IHACPA

NEP25 National Cost and Activity Drivers Report

National Summary Report

Version
July 2025

NEP25 National cost and activity drivers report — July 2025

Glossary

Term	Definition
ABF	Activity Based Funding
ACT	Australian Capital Territory
AECC	Australian Emergency Care Classification
AIHW	Australian Institute of Health and Welfare
AMHCC	Australian Mental Health Care Classification
AR-DRG	Australian Refined Diagnosis Related Group
COLA	Cost of living adjustment
COVID-19	Coronavirus Disease 2019
CPI	Consumer Price Index
EBA	Enterprise Bargaining Agreement
ED	Emergency Department
FTE	Full time equivalent
GWAU	Gross weighted activity unit
IHACPA	Independent Health and Aged Care Pricing Authority
LHN	Local Hospital Network
MDC	Major Diagnostic Category
NEP	National Efficient Price
NHCDC	National Hospital Cost Data Collection
NHRA	National Health Reform Agreement
NPCR	National Partnership on COVID-19 Response
NWAU	National weighted activity unit
PBS	Pharmaceutical Benefits Schedule
TTR	Teaching, training and research
WPI	Wage Price Index

Executive Summary

Each year, jurisdictions submit public hospital activity and cost data for all care streams, which the Independent Health and Aged Care Pricing Authority (IHACPA) uses to develop the National Efficient Price (NEP) determination. The NEP determination sets out the prices and parameters required for the implementation of national activity-based funding (ABF) for Australian public hospital services under the National Health Reform Agreement (NHRA).

Scyne Advisory was engaged by IHACPA to conduct a comprehensive review of the activity and cost data used in the development of the NEP Determination for 2025-26 (NEP25), which used hospital activity and cost data for the 2022-23 financial year.

The NEP25 grew by 12.3% from NEP 2024-25. This review sought to report on growth patterns in data submitted by states and territories to gain a deeper understanding of the primary contributors to the growth in the NEP25.

Responsibility for public hospital funding under the NHRA is shared between the Commonwealth and state and territory governments. Although the analysis focused on the growth between the published NEP24 and NEP25, growth in Commonwealth funding is calculated using efficient price growth[1] which was 5.9%. Funding calculations are also impacted by other factors including a national funding cap of 6.5%.

This report presents a national summary of the analysis undertaken as part of this review. A separate detailed report was developed for IHACPA and the Pricing Authority. It is noted that although the analysis was performed on the models underpinning the draft NEP25, there was minimal change between the draft and final NEP25 results.

It is noted that the Australian Capital Territory (ACT) did not submit data for the 2022-23 National Hospital Cost Data Collection (NHCDC). Consequently, the ACT was excluded from the analysis and, therefore, from this report. References to ‘all jurisdictions’ in this report should be understood as excluding the ACT.

Key findings

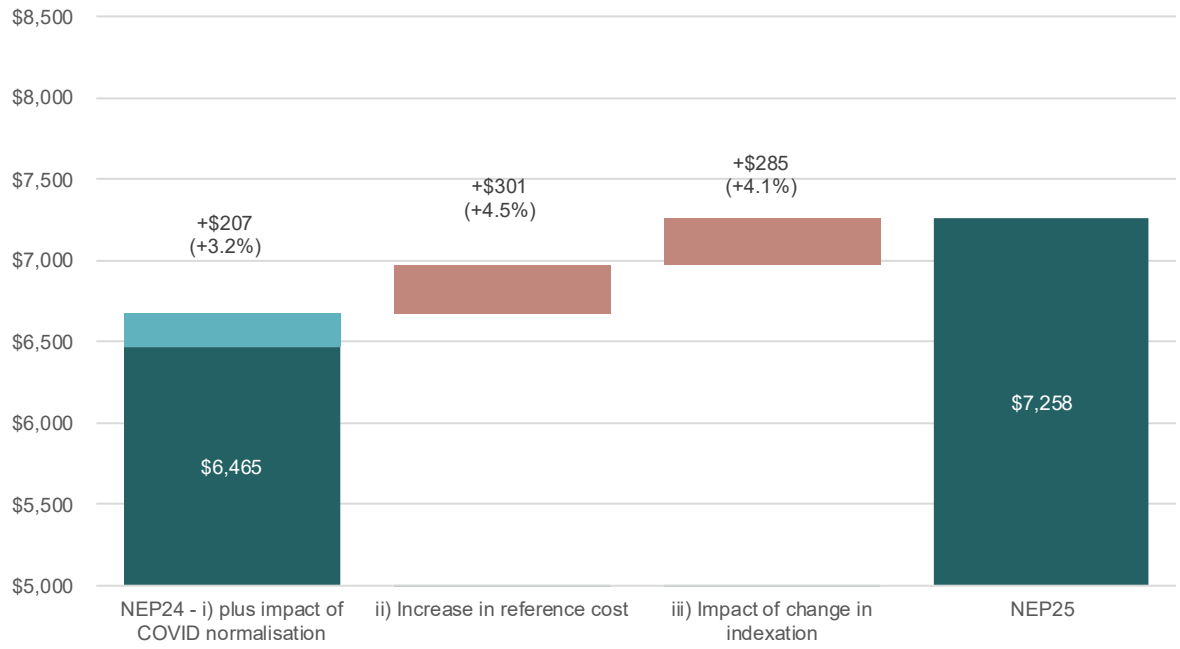
The NEP (underpinned by the reference cost) is developed using only data from the admitted acute stream, which includes the acute care, newborn care and other admitted patient care types[2]. Therefore, while the review covered multiple care streams including emergency department, non-admitted, subacute and admitted mental health, a strong focus was placed on the review of the admitted acute stream and the drivers of activity (including Gross Weighted Activity Units (GWAU)) and cost in this stream.

[1] Clause A41 of the Addendum to the National Health Reform Agreement 2020–26 outlines that where the Pricing Authority makes any significant changes to the activity based funding (ABF) classification systems or costing methodologies, the effect of such changes must be back-cast to the year prior to their implementation for the purpose of calculating Commonwealth funding. Efficient price growth is determined using a ‘back-cast’ NEP as specified in the National Efficient Price Determination.

[2] In-scope admitted acute activity is specified in Section 2.1.2 of the National Pricing Model Technical Specifications 2025-26 .

Drivers of growth in NEP25

Figure 1: Breakdown of changes from NEP24 to NEP25



Several factors contributed to the 12.3% increase between NEP24 and the NEP25.

- The NEP24 Determination included a COVID-19 normalisation adjustment which reduced the reference cost and hence the NEP by approximately 3.2%. This adjustment sought to account for the impact that lower activity volumes in the 2021-22 year had on increasing average costs per GWAU. While the draft NEP25 figure would still reflect the latest submitted costs, without the normalisation