the same values on all variables in the admitted mental health care NBP dimensions list in Appendix A). Variables which are not in the NBP dimensions list, for example, cost and NWAU, are summed when performing the aggregation.

### 3.1.4 Emergency department

The emergency department stream refers to activity data submitted to the emergency department activity data set (IHACPA, 2025a) and the NHCDC cost records linked with this activity.

Only costs that can be linked to records in the emergency department activity data set are included in the emergency department stream within the NBP. Similarly, emergency department records with no matching cost data are not included in the NBP. Only patient-level data is reported in the NHCDC, hence all data included in the NBP is at the patient level, whereas some emergency services activity is reported to IHACPA at the aggregate level (IHACPA, 2025a).

Just as in the admitted streams, records are not included in the NBP if they are not assigned an NWAU due to them being out-of-scope under the NHRA. In the emergency department stream, this means that the record must not be funded through the Department of Veterans’ Affairs and that the patient in question is not entitled to claim damages for the emergency presentation, for example under Motor Vehicle Third Party Insurance. Similarly, emergency department records are included in the NBP only if they are reported by a hospital which was funded through ABF in the year under consideration.

Records are not included in the NBP if they possess insufficient information to be assigned an NWAU. Prior to 2021–22, URG was the primary classification used to assign an NWAU to emergency department presentations. From 2021–22, AECC is used to assign an NWAU. It is worth noting that in the years that use URG, a coarser classification, the Urgency Disposition Groups (UDG) may be used for NWAU calculation if an error URG is assigned. The UDG class of an

emergency presentation is determined by that presentation's Type of visit[12], Episode end status[13], and Triage category[14]. The criteria used to determine whether a record receives an error UDG class differ in the years of data available in the NBP. However, if all 3 of these variables have valid values then a non-zero NWAU is assigned. The assignment of a non-error URG requires diagnostic information in addition to the variables required to determine a UDG.

Table 17 summarises the emergency department records removed from the NBP. The following abbreviations are used:

- NA: NHCDC records to which no matching activity data could be found.
- HO: Records reported by hospitals which were not funded through ABF in the given reporting year. This excludes records in the category NA above.
- OS: Records without the requisite URG or UDG information to allow for pricing, those funded by the Department of Veterans' Affairs or those eligible for compensation via a damages claim. This excludes records in the categories NA, or HO above.

[12] AIHW METeOR 746599

[13] AIHW METeOR 746709

[14] AIHW METeOR 746627

## Table 17: Summary of emergency department NHCDC records not included in the NBP

| Reason for removal from emergency department data | | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| 2017–18 | NA | 0 | 0 | 0 | 0 | 1,216 | 451 | 40 | 0 | **1,707** |
| | HO | 0 | 0 | 266,057 | 0 | 51,470 | 0 | 9,171 | 0 | **326,698** |
| | OS | 89,031 | 52,872 | 49,524 | 13,431 | 24,593 | 6,785 | 2,784 | 4,103 | **243,123** |
| 2018–19 | NA | 0 | 0 | 0 | 0 | 38,824 | 523 | 0 | 0 | **39,347** |
| | HO | 10,486 | 0 | 261,623 | 0 | 17,046 | 0 | 9,162 | 0 | **298,317** |
| | OS | 85,188 | 54,102 | 49,387 | 14,277 | 23,923 | 6,489 | 2,839 | 3,975 | **240,180** |
| 2019–20 | NA | 0 | 192,781 | 0 | 0 | 38,479 | 514 | 1 | 82 | **231,857** |
| | HO | 0 | 0 | 242,940 | 0 | 15,910 | 0 | 8,580 | 0 | **267,430** |
| | OS | 77,073 | 48,779 | 45,737 | 13,288 | 22,148 | 6,074 | 2,811 | 3,049 | **218,959** |
| 2020–21 | NA | 0 | 0 | 4,066 | 20,992 | 41,124 | 561 | 29 | 0 | **66,772** |
| | HO | 0 | 0 | 259,614 | 0 | 17,338 | 0 | 9,558 | 0 | **286,510** |
| | OS | 76,241 | 44,121 | 53,118 | 15,434 | 24,575 | 7,362 | 3,010 | 3,478 | **227,339** |
| 2021–22 | NA | 0 | 0 | 0 | 25,042 | 43,307 | 618 | 0 | 0 | **68,967** |
| | HO | 0 | 0 | 270,322 | 0 | 18,447 | 0 | 8,481 | 0 | **297,250** |
| | OS | 69,782 | 42,220 | 56,934 | 12,206 | 22,712 | 7,251 | 2,589 | 3,168 | **216,862** |
| 2022–23 | NA | 0 | 0 | 0 | 0 | 44,332 | 224 | 300 | N/A | **44,856** |
| | HO | 0 | 0 | 311,860 | 0 | 17,051 | 0 | 0 | N/A | **328,911** |
| | OS | 74,038 | 43,161 | 52,879 | 11,373 | 24,459 | 7,367 | 3,057 | N/A | **216,334** |

Table 18 summarises the emergency department records included in the NBP, by jurisdiction.

## Table 18: Summary of emergency department NHCDC records included in the NBP

| | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| **2017–18** | 2,491,806 | 1,684,113 | 1,543,496 | 486,807 | 652,832 | 155,656 | 146,731 | 144,084 | **7,305,525** |
| **2018–19** | 2,554,009 | 1,744,832 | 1,665,956 | 501,928 | 682,284 | 159,502 | 153,034 | 145,293 | **7,606,838** |
| **2019–20** | 2,494,672 | 1,675,430 | 1,658,890 | 516,907 | 671,150 | 147,661 | 153,392 | 136,628 | **7,454,730** |
| **2020–21** | 2,443,956 | 1,659,940 | 1,984,303 | 561,269 | 721,138 | 162,925 | 165,084 | 149,978 | **7,848,593** |
| **2021–22** | 2,393,293 | 1,775,598 | 1,836,052 | 560,249 | 724,318 | 166,025 | 160,345 | 140,183 | **7,756,063** |
| **2022–23** | 2,651,959 | 1,827,206 | 1,884,683 | 586,270 | 734,327 | 166,521 | 178,729 | 0 | **8,029,695** |

The principal diagnosis field appearing on the NBP takes values from the ED Short List (IHACPA, 2025b). If a diagnosis code appearing in the emergency department data set does not match a valid entry in the ED Short List, then that code is replaced with the value 'Missing'. This allows for greater aggregation and enables the user to compare all records with a missing or invalid principal diagnosis code. The records impacted are summarised in Table 19.

Table 19: Summary of presentations with missing or invalid principal diagnoses in the emergency department stream

| Missing or invalid principal diagnosis | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| **2017–18** | 2,175,472 | 328,983 | 501,344 | 133,477 | 191,824 | 7,273 | 47,068 | 11,656 | **3,397,097** |
| **2018–19** | 59,468 | 86,637 | 134,552 | 46,643 | 51,150 | 15 | 11,831 | 4,366 | **394,662** |
| **2019–20** | 49,363 | 79,243 | 112,607 | 22,900 | 47,864 | 9 | 7,315 | 3,742 | **323,043** |
| **2020–21** | 40,253 | 76,835 | 39,175 | 6,142 | 62,606 | 4,086 | 9,104 | 4,711 | **242,912** |
| **2021–22** | 30,173 | 102,770 | 154,994 | 2,459 | 68,813 | 6,369 | 10,543 | 5,236 | **381,357** |
| **2022–23** | 36,373 | 140,571 | 9,881 | 1,315 | 62,177 | 7,248 | 15,793 | N/A | **273,358** |

IHACPA calculates the native NWAU for every record in the emergency department stream using the formula published in the relevant NEP Determination (IHACPA, 2025d). The variables required to calculate the NWAU for each emergency department record are contained in the emergency department activity data set, or in the NEP Determinations available on IHACPA's website, other than remoteness of hospital location with respect to the Australian Statistical Geography Standard – Remoteness Area[15]. The latter is determined by IHACPA using the hospital's address or by comparison to the remoteness value reported for the same hospital in APC data.

### 3.1.5 Non-admitted

The non-admitted stream refers to activity data submitted to IHACPA via the non-admitted patient activity data set (IHACPA, 2025a) and the NHCDC records identified with this activity.

Only cost data that links to the non-admitted patient activity data set are included in the non-admitted stream within the NBP. Similarly, non-admitted patient activity records with no matching cost data are not included in the NBP. Only patient-level data is reported to IHACPA in the NHCDC, hence only patient-level data are included in the NBP, whereas a large portion of the activity data in the non-admitted stream for the years under consideration is reported to IHACPA through the non-admitted aggregate data set (IHACPA, 2025a).

Non-admitted services which belong to one of the Tier 2 classes in Table 44 are omitted from the NBP. This is done because records receive zero NWAU due to being out-of-scope for ABF, or because their price is bundled with the NWAU of other services. However, many of these services

[15] METeOR 697105.

are delivered at high volumes. Consequently, their inclusion would make cost per NWAU statistics at certain establishments unrealistically high, preventing effective benchmarking.

Non-admitted records are not included in the NBP if they receive funding from a source that is out-of-scope under the NHRA. In the non-admitted stream this means that records included in the NBP are funded either through the jurisdiction's health service budget (other than instances where no charge is raised due to hospital decision) or through contracted care.

As discussed in the preceding streams, non-admitted records are included in the NBP only if they are reported by a hospital which was funded through ABF in the year under consideration.

Table 20 summarises the non-admitted records removed from the NBP. The following abbreviations are used:

- NA: NHCDC records to which no matching activity data could be found.
- HO: Records reported by hospitals which were not funded through ABF in the given reporting year. This excludes records in the category NA above.
- NP: Records with Tier 2 classes listed in Table 44. This excludes the categories NA and HO above.
- OS: Records excluded due to having a funding source which is out-of-scope under the NHRA. This excludes records in the categories NA, HO, or NP above.

Table 20: Summary of non-admitted NHCDC records not included in the NBP

| Reason for removal from non-admitted patient data | | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| 2017–18 | NA | 13,107 | 438,271 | 1,980 | 40,979 | 7,130 | 28,286 | 11,729 | 5 | **541,487** |
| | HO | 0 | 18,918 | 219,146 | 4,150 | 39,110 | 0 | 4,048 | 0 | **285,372** |
| | NP | 523,172 | 1,309 | 239,896 | 897 | 37,570 | 10,152 | 1,060 | 174,503 | **988,559** |
| | OS | 1,326,366 | 835,778 | 521,982 | 171,910 | 181,132 | 145,909 | 17,157 | 167,514 | **3,367,748** |
| 2018–19 | NA | 46,786 | 182 | 0 | 0 | 5,107 | 11,201 | 0 | 7,957 | **71,233** |
| | HO | 5,679 | 16,772 | 329,920 | 5,470 | 37,910 | 0 | 4,858 | 0 | **400,609** |
| | NP | 533,860 | 0 | 236,786 | 1,491 | 38,259 | 8,213 | 6,829 | 143,081 | **968,519** |
| | OS | 1,183,695 | 704,892 | 604,482 | 318,937 | 184,106 | 145,655 | 27,081 | 109,808 | **3,278,656** |
| 2019–20 | NA | 13,181 | 746,819 | 0 | 0 | 32,781 | 8,479 | 0 | 6,557 | **807,817** |
| | HO | 0 | 167 | 358,096 | 0 | 42,118 | 36,891 | 4,838 | 0 | **442,110** |
| | NP | 820,088 | 1,304 | 225,930 | 4,167 | 33,567 | 7,145 | 9,554 | 139,185 | **1,240,940** |
| | OS | 1,227,960 | 1,134,385 | 748,826 | 585,231 | 174,293 | 135,803 | 30,407 | 104,913 | **4,141,818** |
| 2020–21 | NA | 0 | 644,944 | 0 | 126,787 | 50,936 | 5,644 | 359 | 6,056 | **834,726** |
| | HO | 0 | 209 | 514,402 | 0 | 51,589 | 0 | 4,629 | 0 | **570,829** |
| | NP | 3,132,928 | 13,715 | 578,274 | 5,938 | 72,774 | 160,024 | 15,357 | 228,134 | **4,207,144** |
| | OS | 1,301,863 | 1,276,223 | 806,786 | 1,572,669 | 193,570 | 107,698 | 31,608 | 185,623 | **5,476,040** |
| 2021–22 | NA | 0 | 697,243 | 4,278 | 74,498 | 438,046 | 31,390 | 52 | 1,440 | **1,246,947** |
| | HO | 2,609 | 0 | 523,576 | 0 | 60,077 | 0 | 3,686 | 0 | **589,948** |
| | NP | 1,314,342 | 12,370 | 2,626,950 | 1,622,498 | 94,014 | 287,304 | 7,785 | 981,931 | **6,947,194** |
| | OS | 1,543,824 | 1,210,205 | 736,912 | 711,533 | 180,375 | 116,463 | 13,900 | 211,727 | **4,724,939** |
| 2022–23 | NA | 0 | 706,391 | 0 | 15,853 | 457,860 | 20,026 | 1 | N/A | **1,200,131** |
| | HO | 32,701 | 69 | 340,683 | 2,409 | 59,494 | 0 | 0 | N/A | **435,356** |
| | NP | 1,417,950 | 1,569 | 356,191 | 64,587 | 79,348 | 60,442 | 10,183 | N/A | **1,990,270** |
| | OS | 1,606,724 | 1,083,029 | 760,835 | 394,988 | 180,333 | 112,127 | 15,366 | N/A | **4,153,402** |

Table 21 summarises the non-admitted records included in the NBP.

Table 21: Summary of non-admitted NHCDC records included in the NBP

| | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| **2017–18** | 5,513,702 | 2,706,082 | 4,008,059 | 1,232,272 | 1,803,786 | 381,313 | 246,846 | 454,726 | **16,346,786** |
| **2018–19** | 5,296,630 | 2,107,738 | 4,285,617 | 1,211,595 | 1,902,939 | 387,228 | 262,288 | 558,124 | **16,012,159** |
| **2019–20** | 5,655,899 | 2,989,811 | 4,741,909 | 1,109,831 | 1,972,989 | 376,484 | 267,164 | 571,766 | **17,685,853** |
| **2020–21** | 5,928,489 | 3,103,813 | 4,875,428 | 381,467 | 2,365,401 | 431,739 | 305,966 | 552,780 | **17,945,083** |
| **2021–22** | 7,062,441 | 3,503,607 | 4,666,892 | 1,200,300 | 2,494,612 | 431,490 | 281,258 | 492,110 | **20,132,710** |
| **2022–23** | 7,272,467 | 3,878,163 | 5,541,274 | 1,400,772 | 2,353,902 | 487,844 | 286,407 | 0 | **21,220,829** |

IHACPA calculates the native NWAU for every record in the non-admitted stream using the formula published in the relevant NEP Determination (IHACPA, 2025d). All information required to calculate the NWAU of each record is available in the non-admitted patient activity data set and the relevant NEP Determination, other than remoteness of hospital location with respect to the Australian Statistical Geography Standard – Remoteness Area[16]. The latter is determined by IHACPA using the hospital's address or by comparison to the remoteness value reported for the same hospital in APC data.

## 3.2 AIHW establishment peer group

The NBP lists the AIHW peer group of each hospital for which data are included in the NBP. This filter enables the user to compare cost and activity between similar hospitals. The references used to assign a peer group to each hospital are available via the AIHW website (AIHW, 2025a; AIHW, 2015). Hospitals not listed in the more recent list (AIHW, 2025a) were grouped according to their peer group in the original AIHW peer group document (AIHW, 2015), where possible. Hospitals not listed in either AIHW source were assigned the peer group 'Unknown'. However, this category has been assigned to certain hospitals which appear in AIHW data.

It is noted in AIHW documentation (AIHW, 2015) that the categories listed in Table 22 should not be considered peer groups due to the diverse characteristics of the establishments within those categories. However, IHACPA retains the term 'peer group' for these categories in accordance with AIHW terminology and to ease navigability of the NBP. The same is true of the peer group 'Unknown' which is listed in (AIHW, 2025a) but not in (AIHW, 2015).

[16] METeOR 697105.

Table 22: Categories not considered peer groups by the AIHW

| AIHW Category |
| --- |
| Very small |
| Other public acute specialised |
| Other day procedure hospital |
| Mixed subacute and non-acute |
| Unpeered |

In some instances, the establishment identifier of a facility listed in the AIHW table did not match that of the same facility listed in IHACPA's activity reporting. In most of these instances, matching was successfully performed on the basis of hospital name or a previous hospital identifier. The instances in which an establishment identifier was not used for matching are provided in Appendix C).

## 3.3 Service Related Groups Version 6.0

Each admitted acute record in the NBP is assigned as SRG Version 6.0 class SRGs are a classification of admitted patient care episodes, intending to capture the services used to treat that patient. They are intended for use in the planning of hospital services, for which the diagnosis and complexity information used for Diagnostic Related Groups (DRGs) would be too granular. In general, the SRG classification is a coarsening of the DRG classification, although there are some exceptions.

The SRG Version 6.0 classification was developed by the NSW Ministry of Health. Consequently, some of the methodology used is specific to NSW hospitals and this behaviour needs to be generalised to hospitals in the nation. Below, we discuss these adjustments to the SRG Version 6.0 classification for records obtained from outside NSW. The situations in which IHACPA has had to make these adjustments differ according to the 'Patient Type' assigned to the record within the SRG Version 6.0 grouper. Below we describe the assignment of Patient Types and the resulting decisions.

### 3.3.1 Patient Type 9: Hospital boarders, Organ procurement, and Other

Records assigned Patient Type 9 cannot be reliably grouped with similar records for the purposes of benchmarking according to the services provided to the patient. These records are subsequently assigned the SRG 99, *Unallocated*. Some records are assigned Patient Type 9 on the basis of data specific to that record and some are so assigned on the basis of the facility in which they were admitted. In this section we describe how IHACPA has managed this assignment.

Records with the admitted patient care type[17] listed in APC data as 'Other admitted patient care', 'Organ procurement – posthumous', or 'Hospital boarder' are not included in the NBP as they are not priced by IHACPA. These records are summarised in Table 27 – Table 29. However, some establishments have all their records grouped to Patient Type 9 in the NSW Ministry of Health (MoH) SRG Version 6.0 grouper. For these establishments, the same treatment is applied to the data included in the NBP. In this section we describe how IHACPA has extended this treatment to hospitals outside NSW. The complete list of impacted hospitals is available in Appendix D).

All records from a NSW Justice Health facility are assigned to Patient Type 9. The Forensic Hospital (NSW) is not included in this provision, or in Appendix D) because this facility has historically been distinguished from Justice Health facilities through use of a different establishment identifier. There were no establishments from other jurisdictions in IHACPA's data with a similar profile to Justice Health facilities from NSW, so the facilities in Appendix D) are the only ones impacted by this decision.

Within the NSW MoH grouper, all records from a facility within the NSW Health hospital peer group (NSW MoH, 2016; NSW MoH, 2025) 'Mothercraft', are assigned to Patient Type 9. All facilities within this NSW MoH hospital peer group are within the AIHW peer group known as *Early parenting centres* (AIHW, 2015). Therefore, any records from a facility belonging to the *Early parenting centres* is assigned to Patient Type 9. The impacted facilities are listed in Appendix D).

Within the NSW MoH grouper, all records with the NSW Health hospital peer group 'Other ungrouped'[18] (NSW MoH, 2016; NSW MoH, 2025) are assigned to Patient Type 9. This impacts all facilities with an AIHW peer group of *Drug and alcohol hospital* or *Unknown*. Consequently, any records from establishments in Australia with an AIHW peer group *Drug and alcohol hospital* or *Unknown* are assigned to Patient Type 9. This treatment does not extend to facilities with AIHW peer group *Unpeered*. The complete list of impacted facilities is provided in Appendix D).

There were an additional 4 NSW hospitals within the NSW MoH peer group 'Other ungrouped' (NSW MoH, 2016; NSW MoH, 2025), which do not lie in any of the AIHW peer groups listed above. These are listed in Appendix D). These hospitals belong either to the AIHW peer groups *Outpatient hospital* or *Mixed subacute and non-acute*. However, there are NSW facilities within these AIHW peer groups for which records are not assigned to Patient Type 9. Therefore, the assignment of Patient Type 9 to all records was not extended to all facilities in the AIHW peer groups *Outpatient hospital* or *Mixed subacute and non-acute*.

All records assigned Patient Type 9 are assigned to SRG 99, *Unallocated*.

### 3.3.2 Patient Type 2: Psychiatric admission in designated facility

If a hospital is not listed as being restricted to delivering records within the SRG v6 99, *Unallocated* in the previous section, then records from that hospital may be assigned to Patient Type 2: Psychiatric admission in designated facility. The NSW MoH SRG Version 6.0 grouper contains certain behaviour specific to NSW hospitals. IHACPA has generalised this behaviour to hospitals throughout the nation. We describe this generalisation below.

[17] AIHW METeOR 711010.

[18] In the 2025 NSW Health hospital peer group list, the 'Other ungrouped' peer group has been split into 'Ungrouped Justice Health and Mental Health facilities or services' and 'Other ungrouped facilities or services'. This split is not yet reflected on the NBP.

To undertake this generalisation, IHACPA needed to determine which private hospitals would be considered to be psychiatric hospitals and which would be considered to be private hospitals with a specialist psychiatric unit. A private hospital is considered to be a psychiatric hospital on the basis of that establishment's self-description. A private (non-psychiatric) hospital was deemed to have a psychiatric unit if there was at least one psychiatric care day from that facility in 2018–19 or 2019–20. The list of hospitals in each category is provided in Appendix E).

A record from a public hospital is assigned to Patient Type 2 if it satisfies the following:

1) The record has not been assigned Patient Type 9.
2) Either:

- The record has admitted patient care type[19] of 'Mental health care' or
- The record comes from a public hospital within the AIHW Peer Group *Psychiatric* or
- The record comes from a public hospital and has at least one psychiatric care day or
- The record comes from a hospital listed as a private psychiatric hospital in Appendix E) or
- The record comes from a facility listed as a private hospital with a psychiatric unit in Appendix E), and has at least one psychiatric care day.

All records with Patient Type of 2 are assigned SRG 83, *Specialist mental health*.

### 3.3.3 Patient Type 1: Acute and Patient Type 3: Unqualified newborn

If a record has not been assigned to Patient Type 9, then it is assigned to Patient Type 1: Acute, if it satisfies one of the following 2 criteria:

1) Admitted patient care type[20] is 'Acute care' and

- Adjacent AR-DRG (ADRG) is not equal to Z60, *Rehabilitation*[21] and
- Principal diagnosis does not have the prefix Z50, *Care involving use of rehabilitation procedures*, Z74, *Problems related to care-provider dependency*, or Z75, *Problems related to medical facilities and other health care*.

2) Admitted patient care type is equal to 'Newborn care' and record has at least one qualified day[22].

If a record has admitted patient care type 'Newborn care' and does not have at least one qualified day, then that record is assigned Patient Type 3: Unqualified newborn. All such records are assigned to SRG 74, *Unqualified neonate*.

Records having Patient Type 1 may be assigned to SRG 73, *Qualified neonate* or SRG 75, *Perinatology*, depending on the facility in which the admission takes place. SRG 75, *Perinatology*,

[19] AIHW METeOR 711010.

[20] AIHW METeOR 711010.

[21] This ADRG was part of AR-DRG v8 but was assigned no NWAU as rehabilitation events should be grouped to the admitted care type 'Rehabilitation care'. This is not a valid ADRG within AR-DRG v9. Consequently, a small number of records among 2017–18 data are the only records classified within this ADRG in the NBP.

[22] AIHW METeOR 722649.

contains only records with time within a neonatal intensive care unit (NICU). Below we list our methodology for determining which records have some number of NICU hours.

IHACPA does not maintain records of NICU facilities at Australian hospitals. Hospitals from NSW which are eligible to have records grouped into SRG 75, *Perinatology* are exactly those chosen by NSW MoH in designing SRG Version 6.0. The NSW MoH also listed Canberra Hospital among eligible establishments and this decision has also been carried out in the NBP. For all other hospitals outside NSW, facilities deemed to have NICU facilities were those with at least 100 ICU hours delivered to patients in the neonatal care type in at least one of the years within the analysis period of 2018–19 to 2020–21. For the purposes of this assessment, all data were considered, not just those which were included in the NBP. The facilities deemed to have NICU facilities on this basis, are listed in Appendix F).

Records which have been assigned Patient Type 3 are classed within SRG 74, *Unqualified neonate*. Records assigned Patient Type 1 with an admitted patient care type of 'Acute care' have their SRG class assigned on the basis of their DRG, primary diagnosis, and principal procedure. If the record has Patient Type 1 and an admitted patient care type of 'Newborn care' then the SRG assignment uses the additional information of the number of ICU hours delivered and whether the record comes from a hospital with NICU facilities, as specified in Appendix F).

### 3.3.4 Patient Type 4: Subacute and non-acute

Patients satisfying the one of the following 2 criteria were assigned Patient Type 4: Subacute and non-acute.

1) Admitted patient care type[23] is 'Acute care' and either:

- ADRG is equal to Z60, *Rehabilitation* or
- Principal diagnosis has prefix Z50, *Care involving use of rehabilitation procedures*, Z74, *Problems related to care-provider dependency*, or Z75, *Problems related to medical facilities and other health care*.

2) Admitted patient care type is equal to 'Rehabilitation care' or 'Palliative care' or 'Geriatric evaluation and management' or 'Psychogeriatric care' or 'Maintenance care'.

If a record has been assigned Patient Type 4 then its SRG is determined by the admitted patient care type of that record in the following manner:

1) If the record has admitted patient care type 'Acute care' or 'Rehabilitation care' then it is assigned SRG 84, *Rehabilitation*.
2) If the record has admitted patient care type 'Palliative care' then it is assigned SRG 86, *Palliative care*.
3) If the record has admitted patient care type 'Geriatric evaluation and management' then it is assigned SRG 92, *Geriatric evaluation and management*.
4) If the record has admitted patient care type 'Psychogeriatric care' then it is assigned SRG 85, *Psychogeriatric*.

[23] AIHW METeOR 711010.

5) If the record has admitted patient care type ‘Maintenance care’ then it is assigned SRG 87, *Maintenance*.

## 3.4 Cost data

All cost data presented in the NBP were submitted to IHACPA through the NHCDC (IHACPA, 2025e). As a rule, all NHCDC costs are included in the NBP other than costs associated with the activity which has not been included in, as described in Section 3.1. However, there are some costs which have not been included in the NBP, or which are modified before uploading, to improve benchmarking or to align with IHACPA’s reporting or pricing practices. We discuss these costs and modifications in this section.

### 3.4.1 Costs of unqualified newborns

Unqualified newborns are those without care interventions following birth and who are less than 10 days old when discharged. If a newborn undergoes a care intervention or is 10 or more days old when discharged, then they begin to accrue ‘qualified days’ and are no longer considered ‘unqualified newborns’.

If costs are submitted for unqualified newborns, then those costs are redistributed to the childbirth episodes of care in the following manner. This process refers to costs submitted in the NHCDC which could be matched to activity in the APC data set.

1) Patients eligible to have their costs redistributed are those with admitted patient care type[24] ‘Newborn care’. Patients eligible to receive these costs are those with admitted patient care type ‘Acute care’ and any ICD-10-AM code (not necessarily principal diagnosis) belonging to the following list, each of which indicates that the patient gave live birth.

- Z37.0, *Single live birth*.
- Z37.2, *Twins, both liveborn*.
- Z37.5, *Other multiple births, all liveborn*.
- Z37.6, *Other multiple births, some liveborn*.
- Z37.9, *Outcome of delivery, unspecified*.

2) The 2 lists created in the previous step are joined using a linking key present in the APC data set (IHACPA, 2025a), where we ensure that the date of birth field of any patient in the newborn list is between the admission and separation dates of any childbirth record to which it is matched.
3) For any successful matches created in the previous step, all costs from the newborn are added to the cost of the childbirth record to which it is matched.
4) For any newborn which could not be matched to a childbirth record in step 2, we group records taking place at the same hospital, and sum their costs.
5) For any childbirth records which could not be matched with a newborn record in step 2, we group records taking place at the same hospital, and sum their length of stay.

[24] AIHW METeOR 711010.

6) Dividing the output of step 4 by the output of step 5, we have a cost per day at each hospital at which there is a childbirth record without a matching unqualified newborn record. For each childbirth record which could not be matched to an unqualified newborn record, multiply this cost per day (specific to the hospital at which the childbirth record took place) by the length of stay of the childbirth record.

### 3.4.2 Costs excluded from the NHCDC

We described above the records selected for inclusion in the NBP. Among these records all costs are included apart from those listed under the Capital works and Excluded costs line items within the NHCDC submission (IHACPA, 2025e). These costs are removed because they are accrued through activity which is out of IHACPA's scope for IHACPA's hospital service pricing responsibilities under the NHRA (FFR, 2025). Consequently, these costs are not reported consistently across jurisdictions and are not suitable for benchmarking. Table 23 summarises the costs excluded in this process, after restricting to the records which are included in the NBP. Excluded costs can be negative at times as it acts as a balancing item to in-scope costs. This is generally due to actuarial adjustments in calculating long service leave liability that are captured as part of in-scope costs.

Table 23: Excluded costs and Capital works costs not included in the NBP

| | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| **2017–18** | $133M | $0 | $0 | $0 | $0 | $0 | $23M | $0 | **$156M** |
| **2018–19** | $347M | $0 | $0 | $0 | $0 | $0 | $23M | $0 | **$369M** |
| **2019–20** | $203M | $305 | $24M | $0 | $0 | $0 | $9M | -$215K | **$236M** |
| **2020–21** | -$99M | $3K | $42M | $0 | $0 | $0 | $46M | $0 | **-$11M** |
| **2021–22** | -$61K | $0 | $22M | $0 | $0 | $0 | $45M | $0 | **$66M** |
| **2022–23** | $0 | $0 | $26M | $0 | $0 | $0 | $58M | $0 | **$84M** |

### 3.4.3 Costs excluded from the pricing process

There are also costs which are included in the NBP which are not used to develop the NEP or the Price Weights in IHACPA's Determinations. These costs include costs associated with depreciation and leasing, the Pharmaceutical Benefits Scheme (PBS), costs associated with the provision of blood services, costs reimbursed by private health insurers, and some teaching, training, and research costs. Consequently, it is expected that the cost of services appearing on the NBP may be greater than the product of NWAU for that service and the NEP for the relevant year.

Table 24 – Table 26 summarise the costs of items that are excluded from the pricing process which are submitted to IHACPA, by jurisdiction. Not all costs in Table 24 – Table 26 are accrued in the performance of the activity represented in the NBP, for instance, some will be accrued among NHCDC records not matched to activity. Therefore, these tables should be read as an estimate only, provided for the purposes of conveying the scale and locus of potential inconsistencies.

Table 24 contains costs reported within the Depreciation and Leasing line items in the NHCDC. These costs are included in the NBP but are removed before pricing is undertaken.

### Table 24: Depreciation and Leasing costs included in the NBP, by jurisdiction

| | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| **2017–18** | $554M | $92M | $294M | $181M | $238M | $25M | $33M | $521K | **$1,418M** |
| **2018–19** | $596M | $100M | $273M | $187M | $236M | $36M | $42M | $1M | **$1,472M** |
| **2019–20** | $681M | $100M | $301M | $187M | $226M | $34M | $43M | $2M | **$1,574M** |
| **2020–21** | $660M | $121M | $235M | $159M | $224M | $41M | $43M | $2M | **$1,484M** |
| **2021–22** | $716M | $138M | $267M | $277M | $260M | $53M | $46M | $5M | **$1,762M** |
| **2022–23** | $946M | $155M | $438M | $336M | $285M | $51M | $48M | $0 | **$2,259M** |

Table 25 contains costs accrued for blood services, which are removed before pricing is undertaken but are retained for the NHCDC public sector Report.

### Table 25: Blood costs submitted via the NHCDC, by jurisdiction

| | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| **2017–18** | $101M | $121M | $44M | $0 | $0 | $4M | $2M | $7M | **$279M** |
| **2018–19** | $111M | $128M | $45M | $0 | $0 | $3M | $2M | $6M | **$295M** |
| **2019–20** | $110M | $127M | $48M | $0 | $0 | $6M | $2M | $5M | **$299M** |
| **2020–21** | $112M | $120M | $50M | $0 | $0 | $6M | $2M | $7M | **$296M** |
| **2021–22** | $114M | $143M | $63M | $33M | $0 | $8M | $2M | $9M | **$371M** |
| **2022–23** | $124M | $144M | $67M | $33M | $0 | $10M | $3M | $0 | **$381M** |

Table 26 contains costs reported in the NHCDC which are reimbursed through the PBS. These costs are included in the NHCDC public sector report but not in the pricing process.

Table 26: PBS costs included in the NHCDC, by jurisdiction

| | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| **2017–18** | $0 | $562M | $349M | $151M | $176M | $50M | $20M | $20M | **$1,328M** |
| **2018–19** | $0 | $446M | $416M | $179M | $190M | $46M | $19M | $20M | **$1,316M** |
| **2019–20** | $0 | $659M | $485M | $190M | $209M | $50M | $20M | $22M | **$1,634M** |
| **2020–21** | $322M | $728M | $505M | $206M | $233M | $76M | $21M | $22M | **$2,113M** |
| **2021–22** | $295M | $711M | $493M | $227M | $245M | $81M | $20M | $27M | **$2,099M** |
| **2022–22** | $446M | $809M | $675M | $243M | $276M | $87M | $22M | $0 | **$2,558M** |

Costs associated to private health insurance benefits paid to private patients are provided to IHACPA through the Hospital Casemix Protocol (HCP) data set (DHDA, 2025). These are used to calculate an adjustment factor, which is applied to the in-scope costs of patients to set the prices found in the NEP Determination for admitted streams. The HCP adjustment factor is not applied to the costs included in the NBP.

Not all admitted patients are included in the NBP due to their activity not being priced by IHACPA. Patients with an admitted patient care type of ‘Other admitted patient care’, ‘Organ procurement – posthumous’, or ‘Hospital boarder’ are not priced by IHACPA. IHACPA does not price these records, so they are not reported consistently by jurisdictions. Consequently, benchmarking measures cannot be applied appropriately to these records, so we do not include their activity or costs in the NBP. The costs and of these records as submitted via the NHCDC are contained in Table 27 – Table 29.

## Table 27: Summary of records with admitted patient care type ‘Other admitted patient care’ submitted via the NHCDC

| | | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| 2017–18 | Seps | 87 | 0 | 0 | 0 | 0 | 423 | 0 | 0 | **510** |
| | Cost | $307K | $0 | $0 | $0 | $0 | $416K | $0 | $0 | **$723K** |
| 2018–19 | Seps | 66 | 0 | 0 | 0 | 0 | 102 | 0 | 0 | **168** |
| | Cost | $531K | $0 | $0 | $0 | $0 | $259K | $0 | $0 | **$790K** |
| 2019–20 | Seps | 0 | 0 | 0 | 0 | 0 | 34 | 0 | 0 | **34** |
| | Cost | $0 | $0 | $0 | $0 | $0 | $193K | $0 | $0 | **$193K** |
| 2020–21 | Seps | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | **3** |
| | Cost | $0 | $0 | $0 | $0 | $0 | $18K | $0 | $0 | **$18K** |
| 2021–22 | Seps | 0 | 0 | 1 | 0 | 0 | 19 | 0 | 0 | **20** |
| | Cost | $0 | $0 | $16K | $0 | $0 | $371K | $0 | $0 | **$388K** |
| 2022–23 | Seps | 0 | 0 | 1 | 0 | 0 | 23 | 0 | 0 | **24** |
| | Cost | $0 | $0 | $653 | $0 | $0 | $884K | $0 | $0 | **$885K** |

## Table 28: Summary of records with admitted patient care type ‘Organ procurement – posthumous’ submitted via the NHCDC

| | | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| 2017–18 | Seps | 107 | 142 | 0 | 0 | 37 | 21 | 3 | 17 | **327** |
| | Cost | $4M | $1M | $0 | $0 | $944K | $194K | $82K | $259K | **$7M** |
| 2018–19 | Seps | 129 | 172 | 0 | 40 | 54 | 14 | 5 | 0 | **414** |
| | Cost | $6M | $2M | $0 | $306K | $1M | $115K | $101K | $0 | **$10M** |
| 2019–20 | Seps | 94 | 140 | 0 | 39 | 43 | 16 | 2 | 0 | **334** |
| | Cost | $1M | $2M | $0 | $339K | $744K | $181K | $21K | $0 | **$5M** |
| 2020–21 | Seps | 94 | 120 | 65 | 47 | 41 | 8 | 3 | 11 | **389** |
| | Cost | $1M | $2M | $2M | $396K | $883K | $153K | $31K | $355K | **$6M** |
| 2021–22 | Seps | 69 | 111 | 0 | 32 | 46 | 12 | 4 | 8 | **282** |
| | Cost | $860K | $2M | $0 | $292K | $1M | $293K | $81K | $135K | **$5M** |
| 2022–23 | Seps | 95 | 123 | 0 | 40 | 39 | 19 | 2 | 0 | **318** |
| | Cost | $1M | $3M | $0 | $441K | $1M | $324K | $33K | $0 | **$6M** |

Table 29: Summary of records with admitted patient care type ‘Hospital boarder’ submitted via the NHCDC

| | | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| 2017–18 | Seps | 0 | 0 | 16,804 | 0 | 497 | 1,525 | 0 | 0 | **18,826** |
| | Cost | $0 | $0 | $7M | $0 | $2M | $179K | $0 | $0 | **$9M** |
| 2018–19 | Seps | 0 | 0 | 17,228 | 0 | 0 | 1,579 | 0 | 0 | **18,807** |
| | Cost | $0 | $0 | $14M | $0 | $0 | $256K | $0 | $0 | **$14M** |
| 2019–20 | Seps | 0 | 0 | 17,118 | 0 | 0 | 1,486 | 0 | 0 | **18,604** |
| | Cost | $0 | $0 | $9M | $0 | $0 | $355K | $0 | $0 | **$10M** |
| 2020–21 | Seps | 0 | 0 | 10,916 | 0 | 0 | 1,421 | 0 | 0 | **12,337** |
| | Cost | $0 | $0 | $7M | $0 | $0 | $382K | $0 | $0 | **$8M** |
| 2021–22 | Seps | 0 | 0 | 11,479 | 0 | 0 | 1,569 | 0 | 0 | **13,048** |
| | Cost | $0 | $0 | $9M | $0 | $0 | $420K | $0 | $0 | **$9M** |
| 2022–23 | Seps | 0 | 0 | 13,793 | 0 | 0 | 1,529 | 0 | 0 | **15,322** |
| | Cost | $0 | $0 | $11M | $0 | $0 | $462K | $0 | $0 | **$12M** |

## 3.5 Hospital acquired complications data

The definition of a Hospital acquired complication (HAC) and HAC categories appearing in the NBP are those established by the Australian Commission on Safety and Quality in Health Care (The Commission) in HAC Version 3.0 (ACSQHC, 2025b).

The HAC dashboards on the NBP utilise the admitted acute data, prepared for the Cost per NWAU dashboards, detailed in Section 3.1.1. The following sections highlight the additional data preparation required and specifications in relation to the HAC data.

### 3.5.1 HAC groups not included in the NBP

HAC Version 3.0 describes 16 HAC categories. The NBP presents only 14 of these categories due to data limitations.

HAC 5, *Unplanned intensive care unit admission* is not presented on the NBP as these ICU admissions cannot be identified in IHACPA’s datasets. HAC 16, *Neonatal birth trauma* is not presented on the NBP due to low volume of data.

### 3.5.2 Episodes not eligible for HACs

Within the admitted acute stream, there are episodes that are not eligible to receive HACs or are not eligible for certain HAC groups. These episodes are not included in the calculation of HAC rates, where the denominator of the HAC rate represents the population that are eligible to receive a HAC.

If episodes have AR-DRG L61Z, *Haemodialysis* or R63Z, *Pharmacotherapy for Neoplastic Disorders*[25], and the admission and separation dates fall on the same day, then these episodes are considered not eligible for HACs. Episodes that have the 'Hospital boarder', 'Organ procurement – posthumous', or 'Unqualified newborns' care types are also not eligible for HACs. Table 30 shows the number of admitted acute episodes that are not eligible for HACs and hence excluded from the HAC rate calculations.

Table 30: Summary of episodes not eligible for HACs

| | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| **2017–18** | 352,118 | 396,322 | 282,453 | 80,968 | 155,745 | 20,321 | 85,175 | 19,303 | **1,392,405** |
| **2018–19** | 356,395 | 404,906 | 303,884 | 84,335 | 161,233 | 23,907 | 89,137 | 17,751 | **1,441,548** |
| **2019–20** | 372,156 | 414,982 | 320,685 | 86,991 | 183,364 | 28,954 | 91,916 | 18,976 | **1,518,024** |
| **2020–21** | 372,366 | 426,779 | 352,975 | 94,604 | 201,951 | 29,226 | 92,254 | 19,798 | **1,589,953** |
| **2021–22** | 371,977 | 451,694 | 368,159 | 98,218 | 202,694 | 37,999 | 91,390 | 21,134 | **1,643,265** |
| **2022–23** | 401,892 | 452,864 | 383,330 | 102,289 | 213,072 | 39,331 | 96,269 | 0 | **1,689,047** |

Only certain episodes are eligible to be assigned HAC 15, *Third and fourth degree perineal laceration during delivery*, due to the nature of the HAC. Eligibility for this HAC is limited to episodes that relate to childbirth and delivery. These are episodes with the following diagnosis codes:

- Z37.0, *Single live birth*
- Z37.1, *Single stillbirth*
- Z37.2, *Twins, both liveborn*
- Z37.3, *Twins, one liveborn and one stillborn*
- Z37.4, *Twins, both stillborn*
- Z37.5, *Other multiple births, all liveborn*
- Z37.6, *Other multiple births, some liveborn*
- Z37.7, *Other multiple births, all stillborn*
- Z37.9, *Outcome of delivery, unspecified*.

In addition, the following types of episodes are not eligible to be assigned HAC 15:

- Episodes with the following procedure codes:
  - 1652000, *Elective classical caesarean section*
  - 1652001, *Emergency classical caesarean section*
  - 1652002, *Elective lower segment caesarean section*
  - 1652003, *Emergency lower segment caesarean section*
  - 1652004, *Elective caesarean section, not elsewhere classified*
  - 1652005, *Emergency caesarean section, not elsewhere classified*

[25] Description under AR-DRG V11.0. Note the description for R63Z is *Chemotherapy* under AR-DRG V10.0 and earlier.

- Episodes that have the ‘Hospital boarder’, ‘Organ procurement – posthumous’, or ‘Unqualified newborns’ care types
- Admitted patient transferred from another hospital.

As such, when calculating the HAC rate for HAC 15, the denominator only includes eligible episodes. Table 31 shows the number of episodes that are eligible to be assigned HAC 15.

Table 31: Summary of episodes eligible for HAC 15

| | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| **2017–18** | 49,382 | 38,731 | 30,899 | 9,504 | 12,101 | 2,920 | 2,143 | 3,220 | **148,900** |
| **2018–19** | 48,426 | 37,621 | 30,688 | 9,440 | 11,759 | 2,886 | 2,118 | 3,262 | **146,200** |
| **2019–20** | 46,737 | 37,448 | 30,464 | 9,252 | 11,866 | 2,866 | 2,055 | 3,338 | **144,026** |
| **2020–21** | 44,289 | 36,936 | 30,695 | 9,390 | 11,994 | 2,878 | 2,208 | 3,063 | **141,453** |
| **2021–22** | 42,436 | 36,545 | 30,474 | 9,381 | 11,574 | 2,977 | 2,110 | 3,050 | **138,547** |
| **2022–23** | 41,463 | 33,164 | 28,682 | 8,773 | 10,988 | 2,812 | 1,911 | 0 | **127,793** |

### 3.5.3 Episodes that do not receive NWAU adjustments for HACs

In some cases, episodes may be flagged with HACs, but no NWAU adjustments for HACs are applied to the total NWAU of these episodes.

Due to the low volume of data available for HAC 15, *Third and fourth degree perineal laceration during delivery*, episodes with HAC 15 did not receive any NWAU adjustment in relation to HAC 15 under the NWAU18 and NWAU19 calculations. However, in the calculation of NWAU20, NWAU21 and NWAU22, episodes with HAC 15.1.2, *Fourth degree perineal laceration during delivery* receive NWAU adjustments as there is a larger sample size to determine the pricing adjustments. As such, the NWAU adjustments for the HAC 15 group on the NBP represent episodes where an NWAU adjustment was applied in relation to HAC 15.1.2.

In the calculation of NWAU18, episodes with Major Diagnosis Category (MDC) 19, *Mental diseases and disorders*, and 20, *Alcohol/drug use or induced mental disorders* do not receive an NWAU adjustment for HAC, even if the episodes are flagged with HACs under HAC version 3.0. This is due to limitations in identifying MDC 19 and 20 under HAC version 1.0, which was the HAC version used for calculating the NWAU18 adjustment for HACs.

In the calculation of NWAU19, NWAU20, NWAU21 and NWAU22, IHACPA has decided to not apply NWAU adjustments for HACs on episodes relating to COVID patients, as COVID patient records were not included in the datasets used for calculating NWAU adjustments.

Table 32 shows the number of episodes where HACs are identified, but no NWAU adjustment for HACs are applied.

Table 32: Summary of episodes with HACs that received no NWAU adjustment

| | | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| 2017–18 | NWAU18 | 1,967 | 1,377 | 1,172 | 410 | 419 | 112 | 77 | 135 | **5,673** |
| | NWAU19 | 1,767 | 1,222 | 1,068 | 365 | 364 | 94 | 71 | 125 | **5,080** |
| | NWAU20 | 1,692 | 1,150 | 1,015 | 351 | 333 | 92 | 64 | 122 | **4,823** |
| | NWAU21 | 1,692 | 1,150 | 1,015 | 351 | 333 | 92 | 64 | 122 | **4,823** |
| | NWAU22 | 1,692 | 1,150 | 1,015 | 351 | 333 | 92 | 64 | 122 | **4,819** |
| 2018–19 | NWAU18 | 1,837 | 1,402 | 1,122 | 369 | 414 | 110 | 75 | 136 | **5,465** |
| | NWAU19 | 1,704 | 1,266 | 1,030 | 323 | 373 | 95 | 71 | 130 | **4,992** |
| | NWAU20 | 1,630 | 1,207 | 961 | 303 | 351 | 91 | 66 | 127 | **4,736** |
| | NWAU21 | 1,630 | 1,207 | 961 | 303 | 351 | 91 | 66 | 127 | **4,736** |
| | NWAU22 | 1,630 | 1,207 | 961 | 303 | 351 | 91 | 66 | 127 | **4,736** |
| 2019–20 | NWAU18 | 1,729 | 1,262 | 971 | 337 | 347 | 112 | 85 | 121 | **4,964** |
| | NWAU19 | 1,634 | 1,172 | 917 | 305 | 326 | 101 | 79 | 116 | **4,650** |
| | NWAU20 | 1,559 | 1,131 | 876 | 281 | 308 | 98 | 71 | 106 | **4,430** |
| | NWAU21 | 1,559 | 1,131 | 876 | 281 | 308 | 98 | 71 | 106 | **4,430** |
| | NWAU22 | 1,559 | 1,131 | 876 | 281 | 308 | 98 | 71 | 106 | **4,430** |
| 2020–21 | NWAU18 | 1,521 | 1,244 | 1,034 | 289 | 392 | 91 | 107 | 101 | **4,779** |
| | NWAU19 | 1,390 | 1,352 | 955 | 256 | 352 | 85 | 100 | 96 | **4,586** |
| | NWAU20 | 1,327 | 1,313 | 907 | 244 | 335 | 83 | 95 | 93 | **4,397** |
| | NWAU21 | 1,327 | 1,313 | 907 | 244 | 335 | 83 | 95 | 93 | **4,397** |
| | NWAU22 | 1,327 | 1,313 | 907 | 244 | 335 | 83 | 95 | 93 | **4,397** |
| 2021–22 | NWAU18 | 1,525 | 1,187 | 981 | 331 | 375 | 106 | 83 | 117 | **4,705** |
| | NWAU19 | 3,986 | 3,214 | 1,804 | 537 | 492 | 165 | 160 | 214 | **10,572** |
| | NWAU20 | 3,943 | 3,168 | 1,758 | 525 | 475 | 160 | 159 | 212 | **10,400** |
| | NWAU21 | 3,943 | 3,168 | 1,758 | 525 | 475 | 160 | 159 | 212 | **10,400** |
| | NWAU22 | 3,943 | 3,168 | 1,758 | 525 | 475 | 160 | 159 | 212 | **10,400** |
| 2022–23 | NWAU18 | 1,446 | 1,084 | 907 | 281 | 322 | 113 | 73 | 0 | **4,226** |
| | NWAU19 | 4,311 | 3,011 | 2,333 | 797 | 839 | 392 | 159 | 0 | **11,842** |
| | NWAU20 | 4,240 | 2,971 | 2,288 | 783 | 821 | 385 | 157 | 0 | **11,645** |
| | NWAU21 | 4,240 | 2,971 | 2,288 | 783 | 821 | 385 | 157 | 0 | **11,645** |
| | NWAU22 | 4,240 | 2,971 | 2,288 | 783 | 821 | 385 | 157 | 0 | **11,645** |

### 3.5.4 NWAU adjustments for HACs

When calculating the NWAU adjustments for HACs, the native NWAU version is used for all years apart from 2017–18, where NWAU18 is used as a proxy to the native NWAU. This is due to the

absence of NWAU adjustments for HACs in the calculation of NWAU17, which is the native NWAU for the 2017–18 year.

This guide does not describe the manner in which the HAC NWAU adjustment is calculated. For this information, see the National Pricing Model Technical Specifications for the relevant NWAU version on IHACPA's website (IHACPA, 2025f).

## 3.6 Avoidable hospital readmissions data

An Avoidable hospital readmission (AHR) is an instance in which a patient:

- is admitted to hospital within a specified time interval of being discharged, and;
- in which the second admission (readmission episode) is clinically related to the first (index episode).

The AHR dashboards on the NBP utilise the admitted acute data prepared for the Cost per NWAU dashboards, detailed in Section 3.1.1. The following sections highlight the additional data preparation required and specifications in relation to the AHR data. The definition of an AHR, and the AHR categories appearing in the NBP are those established by The Commission in AHR Version 1.0 (ACSQHC, 2025a).

### 3.6.1 Episodes not eligible for AHRs

Using the definition provided by The Commission, some records are precluded from being the index episode of an AHR, regardless of the remainder of their activity. Those records are:

- Records taking place at multi-purpose services or mothercraft facilities.
- Records with a care type of: 'Hospital boarder', 'Organ procurement – posthumous', or 'Unqualified newborns' (none of these records are included in any NBP dashboard).
- Records pertaining to patients not discharged alive.
- Records pertaining to patients discharged against medical advice.
- Same-day or single night records from any of the following AR-DRGs:
    - R63Z, *Pharmacotherapy for Neoplastic Disorders* (known as *Chemotherapy* before AR-DRG V11.0)
    - L61Z, *Haemodialysis*,
    - L68Z, *Peritoneal dialysis*.
- Records pertaining to palliative care (all palliative care records are excluded from the HAC and AHR dashboards).
- Records pertaining to oncology or haematology (as defined by the presence of any ICD-10-AM codes indicating these categories of care).
- Records with a care type of 'Neonatal care'.

In addition to records which do not satisfy The Commission's index episode criteria, listed above, there are records which contain insufficient information to be index episodes. The National Minimum Datasets (NMDS) reported to IHACPA do not contain patient identification information, which would allow IHACPA to identify instances in which 2 admissions belong to the same person. Therefore, IHACPA relies on the provision of a Medicare PIN data set by Services Australia, which can be linked to the admitted patient care data set. If an episode of care cannot be linked to a Medicare

PIN, then the episode in question is not eligible to be the index episode of an AHR due to the unavailability of a reliable patient identifier. If a single Medicare PIN is linked to episodes of care where the index and readmission episodes have different values of the sex or birth date variable, then the episodes in question are not eligible for AHR.

The AHR rate values that appear on the NBP are defined to be the number of AHRs for every 10,000 records which are eligible to be the index episode of an AHR.

Table 33 shows the number of admitted acute episodes that are not eligible to be the index episode of an AHR on the basis of The Commission's index episode criteria, or due to the absence of reliable Medicare PIN data.

Table 33: Summary of episodes not eligible to be the index episode of an AHR

| | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| **2017–18** | 619,064 | 660,595 | 477,905 | 143,823 | 229,718 | 37,326 | 100,570 | 33,763 | **2,302,764** |
| **2018–19** | 632,509 | 685,712 | 511,718 | 148,400 | 238,378 | 41,993 | 104,171 | 42,200 | **2,405,081** |
| **2019–20** | 641,237 | 693,876 | 538,389 | 152,297 | 262,557 | 47,639 | 107,202 | 34,300 | **2,477,497** |
| **2020–21** | 646,325 | 700,173 | 586,834 | 161,044 | 288,887 | 47,875 | 107,531 | 38,556 | **2,577,225** |
| **2021–22** | 630,788 | 728,249 | 604,964 | 162,056 | 290,145 | 60,477 | 105,683 | 38,499 | **2,620,861** |
| **2022–23** | 689,973 | 744,114 | 630,635 | 165,833 | 303,731 | 62,258 | 111,592 | N/A | **2,708,136** |

### 3.6.2 NWAU adjustments for AHRs

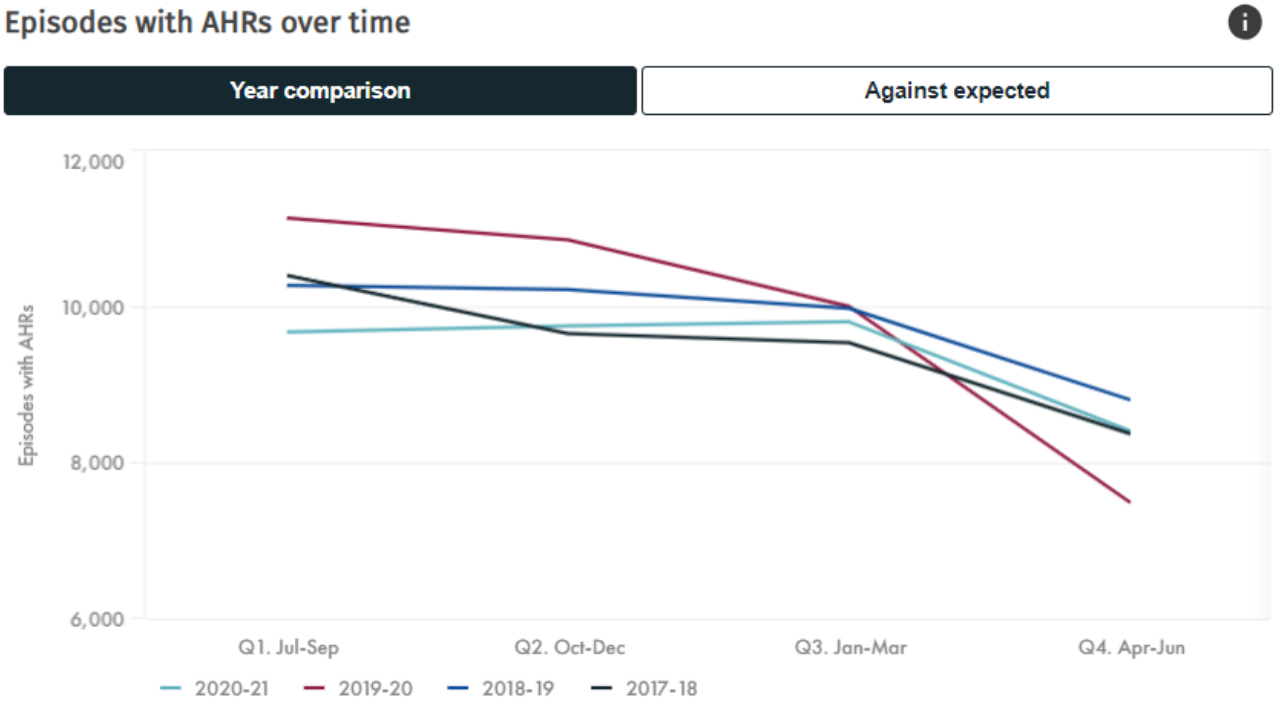
IHACPA has sought to make the NBP relevant for those seeking to understand national funding arrangements and has therefore sought to measure activity in terms of a year's native NWAU wherever possible. AHR deductions were not introduced into NWAU calculations until NWAU21 and do not form part of the NWAU versions which are native to most of the years presented on the NBP at the time of publication. Therefore, the AHR dashboards use NWAU21 for 2017–18 to 2021–22 and NWAU22 for 2022–23.

This guide does not describe the manner in which the AHR NWAU adjustment is calculated. For this information, see the National Pricing Model Technical Specifications for the relevant NWAU version on IHACPA's website (IHACPA, 2025f).

### 3.6.3 AHRs across financial years

In situations where the index episode and the readmission episode are across 2 different financial years, the episodes in question would not be flagged as an AHR. This is because the NBP data preparation considers the data for each financial year separately. As such, any potential readmission episodes within the data of the subsequent financial year are not linked back to the index episodes within the data of the preceding financial year. This is the reason why the counts of AHRs are consistently lower in the fourth quarter of each financial year on the NBP, as shown in Figure 2 below.

Figure 2: Episodes with AHRs over time



# 4. Drivers of acute NWAU growth

The drivers of acute NWAU growth chart is displayed on the NWAU detail page within the NBP. IHACPA's intention in providing this chart is to quantify the factors contributing to annual admitted acute NWAU change among the categories of records selected by the user. The graphic refers to NWAU growth between the year prior to that selected by the user, and the year selected by the user. The NWAU version being measured is that which is native to the year selected by the user.

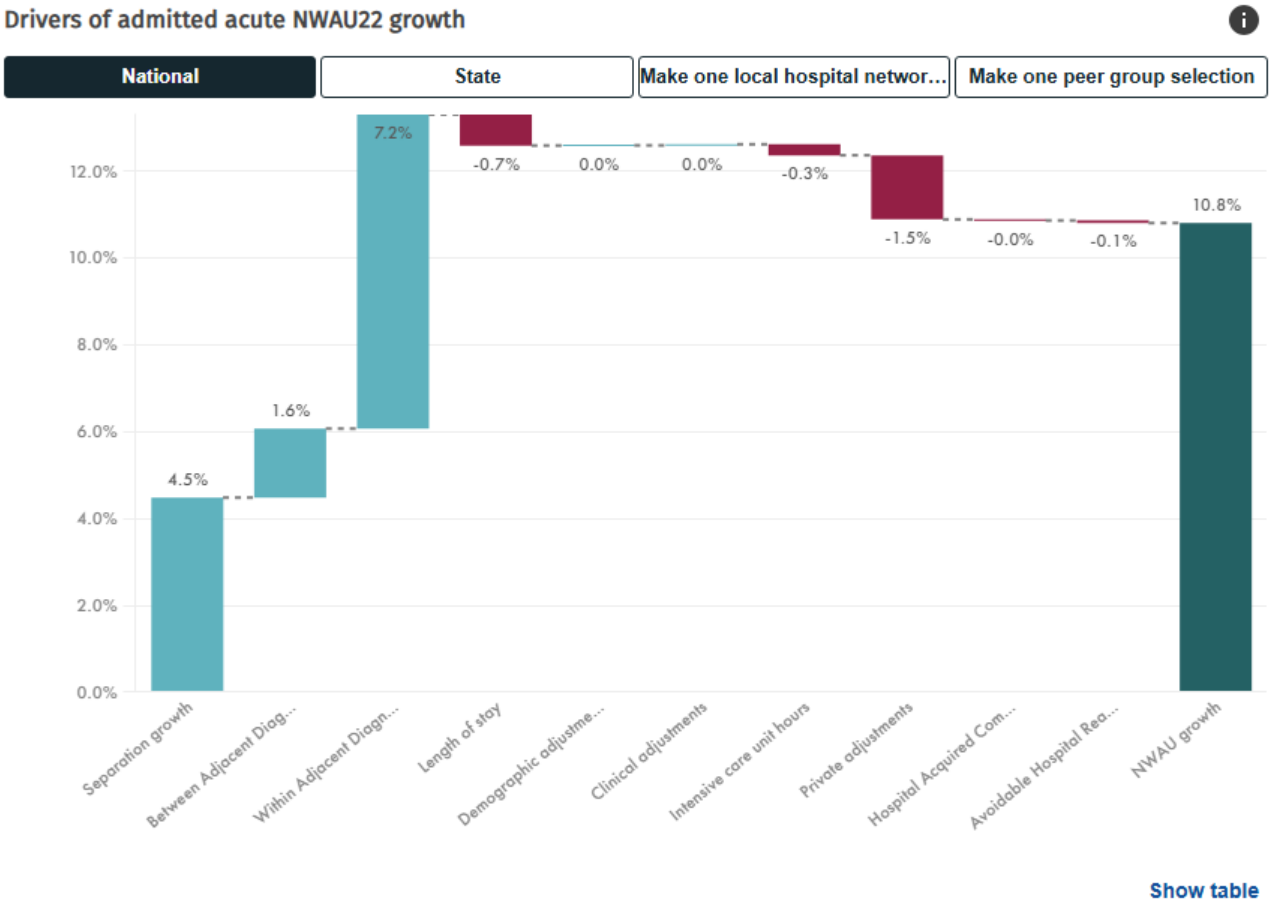
The chart only applies to the admitted acute stream, so any data displayed on this chart refers only to this stream of care. However, the user may select filters within the admitted acute stream, such as restricting to episodes which have specific values of AR-DRG, SRG, and principal diagnosis. These choices will be reflected in the display of the drivers of acute NWAU growth chart.

## 4.1 Choosing a cohort of study

Before calculating separation growth, the user must select a baseline for NWAU growth based on separation growth figures for a group. This is used to attribute an amount of NWAU growth to the growth expected due to change in separations. This choice is implemented via the 4 tabs at the top of Figure 3. The tab chosen by the user is referred to as the $LEVEL$ in this section.

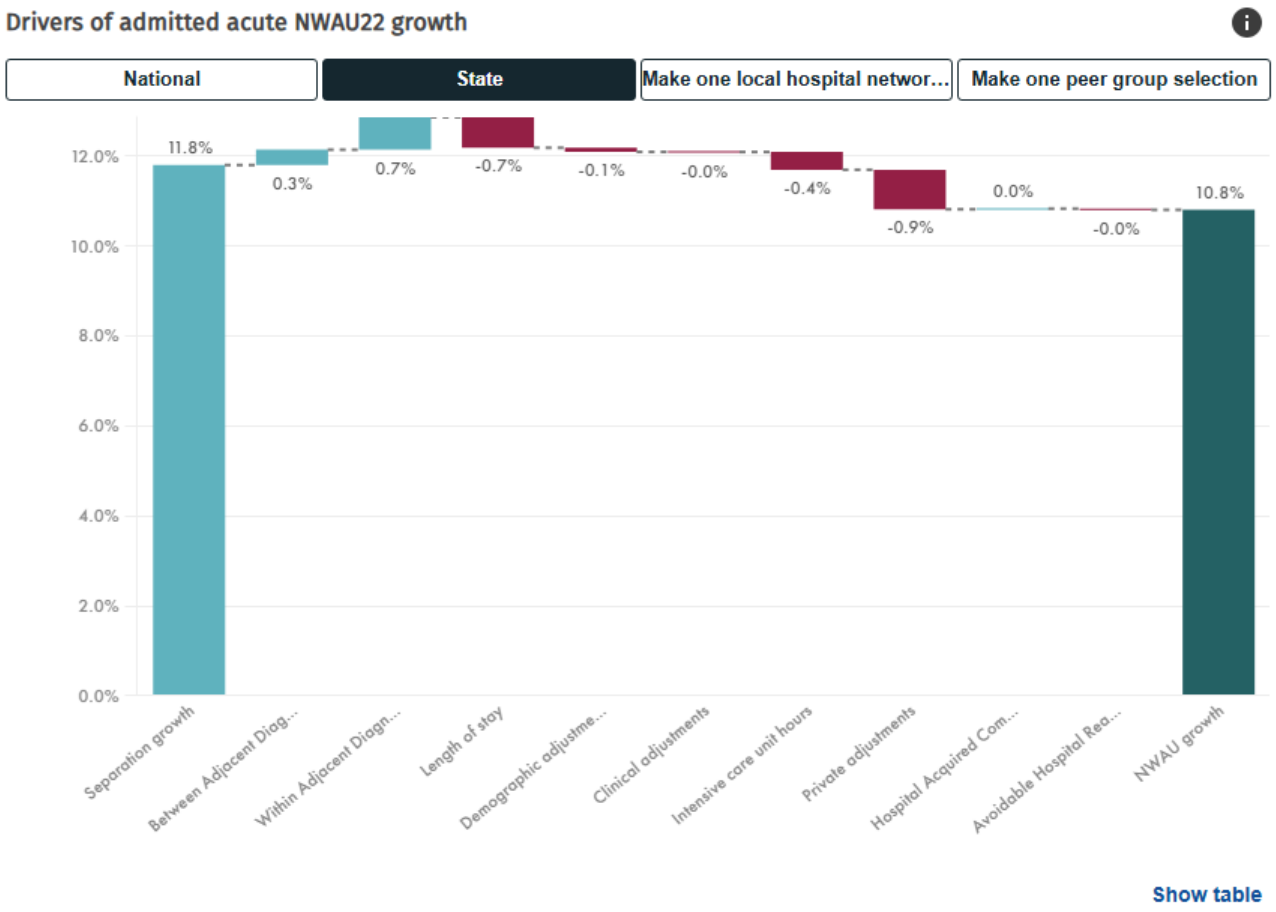
Figure 3 shows 4 level tabs available for selection: 'National', 'State', 'Local hospital network' and 'Peer group'. In this instance, the user has already filtered their data by state, so the 'State' tab is available for selection, indicating that the user may choose to view the drivers of acute NWAU growth chart using separation growth figures specific to the state or territory they have selected. The 'Local hospital network' and 'Peer group' tabs are not available for selection (so they read 'Make one local hospital network selection' and 'Make one peer group selection', respectively) because the user has not filtered their data by LHN or peer group.

Figure 3: Drivers of admitted acute NWAU growth




In Figure 3, the user has selected the ‘National’ tab, indicated by that tab being highlighted in black, so the growth figures are based on national separation growth benchmarks. This sets a baseline for NWAU growth based on national separation growth trends. Figure 4 shows the same data as Figure 3, after the user has selected the ‘State’ tab instead of the ‘National’ tab. The final growth figure is the same, but the contributors to that growth are different. This is because the starting assumptions on the growth attributable to the separation change between one year and the next are different.

Figure 4: Drivers of admitted acute NWAU growth, observed using the ‘State’ tab




In the remainder of this section, we define how each of the components of NWAU growth in Figure 3 and Figure 4 are calculated.

## 4.2 Accounting for separation growth

The first 2 categories attribute NWAU growth to separation growth by addressing the question ‘What if NWAU growth was the same as separation growth?”. The first component of NWAU growth in the chart is a growth factor equal to the total growth in separations between the 2 years under consideration. In this section, we refer to the year selected by the user as Y2 and the year prior to Y2 as Y1. The NWAU version under consideration is that which is native to Y2. This NWAU variable, with version native to Y2, is referred to as $NWAU$ in this section.

Separation growth for the nation and for each jurisdiction, LHN and peer group are recorded in the NBP. The user chooses which separation growth factor to use by choosing one of the 4 tabs at the top of Figure 3. These growth factors are calculated only among separations which are assigned a valid NWAU. Let $LEVEL$ represent the tab chosen by the user in the drivers of acute NWAU growth chart. Let $LEVEL_i$ be the $i^{th}$ possible value taken in the category $LEVEL$. For example, if $LEVEL$ is ‘National’ then there is only one value of $LEVEL_i$, which is Australia, but if $LEVEL$ is ‘State’ then there are 8 possible values of $LEVEL_i$: NSW, Vic, Qld, SA, WA, Tas, NT and ACT. We define the $i^{th}$ separation growth factor as follows.

$$g_i \coloneqq \frac{\text{Separations with valid NWAU in } LEVEL_i \text{ in Y2}}{\text{Separations with valid NWAU in } LEVEL_i \text{ in Y1}}$$

Let $x_k$ be the $NWAU$ of the $k^{th}$ separation in Y1. Let $N_{Y1}$ be the total number of separations with valid $NWAU$ satisfying the user's filters, taking place in Y1, and let $J = \{1, \dots, N_{Y1}\}$. Fix an arbitrary order on those separations. We define

$NWAU_0 \coloneqq \sum_{j \in J} x_j =$ Total $NWAU$ in Y1

Let $LEVEL(k)$ be the value of the category $LEVEL$ to which the $k^{th}$ separation in Y1 belongs. For example, if $LEVEL$ is 'State' then $LEVEL(k)$ is the state in which the $k^{th}$ separation in Y1 took place. We define

$NWAU_1 \coloneqq \sum_{j \in J} x_j g_{LEVEL(j)}$

For the final chart display, we will need to recall the difference between $NWAU_1$ and $NWAU_0$ as a proportion of $NWAU_0$ . Therefore, we define

$$\rho_{\text{Sep}} \coloneqq \frac{NWAU_1 - NWAU_0}{NWAU_0}$$

This provides the user with an indication of what $NWAU$ growth would look like if $NWAU$ grew at the same rate as separations in their chosen $LEVEL$.

Next, we consider separation growth by ADRG within the user's chosen $LEVEL$. We suppose that separation growth has been accounted for but rescale the $NWAU$ of each ADRG according to separation growth, as follows. Let $ADRG_{i,j}$ denote the $i^{th}$ ADRG in $LEVEL(j)$ and

$$\rho_{ADRG_{i,j}} \coloneqq \frac{\text{Valid ADRG}_{\text{i,j}} \text{ Separations in Y2}}{\text{Valid ADRG}_{\text{i,j}} \text{ Separations in Y1}}$$

We refer to $\rho_{ADRG_{i,j}}$ as the growth ratio of the $i^{th}$ ADRG in $LEVEL(j)$ and let $M$ be the total number of distinct values in the category $LEVEL$. Now we define the function

$\phi_{ADRG} : J \to \{\rho_{ADRG_{0,0}}, \dots, \rho_{ADRG_{23,\text{M}}}\}$

$k \mapsto \rho_{ADRG_{i(k)},LEVEL(k)}$

where the $k^{th}$ separation belongs to $ADRG_{i(k)}$. Let $x_j$ be the $NWAU$ of the $j^{th}$ separation in Y1. We define $NWAU_2$ as follows.

$$NWAU_2 \coloneqq \sum_{j \in J} x_j \cdot \phi_{ADRG}(j)$$

Defining $NWAU_2$ is a means of showing the user what $NWAU$ growth would look like if the $NWAU$ in each ADRG grew in agreement with the valid separation growth in that ADRG. We refer to this as *casemix growth* as it incorporates the type of procedures a hospital is performing but does not consider the complexity of the individuals involved or per capita changes in ICU hours, adjustments, HACs or AHRs (if applicable).

When incorporating the change due to casemix growth into our activity reporting, we will consider the difference between $NWAU_2$ and $NWAU_1$ as a proportion of $NWAU_0$. Therefore, we record the following value for later use.

$$\rho_{ADRG} \coloneqq \frac{NWAU_2 - NWAU_1}{NWAU_0}$$

## 4.3 The admitted acute NWAU formula

The remainder of growth is calculated by finding the difference between $NWAU_2$ and the observed $NWAU$ in Y2 in terms of the components of the $NWAU$ formula. The formula used is that found in the NEP determinations pertaining to the years included in the NBP (IHACPA, 2025d) relevant to the year selected by the user – with the exception that the $NWAU$ formula below are forced to be non-negative, which is how $NWAU$ is calculated in practice. The formulae used in the drivers of acute NWAU growth chart are as follows:

$$\text{GWAU} \coloneqq PW \cdot A_{\text{Paed}} \cdot (1 + A_{\text{Ind}} + A_{\text{Res}} + A_{\text{RT}} + A_{\text{Dia}}) \cdot (1 + A_{\text{Treat}}) + A_{\text{ICU}} \cdot \text{ICU hours}$$

$$\text{NWAU} \coloneqq \max(0, GWAU - (PW + A_{\text{ICU}} \cdot \text{ICU hours}) \cdot A_{\text{PPS}} - \text{LOS} \cdot A_{\text{Acc}} - PW \cdot A_{\text{HAC}} - PW_{\text{AHR}} \cdot R_{\text{AHR}})$$

where $A_{\text{Paed}}$ = Paediatric adjustment,

$A_{\text{Ind}}$ = Indigenous adjustment,

$A_{\text{Res}}$ = Patient residential remoteness area adjustment,

$A_{\text{RT}}$ = Radiotherapy adjustment,

$A_{\text{Dia}}$ = Dialysis adjustment,

$A_{\text{Treat}}$ = Patient treatment remoteness area adjustment,

$A_{\text{ICU}}$ = Intensive care unit adjustment,

$A_{\text{PPS}}$ = Private patient service adjustment,

$A_{\text{Acc}}$ = Private patient accommodation adjustment,

$A_{\text{HAC}}$ = Hospital acquired complication adjustment,

$R_{\text{AHR}}$ = Avoidable hospital readmission risk adjustment factor,

$\text{ICU hours}$ = Number of hours in a specified level 3 intensive care unit,

$\text{LOS}$ = Length of stay, including any ICU hours,

$PW$ = The price weight for this episode based on the AR-DRG and length of stay (after removing any level 3 ICU hours). This is obtained from the NEP Determination relevant to the data year under consideration.

$PW_{\text{AHR}}$ = The price weight for an ABF activity of a linked AHR.

The NWAU formulae generally differ from year to year[26,27,28,29,30]. The formulae listed above were used in NWAU22, and we assume we are working with them for the remainder of this section.

For the purposes of accounting for growth, we break down the $NWAU$ formula as follows: the term $PW$ is broken down into 2 parts, which will be used to account for growth in acuity and length of stay. Next, the portion

$$P_{Demo} \coloneqq PW \cdot A_{\text{Paed}} \cdot (1 + A_{\text{Ind}} + A_{\text{Res}}) \cdot (1 + A_{\text{Treat}})$$

is compared between Y1 and Y2 to measure the change in adjustments based solely on demographic factors: age, Indigenous status, remoteness of residence and remoteness of treatment. We next compare the difference in the component

$$P_{Clin} \coloneqq PW \cdot A_{\text{Paed}} \cdot (A_{\text{RT}} + A_{\text{Dia}}) \cdot (1 + A_{\text{Treat}})$$

to measure the change in adjustments due to clinical factors: radiotherapy and dialysis. In this instance, some terms involving demographic factors remain to simplify the calculation. We measure the difference in the term

$$P_{ICU} \coloneqq A_{\text{ICU}} \cdot \text{ICU hours}$$

to obtain an indication of how ICU hours have impacted $NWAU$ growth, beyond what would be expected from the change in number of admissions within each ADRG. We then calculate the difference between the quantity

$$P_{Priv} \coloneqq \max(-GWAU, -(PW + A_{\text{ICU}} \cdot \text{ICU hours}) \cdot A_{\text{PPS}} - \text{LOS} \cdot A_{\text{Acc}})$$

measured in Y1 and Y2 to study change in the amount of $NWAU$ removed due to private patient adjustments. We do not allow $NWAU$ to be negative so for each episode we do not allow the amount of $NWAU$ removed due to private patient deductions to exceed $GWAU$. The private patient deduction is calculated before the HAC deduction is taken into account. Therefore, if a private patient has a HAC, the private patient deduction is given priority when allocating the total deduction to one cause or the other. Next, we compare the quantity

$$P_{HAC} \coloneqq \max(-PW \cdot A_{\text{HAC}}, -GWAU - P_{Priv})$$

to determine the growth in $NWAU$ removed due to HACs. As with private patient adjustments, for each episode we do not allow the amount of $NWAU$ removed due to HACs to be greater than $GWAU + P_{Priv}$. Finally, we compare the quantity

$$P_{AHR} \coloneqq \max(-PW_{AHR} \cdot R_{\text{AHR}}, -GWAU - P_{Priv} - P_{HAC})$$

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[26] For GWAU17, the formula is:

$$\text{GWAU} \coloneqq PW \cdot A_{\text{Paed}} \cdot (1 + A_{\text{SPA}}) \cdot (1 + A_{\text{Ind}} + A_{\text{A}} + A_{\text{RT}} + A_{\text{Dia}}) + A_{\text{ICU}} \cdot \text{ICU hours}$$

where $A_{\text{A}}$= Remoteness area adjustment and $A_{\text{SPA}}$= Specialist psychiatric age adjustment

[27] For GWAU18 and GWAU19, the formula is:

$$\text{GWAU} \coloneqq PW \cdot A_{\text{Paed}} \cdot (1 + A_{\text{SPA}}) \cdot (1 + A_{\text{Ind}} + A_{\text{Res}} + A_{\text{RT}} + A_{\text{Dia}}) \cdot (1 + A_{\text{Treat}}) + A_{\text{ICU}} \cdot \text{ICU hours}$$

[28] For GWAU20 and GWAU21, the formula is:

$$\text{GWAU} \coloneqq PW \cdot A_{\text{Paed}} \cdot (1 + A_{\text{SPA}} + A_{\text{Ind}} + A_{\text{Res}} + A_{\text{RT}} + A_{\text{Dia}}) \cdot (1 + A_{\text{Treat}}) + A_{\text{ICU}} \cdot \text{ICU hours}$$

[29] The calculation of NWAU21 is the same as NWAU22. For NWAU17, the formula is:

$$\text{NWAU} \coloneqq \max(0, GWAU - (PW + A_{\text{ICU}} \cdot \text{ICU hours}) \cdot A_{\text{PPS}} - \text{LOS} \cdot A_{\text{Acc}})$$

[30] For NWAU18, NWAU19 and NWAU20, the formula is:

$$\text{NWAU} \coloneqq \max(0, GWAU - (PW + A_{\text{ICU}} \cdot \text{ICU hours}) \cdot A_{\text{PPS}} - \text{LOS} \cdot A_{\text{Acc}} - PW \cdot A_{\text{HAC}})$$

to determine the growth in NWAU removed due to AHRs. Again, we do not allow the amount of $NWAU$ removed due to AHRs to be greater than $GWAU + P_{Priv} + P_{HAC}$.

## 4.4 Acuity and base growth

We begin by calculating growth in the $PW$ term of the $NWAU$ formula. The $PW$ component is broken down into 2 parts. First it is estimated by the inlier weight, which is determined by a separation's AR-DRG. The inlier weight of the $j^{th}$ separation in the year $X$ is denoted $W_{In}(j, X)$.This is done as a means of taking into account acuity before we consider length of stay.

If, after taking into account separation growth, we see a large increase in the sum of inlier weights from Y1 to Y2, we interpret this information by saying that in Y2, the admissions being treated in Y2 were of a more complicated nature.

Let $J = \{1, \dots, N_{Y1}\}$, where $N_{Y1}$ is defined above. Similarly, we let $N_{Y2}$ be the number of separations in Y2 and $K = \{1, \dots, N_{Y2}\}$. Fix an order on the separations which took place in Y2. We define

$$\Delta_{Acuity} \coloneqq \sum_{k \in K} W_{In}(k, Y2) - \sum_{j \in J} \phi_{ADRG}(j) \cdot W_{In}(j, Y1)$$

Recall that $\phi_{ADRG}(j)$ is defined above to be the growth ratio of the ADRG to which the $j^{th}$separation in Y1 belongs. Recall that this separation growth figure is calculated by considering only valid separations within the scope of the user-defined *Sample.*

For the purposes of presenting this information in the drivers of acute NWAU growth chart, we set about presenting all differences as a proportion of the total (unscaled) $NWAU$ recorded in Y1. To this end, we define the following.

$$\rho_{Acuity} \coloneqq \frac{\Delta_{Acuity}}{NWAU_0}$$

Not every patient receives the inlier weight for their AR-DRG, therefore we need to consider the difference between the base price weight assigned to a separation (the value $PW$ in the $NWAU$ formula) and the inlier weight for that separation's AR-DRG. We define the length of stay adjustment for the $j^{th}$ separation in the year $X$ by

$$W_{LOS}(j, X) \coloneqq PW - W_{In}(j, X)$$

where $PW$ is defined in the $NWAU$ formula. This value is uniquely determined by a separation's length of stay and its AR-DRG and may be found in the NEP Determination (IHACPA, 2025d) relevant to the year Y2. If separation $j$ in the year $X$ is an inlier, then $W_{LOS}(j, X) = 0$. If separation $j$ in the year $X$ is a long-stay outlier, then $W_{LOS}(j, X) > 0$. If separation $j$ in the year $X$ is a short-stay outlier, then $W_{LOS}(j, X) < 0$. We now define

$$\Delta_{LOS} \coloneqq \sum_{k \in K} W_{LOS}(k, Y2) - \sum_{j \in J} \phi_{ADRG}(j) \cdot W_{LOS}(j, Y1)$$

We define

$$\rho_{LOS} \coloneqq \frac{\Delta_{LOS}}{NWAU_0}$$

## 4.5 Demographic and clinical adjustments

We now consider the demographic summands within the $NWAU$ formula. Specifically, we are considering only the components which pertain solely to demographic factors. Let the value $P_{Demo}(j,X)$ denote the value $P_{Demo}$ for the $NWAU$ calculation of the $j^{th}$ separation in year $X$. Define

$$\Delta_{Demo} \coloneqq \sum_{k\in K} P_{Demo}(k,Y2) - \sum_{j\in J} \phi_{ADRG}(j) \cdot P_{Demo}(j,Y1)$$

and

$$\rho_{Demo} \coloneqq \frac{\Delta_{Demo}}{NWAU_0}$$

We now repeat the above for the clinical adjustments. Here we consider any terms in the $NWAU$ that contain only clinical adjustments or are products of clinical and demographic adjustments. Let the value $P_{Clin}(j,X)$ denote the value $P_{Clin}$ for the $NWAU$ calculation of the $j^{th}$ separation in year $X$. Now define

$$\Delta_{Clin} \coloneqq \sum_{k\in K} P_{Clin}(k,Y2) - \sum_{j\in J} \phi_{ADRG}(j) \cdot P_{Clin}(j,Y1)$$

and

$$\rho_{Clin} \coloneqq \frac{\Delta_{Clin}}{NWAU_0}$$

We repeat the same procedure as above for the ICU adjustment. Let the value $P_{ICU}(j,X)$ denote the value $P_{ICU}$ for the $NWAU$ calculation of the $j^{th}$ separation in year $X$. We define

$$\Delta_{ICU} \coloneqq \sum_{k\in K} P_{ICU}(k,Y2) - \sum_{j\in J} \phi_{ADRG}(j) \cdot P_{ICU}(j,Y2)$$

and

$$\rho_{ICU} \coloneqq \frac{\Delta_{ICU}}{NWAU_0}$$

## 4.6 Private patient, HAC and AHR adjustments

In attributing $NWAU$ growth to the private patient, HAC and AHR adjustments, we follow the same procedure as above except that we do not allow the amount being deducted to exceed an episode's $NWAU$. For this reason, the values $P_{Priv}$, $P_{HAC}$ and $P_{AHR}$ have been defined to ensure that

$$GWAU + P_{Priv} + P_{HAC} + P_{AHR} \geq 0$$

Let the $P_{Priv}(j,X)$ denote the value $P_{Priv}$ for the $NWAU$ calculation of the $j^{th}$ separation in year $X$. Define

$$\Delta_{Priv} \coloneqq \sum_{k\in K} P_{Priv}(k,Y2) - \sum_{j\in J} \phi_{ADRG}(j) \cdot P_{Priv}(j,Y1)$$

and

$$\rho_{Priv} \coloneqq \frac{\Delta_{Priv}}{NWAU_0}$$

Let $P_{HAC}(j, X)$ denote the value $P_{HAC}$ for the $NWAU$ calculation of the $j^{th}$ separation in year $X$. Define

$$\Delta_{HAC} \coloneqq \sum_{k \in K} P_{HAC}(k, Y2) - \sum_{j \in J} \phi_{ADRG}(j) \cdot P_{HAC}(j, Y1)$$

and

$$\rho_{HAC} \coloneqq \frac{\Delta_{HAC}}{NWAU_0}$$

Let $P_{AHR}(j, X)$ denote the value $P_{AHR}$ for the $NWAU$ calculation of the $j^{th}$ separation in year $X$. Define

$$\Delta_{AHR} \coloneqq \sum_{k \in K} P_{AHR}(k, Y2) - \sum_{j \in J} \phi_{ADRG}(j) \cdot P_{AHR}(j, Y1)$$

and

$$\rho_{AHR} \coloneqq \frac{\Delta_{AHR}}{NWAU_0}$$

For reference we define

$$\Delta_{Total} \coloneqq \Delta_{Acuity} + \Delta_{LOS} + \Delta_{Demo} + \Delta_{Clin} + \Delta_{ICU} + \Delta_{Priv} + \Delta_{HAC} + \Delta_{AHR}$$

## 4.7 Construction of the drivers of acute NWAU growth chart

The growth proportions which appear in the drivers of acute NWAU growth chart on the NWAU detail page of the NBP are described in Table 34, along with the labels of each item as it appears in Figure 3 and the NBP.

## Table 34: Descriptions of each component of the drivers of acute NWAU growth chart

| Value | Title in NBP | Interpretation |
|---|---|---|
| $\rho_{Sep}$ | Separation growth | This is what NWAU growth between Y1 and Y2 would be if NWAU growth was the same as the overall growth in separations. |
| $\rho_{ADRG}$ | Between ADRG changes | After taking into account total separation growth, this is the growth in NWAU we would expect after taking into account the different growth rates of the different ADRGs. |
| $\rho_{Acuity}$ | Within ADRG changes | After taking into account separation growth by ADRG, this is the growth in NWAU attributed to changes in the distribution of inlier weights within each ADRG. |
| $\rho_{LOS}$ | Length of stay | After taking into account separation growth by ADRG, this is the growth in NWAU attributed to changes in the length of stay profile within each ADRG. |
| $\rho_{Demo}$ | Demographic adjustments | After taking into account separation growth by ADRG, this is the growth in NWAU attributed to change in demographic factors among the cohort of separated patients. |
| $\rho_{Clin}$ | Clinical adjustments | After taking into account separation growth by ADRG, this is the growth in NWAU attributed to change in clinical factors. |
| $\rho_{ICU}$ | ICU adjustment | After taking into account separation growth by ADRG, this is the growth in NWAU attributed to change in number of ICU hours provided. |
| $\rho_{Priv}$ | Private patient adjustment | After taking into account separation growth by ADRG, this is the growth in NWAU attributed to changes in private patient deductions. Private patient deductions are removed before HAC and AHR deductions are taken into consideration. |
| $\rho_{HAC}$ | HAC adjustment | After taking into account separation growth by ADRG, this is the growth in NWAU attributed to changes in HACs. HAC deductions are removed after any private patient deduction has already been removed. |
| $\rho_{AHR}$ | AHR adjustment | After taking into account separation growth by ADRG, this is the growth in NWAU attributed to changes in AHRs. AHR deductions are removed after any private patient deduction and HAC deduction has already been removed. |
| $\frac{NWAU_2 + \Delta_{Total}}{NWAU_0}$ | NWAU growth | Total NWAU growth if separation grows with separation growth rates determined by the tab selected by the user. This is equal to observed admitted acute NWAU growth. |

# 5. Alignment with other data sources

This section explains some of the ways in which figures presented in the NHCDC public sector report, and other sources based on NHCDC data, may differ from those in the NBP. As a general rule, the NBP has been prepared to enable effective benchmarking between services. Costs and services which are not amenable to this manner of benchmarking have been omitted from the NBP but may be present in other sources.

## 5.1 NHCDC public sector reports

Each year, IHACPA publishes a report on the NHCDC data submitted by public sector hospitals (IHACPA, 2025e). The purpose of the NHCDC public sector report is to describe all costs submitted to IHACPA via the NHCDC from public sector hospitals. This is distinct from the purpose of the NBP which is to enable accurate benchmarking between services. Therefore, the user may notice the following differences between figures within the NHCDC report and the NBP.

The NBP contains only NHCDC data which may be identified with records from IHACPA's activity data sets. Among the admitted streams, the NBP also requires that NHCDC records be identified with records from the APC data set as this contains some information necessary for effective benchmarking. NHCDC records which match activity in the MHCE, MHCP or PCC data sets (IHACPA, 2025a), but cannot be matched to the APC via the usual linking keys, are not included in the NBP.

Non-admitted service events in Tier 2 classes which receive no NWAU are included in the NHCDC public sector report, but not in the NBP. The number of service events impacted is summarised in Section 3.1.5.

A comparison between costs in the NHCDC public sector report and those in the NBP is provided in Table 35.

Table 35: Comparison between costs in NBP and NHCDC public sector report

| | | Jurisdiction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | National |
| 2017–18 ($M) | NBP | $12,854 | $9,861 | $9,383 | $3,462 | $4,578 | $918 | $864 | $874 | **$42,794** |
| | NHCDC | $13,753 | $10,723 | $10,851 | $3,769 | $4,954 | $1,137 | $965 | $1,013 | **$47,165** |
| 2018–19 ($M) | NBP | $13,546 | $10,660 | $10,171 | $3,787 | $4,862 | $1,010 | $942 | $976 | **$45,955** |
| | NHCDC | $14,695 | $11,516 | $11,635 | $4,082 | $5,230 | $1,238 | $1,047 | $1,108 | **$50,550** |
| 2019–20 ($M) | NBP | $14,238 | $11,484 | $10,811 | $3,798 | $5,028 | $1,114 | $1,000 | $1,065 | **$48,538** |
| | NHCDC | $15,747 | $13,134 | $12,621 | $4,189 | $5,408 | $1,341 | $1,117 | $1,189 | **$54,746** |
| 2020–21 ($M) | NBP | $14,588 | $12,165 | $11,233 | $3,210 | $5,361 | $1,237 | $1,088 | $1,104 | **$49,986** |
| | NHCDC | $16,658 | $13,693 | $13,215 | $4,642 | $5,761 | $1,483 | $1,215 | $1,294 | **$57,961** |
| 2021–22 ($M) | NBP | $15,766 | $13,361 | $11,934 | $4,134 | $5,885 | $1,411 | $1,113 | $1,280 | **$54,884** |
| | NHCDC | $17,740 | $15,226 | $13,964 | $4,810 | $6,399 | $1,668 | $1,240 | $1,480 | **$62,527** |
| 2022–23 ($M) | NBP | $18,134 | $15,443 | $14,128 | $4,906 | $6,631 | $1,704 | $1,217 | $0 | **$62,161** |
| | NHCDC | $20,181 | $17,555 | $16,399 | $5,411 | $7,563 | $1,990 | $1,313 | $0 | **$70,412** |

## 5.2 AIHW admitted patient safety and quality data

The AIHW publishes admitted patient safety and quality data which includes episodes with HACs by complication group and subgroup (AIHW, 2025b). However, the HAC data presented on the NBP is not directly comparable to the publications from AIHW due to the following reasons:

- As noted in Section 3, for the purposes of benchmarking, records are only included on the NBP if:
  - Records were reported by a hospital which was funded through ABF
  - Records can be linked between activity and cost data
  - Records are not assigned an error class and have sufficient information to be assigned an NWAU
  - The funding source of the records is in-scope under the NHRA.
- There are privacy considerations which impact the level of granularity in reporting HAC records on the NBP.

Due to the differences in how the HAC data is prepared and presented, IHACPA has not performed a reconciliation of the NBP HAC data against the AIHW admitted patient safety and quality data.

# 6. Data masking

IHACPA has implemented data masking rules to limit the risk of personal re-identification or identification of personal information through information provided in the NBP. This limits the degree to which users may obtain information about low-volume end classes and small hospitals. The following rules have been implemented for each dashboard:

- Cost per NWAU dashboards:
  - In any graphic pertaining to cost or NWAU per quarter, if there is a quarter with fewer than 30 records then the data point will not be displayed.
  - In scatter charts, any datum representing fewer than 30 records are not displayed. All other data points are displayed.
  - In all other graphics and KPIs, no data are displayed if the user selects a combination of filters representing fewer than 30 records.
- HAC and AHR dashboards:
  - In any graphic showing trends over time, if there is a quarter in the year selected by the user, in which fewer than 20 episodes of care took place then the graphic will not be displayed.
  - In graphics displaying data by complication or readmission group, if there is a complication or readmission group representing fewer than 20 episodes, then the graphic will not be displayed.
  - In graphics displaying data by complication or readmission subgroup, complication or readmission subgroups representing fewer than 20 episodes are not displayed. All other complication or readmission subgroups are displayed.
  - In all other graphics and KPIs, no data is displayed if the user selects a combination of filters representing fewer than 20 episodes.

A smaller threshold is implemented for the HAC and AHR dashboards in the interest of providing meaningful data for public access while balancing privacy considerations arising from the smaller sample sizes.

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# Appendix A) Variables included in the NBP

This section lists the variables included in the NBP by stream. A variable has data type 'Dimension' if the user can filter data according to the values of that variable. Otherwise, the variable has data type 'Measure' and summaries of this variable are presented but the user cannot filter according to common values. For example, cost within the pathology cost bucket is a 'Measure' because the user can view the total pathology cost for a group of records, but they cannot request to view all records with the same value of pathology costs.

## Cost per NWAU variables by stream

Table 36 lists the variables that are common to all streams of care on the Cost per NWAU dashboards.

Table 36: Variables included on all records in the Cost per NWAU dashboards

| Variable | Data type | Notes |
|---|---|---|
| State | Dimension | AIHW METeOR 720081. |
| Hospital | Dimension | AIHW METeOR 269973. |
| Local hospital network | Dimension | AIHW METeOR 711144. |
| AIHW peer group | Dimension | AIHW METeOR 584663, also see (AIHW, 2015; AIHW, 2025a). |
| Record quarter | Dimension | For admitted episode-level records this is the quarter that a patient's episode of care ended. For admitted phase-level records this is the quarter that a patient's phase of care ended. |
| Total records | Measure | |
| Ward medical costs | Measure | See Section 2 and (IHACPA, 2025e) for more information about cost collection. |
| Ward nursing costs | Measure | |
| Non-clinical costs | Measure | |
| Pathology costs | Measure | |
| Imaging costs | Measure | |
| Allied health costs | Measure | |
| Pharmacy costs | Measure | |
| Critical care costs | Measure | |

| Variable | Data type | Notes |
|---|---|---|
| Operating room costs | Measure | |
| Emergency department costs | Measure | |
| Ward clinical supplies costs | Measure | |
| Special procedure suit costs | Measure | |
| Prosthetics costs | Measure | |
| On-costs | Measure | |
| Hotel costs | Measure | |
| Depreciation costs | Measure | |
| Patient transport costs | Measure | |
| NWAU | Measure | Native NWAU is displayed for all records, see Section 2 for a further explanation of NWAU versions used in the NBP. Different NWAU versions are used internally to calculate growth statistics but are not directly displayed to the user. |

Table 37 lists the variables listed in the NBP for records in the admitted acute stream, other than those in Table 36.

### Table 37: Variables contained in the admitted acute stream

| Variable | Data type | Notes |
|---|---|---|
| Service Related Group Version 6.0 | Dimension | See Section 3.3. |
| Principal diagnosis | Dimension | Categorised using ICD-10-AM. Versions differ by year as specified in Section 2. Different versions are held internally and used to calculate growth statistics but are not displayed to the user. |
| Major Diagnostic Category (MDC) | Dimension | Version differs by year, as specified in Section 2. Different versions held internally and used to calculate growth statistics but are not displayed to the user. |
| Australian Refined Diagnosis Related Group (AR-DRG) classification | Dimension | Version differs by year, as specified in Section 2. Different versions held internally and used to calculate growth statistics but are not displayed to the user. |

Table 38 lists the variables listed in the NBP for records in the admitted subacute and non-acute stream (including palliative care phases), other than those in Table 36.

### Table 38: Variables contained in the admitted subacute and non-acute stream

| Variable | Data type | Notes |
|---|---|---|
| Service Related Group Version 6.0 | Dimension | See Section 3.3. |
| Principal diagnosis | Dimension | Categorised using ICD-10-AM. Versions differ by year as specified in Section 2. Different versions are held internally and used to calculate growth statistics but are not displayed to the user. |
| Australian National Subacute and Non-Acute Patient (AN-SNAP) | Dimension | Version 4.0 used in each year, as specified in Section 2. |

Table 39 lists the variables listed in the NBP for records in the admitted mental health stream, other than those in Table 36.

### Table 39: Variables contained in the admitted mental health stream

| Variable | Data type | Notes |
|---|---|---|
| Principal diagnosis | Dimension | Categorised using ICD-10-AM. Versions differ by year as specified in Section 2. Different versions are held internally and used to calculate growth statistics but are not displayed to the user. |
| Major Diagnostic Category (MDC) | Dimension | Version differs by year, as specified in Section 2. Different versions held internally and used to calculate growth statistics but are not displayed to the user. |
| Australian Refined Diagnosis Related Group (AR-DRG) classification | Dimension | Version differs by year, as specified in Section 2. Different versions held internally and used to calculate growth statistics but are not displayed to the user. |
| Australian Mental Health Care Classification (AMHCC) | Dimension | Version 1.0 used in 2022–23, as specified in Section 2. |

Table 40 lists the variables listed in the NBP for records in the emergency department stream, other than those in Table 36.

### Table 40: Variables contained in the emergency department stream

| Variable | Data type | Notes |
|---|---|---|
| Principal diagnosis | Dimension | Categorised using the emergency department short list. Versions differ by year, as specified in Section 2. Different versions are held internally and used to calculate growth statistics but are not displayed to the user. |
| Urgency Related Group (URG) | Dimension | Version 1.4 used in 2017–18 to 2020–21, as specified in Section 2. |
| Australian Emergency Care Classification (AECC) | Dimension | Version 1.0 used in 2021–22 to 2022–23, as specified in Section 2. |

Table 41 lists the variables listed in the NBP for records in the non-admitted stream, other than those in Table 36.

### Table 41: Variables contained in the non-admitted stream

| Variable | Data type | Notes |
|---|---|---|
| Tier 2 Non-Admitted Services classification | Dimension | Version differs by year, as specified in Section 2. Different versions held internally and used to calculate growth statistics but are not displayed to the user. |

# HAC variables

Table 42 lists the variables listed in the HAC dashboards.

### Table 42: Variables included in the HAC dashboards

| Variable | Data type | Notes |
|---|---|---|
| State | Dimension | AIHW METeOR 720081. |
| Hospital | Dimension | AIHW METeOR 269973. |
| Local hospital network | Dimension | AIHW METeOR 711144. |
| AIHW peer group | Dimension | AIHW METeOR 584663, also see (AIHW, 2015; AIHW, 2025a). |
| Record quarter | Dimension | For admitted episode-level records this is the quarter that a patient's episode of care ended. |
| Complication group | Dimension | Complication group, as defined by The Commission (ACSQHC, 2025b), under HAC Version 3.0. |
| Complication subgroup | Dimension | Diagnosis, as defined by The Commission (ACSQHC, 2025b), under HAC Version 3.0. |
| Age group | Dimension | Age of patient, presented as 3 groups: 0-17, 18-59, 60+. |
| Charlson score | Dimension | A score that predicts the one-year morbidity for a patient with a range of specific comorbidities, grouped into Mild, Moderate and Severe categories. |
| Risk category | Dimension | Determined by the complexity score of each risk factor variable relevant to the HAC. |
| Number of HACs | Measure | Count of HACs on a complication group level. |
| Expected number of HACs | Measure | Count of HACs based on the probability of a HAC occurring determined using a logistic regression model as described in the National Pricing Model Technical Specifications (IHACPA, 2025f). |
| Number of episodes with HACs | Measure | The number of episodes satisfying The Commission's definition of a HAC Version 3.0 (ACSQHC, 2025b). |
| Average length of stay | Measure | Average length of stay in days derived from admission and separation dates. |

| Variable | Data type | Notes |
|---|---|---|
| Rate of long stay outliers | Measure | The number of long stay outliers for every 10,000 episodes. The number of admitted days required for a patient to be a long stay outlier depends upon that patient's AR-DRG and the NWAU version under consideration. Exact figures are available in each NEP Determination, available on IHACPA's website (IHACPA, 2025d). |
| HAC NWAU adjustments | Measure | Native NWAU adjustment is displayed for all records, see Section 3.5.4 for a further explanation of NWAU versions used in the HAC dashboards. Different NWAU versions are used internally to calculate growth statistics but are not directly displayed to the user. |

# AHR variables

Table 43 lists the variables listed in the AHR dashboards.

### Table 43: Variables included in the AHR dashboards

| Variable | Data type | Notes |
|---|---|---|
| State | Dimension | AIHW METeOR 720081. |
| Hospital | Dimension | AIHW METeOR 269973. |
| Local hospital network | Dimension | AIHW METeOR 711144. |
| AIHW peer group | Dimension | AIHW METeOR 584663, also see (AIHW, 2015; AIHW, 2025a). |
| Record quarter | Dimension | For admitted episode-level records this is the quarter that a patient's episode of care ended. |
| Readmission group | Dimension | Readmission group, as defined by The Commission (ACSQHC, 2025a), under AHR Version 1.0 |
| Readmission subgroup | Dimension | Readmission diagnosis, as defined by The Commission (ACSQHC, 2025a), under AHR Version 1.0 |
| Age group | Dimension | Age of patient, presented as 3 groups: 0-17, 18-59, 60+. |
| Charlson score | Dimension | A score that predicts the one-year morbidity for a patient with a range of specific comorbidities, grouped into Mild, Moderate and Severe categories. |
| Risk category | Dimension | The likelihood that a record will be the index episode for an AHR, grouped into 3 categories. The more likely a record is to be an index episode, the lower the AHR deduction if an AHR does occur. The method of calculation is described in the National Pricing Model Technical Specifications (IHACPA, 2025f). |
| Number of episodes with AHRs | Measure | The number of episodes satisfying the Commission's definition of an AHR Version 1.0 (ACSQHC, 2025a). |
| Expected number of episodes with AHRs | Measure | Count of AHRs based on the probability of a AHR occurring determined using a gradient boosted decision tree model as described in the National Pricing Model Technical Specifications (IHACPA, 2025f). |

| Variable | Data type | Notes |
|---|---|---|
| Total eligible episodes | Measure | Admitted acute records eligible to be the index episode of an AHR, as defined in Section 3.6.1. |
| Average length of stay | Measure | Average length of stay in days derived from admission and separation dates. |
| Rate of patients aged greater than 60 years | Measure | The number of patients aged greater than 60 years for every 10,000 episodes. |
| AHR NWAU adjustments | Measure | NWAU removed via AHR NWAU deductions. This value is calculated at the episode level and summed over the user's selected data. The manner in which the deduction is calculated is described in the National Pricing Model Technical Specifications (IHACPA, 2025f). See Section 3.6.2 for a further explanation of NWAU versions used in the AHR dashboards. Different NWAU versions are used internally to calculate growth statistics but are not directly displayed to the user. |

# Appendix B) Non-admitted Tier 2 classes omitted from the NBP

Table 44 lists the Tier 2 classes which have been omitted from the NBP on the basis that they are not assigned NWAU and would therefore distort cost per NWAU statistics. The reason that NWAU is not assigned is provided alongside the code for each Tier 2 class.

Table 44: Tier 2 classes not included in the NBP

| Tier 2 class | Reason no NWAU is assigned |
|---|---|
| 10.19: Ventilation – home delivered | This activity is block funded. |
| 10.21: COVID-19 Vaccination | This activity is not priced by IHACPA but funded under a separate agreement between the Commonwealth and the states and territories. |
| 20.06: General practice and primary care | This activity is out of IHACPA's scope under the NHRA. |
| 20.56: Multidisciplinary case conference – patient not present | This class was not yet priced in some of the years under consideration. |
| 30.01: General imaging | NWAU is bundled to the originating service. |
| 30.02: Magnetic resonance imaging (MRI) | NWAU is bundled to the originating service. |
| 30.03: Computerised tomography (CT) | NWAU is bundled to the originating service. |
| 30.04: Nuclear medicine | NWAU is bundled to the originating service. |
| 30.05: Pathology (microbiology, haematology, biochemistry) | NWAU is bundled to the originating service. |
| 30.06: Positron emission tomography | NWAU is bundled to the originating service. |
| 30.07: Mammography screening | NWAU is bundled to the originating service. |
| 30.08: Clinical Measurement | NWAU is bundled to the originating service. |
| 30.09: COVID-19 response diagnostics | NWAU is bundled to the originating service. |
| 40.02: Aged care assessment | This activity is out of IHACPA's scope under the NHRA. |
| 40.08: Primary health care | This activity is out of IHACPA's scope under the NHRA. |
| 40.27: Family planning | This activity is out of IHACPA's scope under the NHRA. |
| 40.33: General counselling | This activity is out of IHACPA's scope under the NHRA. |

| Tier 2 class | Reason no NWAU is assigned |
| --- | --- |
| 40.34: Specialist mental health | This activity is block funded. |
| 40.62: Multidisciplinary case conference – patient not present | This class was not yet priced in the years under consideration. |

# Appendix C) AIHW peer groups reassigned in the NBP

Table 45 lists hospitals having identifiers within IHACPA's data which did not agree with those in the AIHW list. In these instances, the AIHW peer group of a hospital in IHACPA's data set was identified according to hospital name or previous hospital identifier. For transparency, we provide these hospitals in the table below.

Table 45: Hospitals with discrepancy between IHACPA and AIHW identifier, and their peer group assignment

| Establishment | AIHW peer group listed in NBP | Reason for discrepancy |
|---|---|---|
| Armadale Kelmscott Memorial Hospital | Public acute group A | Hospital identifier mismatch due to changed identifier. |
| Royal Perth Hospital | Principal referral | Hospital identifier mismatch due to changed identifier. |
| University of Canberra Hospital | Principal referral | Hospital identifier mismatch due to disaggregation from Canberra Hospital. |
| Peel Health Campus | Public acute group B | Hospital identifier mismatch due to changed identifier. |
| Joondalup Health Campus | Public acute group A | Hospital identifier mismatch due to changed identifier. |
| Hawkesbury Hospital | Public acute group B | Hospital identifier mismatch due to changed identifier. |

# Appendix D) Assignment of SRG 99, *Unallocated* due to establishment

Following the practice of the NSW MoH SRG Version 6.0 grouper, records from certain establishments are assigned SRG 99, *Unallocated*, regardless of the content of that record. IHACPA has sought to generalise this decision to hospitals throughout Australia. The resulting list of establishments from which all records are assigned SRG 99, *Unallocated* is provided in Table 46. Further information is provided in Section 3.3.

Table 46: Establishments with records assigned to SRG 99, *Unallocated*

| Jurisdiction | Establishment | Reason for assigning 99, *Unallocated* | Notes |
|---|---|---|---|
| NSW | Bathurst Inpatient Service | NSW MoH Justice Health facility | Data formerly reported under establishment identifier for 'Justice Health (NSW)'. |
| | Grafton Inpatient Service | | |
| | Justice Health | | |
| | Long Bay Hospital | | |
| | Metropolitan Remand and Reception Centre Inpatient Service | | |
| | Silverwater Womens Inpatient Service | | |
| | Riverlands Drug and Alcohol Centre | AIHW peer group *Drug and alcohol hospital* | |
| | Goodooga Health Service | NSW MoH peer group *Other ungrouped* | |
| | Ivanhoe Health Service | | |
| | Kiama District Hospital | | |
| | Tibooburra Health Service | | |
| Qld | Ellen Barron Family Centre (Riverton) | AIHW peer group *Early parenting centres* | |
| | Cairns Adult Community MHS | AIHW peer group *Unknown* | Data for 2018–19 only.<br>Public mental health services.<br>Establishments not listed on AIHW peer group list. |
| | Longreach Community MHS | | |
| | Cooktown Community MHS | | |

| Jurisdiction | Establishment | Reason for assigning 99, *Unallocated* | Notes |
|---|---|---|---|
| | Innisfail Community MHS | | |
| | Cape York Community MHS | | |
| | Doomadgee Community MHS | | |
| | Bayside Child & Youth Community MHS | | |
| | Warwick Community MHS | | |
| | Biloela Community MHS | | |
| | Palm Beach Adult Community MHS | | |
| | Beenleigh Community MHS | | |
| | Bundaberg Adult Community MHS | | |
| | Bundaberg Child & Youth Community MHS | | |
| | Goondiwindi Community MHS | | |
| | Stanthorpe Community MHS | | |
| | Ipswich Adult Community MHS | | |
| | Redcliffe-Caboolture Crisis Assessment & Treatment Community MHS | | |
| | Mackay Adult Community MHS | | |
| | Mackay Child & Youth Community MHS | | |
| | Maroochydore Adult Community MHS | | |
| | Community Forensic MHS | | |
| | Inner North Brisbane Community MHS | | |
| | Rockhampton Adult Community MHS | | |
| | Logan Central Adult Community MHS | | |
| | Toowoomba Adult Community MHS | | |
| | Toowoomba Child & Youth Community MHS | | |
| | Dalby Community MHS | | |
| | Mount Isa Community MHS | | |
| | Whitsunday Community MHS | | |
| | Moranbah Community MHS | | |

| Jurisdiction | Establishment | Reason for assigning 99, *Unallocated* | Notes |
|---|---|---|---|
| | Fraser Coast Adult Community MHS | | |
| | Fraser Coast Child & Youth Community MHS | | |
| | Redcliffe-Caboolture Child & Youth Community MHS | | |
| | Townsville Adult Community MHS | | |
| | Townsville Adult Community Forensic MHS | | |
| | Bayside Adult Community MHS | | |
| | Nundah Community Mental Health Service | | |
| | Browns Plains Community MHS | | |
| | Ingham Community MHS | | |
| | Robina Community MHS | | |
| | Woolloongabba Community MHS | | |
| | Southport Adult Community MHS | | |
| WA | Next Step Drug and Alcohol Services | AIHW peer group *Drug and alcohol hospital* | |

# Appendix E) Private psychiatric facilities

Table 47 lists the private establishments which are considered eligible to have their admitted episodes grouped into SRG 83, *Specialist mental health*. Hospitals are included on this list if they are either private psychiatric hospitals or not specialised private psychiatric hospitals but private hospitals with a psychiatric unit. The category into which a hospital falls is provided in the 'Type of facility' column.

Table 47: Private psychiatric hospitals and private hospitals with psychiatric units, used in the SRG Version 6.0 grouper

| Jurisdiction | Hospital | Type of facility |
|---|---|---|
| NSW | Northern Beaches Hospital | Private hospital with psychiatric unit |
| Vic | Albert Road Clinic | Private psychiatric hospital |
| Vic | South Eastern Private Hospital | Private hospital with psychiatric unit |
| Vic | Melbourne Clinic | Private psychiatric hospital |
| Vic | Wyndham Clinic | Private hospital with psychiatric unit |
| Vic | Northpark Private Hospital | Private hospital with psychiatric unit |
| Qld | Belmont Private Hospital | Private psychiatric hospital |
| Qld | Toowong Private Hospital | Private psychiatric hospital |
| Qld | Townsville Private Clinic | Private psychiatric hospital |
| Qld | Robina Private Hospital | Private hospital with psychiatric unit |
| Qld | The Cairns Clinic | Private psychiatric hospital |
| WA | Abbotsford Private Hospital | Private psychiatric hospital |
| WA | St John of God Health Care Mount Lawley | Private hospital with psychiatric unit |
| WA | Joondalup Health Campus | Private hospital with psychiatric unit |
| WA | Marian Centre | Private psychiatric hospital |
| WA | St John of God Midland Private Hospital | Private hospital with psychiatric unit |
| ACT | Calvary Bruce Private Hospital | Private hospital with psychiatric unit |
| ACT | Canberra Private Hospital | Private hospital with psychiatric unit |

# Appendix F) Establishments with NICU facilities

Table 48 lists the establishments with NICU facilities. These are the only establishments which are eligible to have their admitted episodes grouped into the SRG 75, *Perinatology*. The establishments in Table 48 which lie within NSW, and Canberra Hospital and Health Services, are those designated by the NSW MoH SRG Version 6.0 grouper. All other establishments in the table below have been selected on the basis that they delivered at least 100 ICU hours to patients with admitted patient care type 'Newborn care' in at least one of the years within the analysis period of 2018–19 to 2020–21.

Table 48: Hospitals with a neonatal intensive care unit, used in the SRG Version 6.0 grouper

| Jurisdiction | Hospital |
|---|---|
| NSW | The Children's Hospital At Westmead |
| NSW | Royal Prince Alfred Hospital |
| NSW | Royal North Shore Hospital |
| NSW | Royal Hospital for Women |
| NSW | Sydney Children's Hospital |
| NSW | Liverpool Hospital |
| NSW | Nepean Hospital |
| NSW | Westmead Hospital |
| NSW | John Hunter Hospital |
| Vic | South West Healthcare – Warrnambool |
| Vic | Mildura Base Public Hospital |
| Vic | Monash Medical Centre – Clayton Campus |
| Vic | Mercy Hospital for Women |
| Vic | The Royal Children's Hospital |
| Vic | The Royal Women's Hospital |
| Vic | Sunshine Hospital |
| Qld | Mater Mothers' Hospital |

| Jurisdiction | Hospital |
|---|---|
| Qld | Sunshine Coast Public University Hospital |
| Qld | Townsville University Hospital |
| Qld | Royal Brisbane & Women’s Hospital |
| Qld | Queensland Children’s Hospital |
| Qld | Gold Coast University Hospital |
| SA | Women’s and Children’s Hospital |
| SA | Flinders Medical Centre |
| WA | King Edward Memorial Hospital |
| WA | Perth Children’s Hospital |
| Tas | Royal Hobart Hospital |
| ACT | Canberra Hospital and Health Services |
| ACT | Calvary John James Hospital |

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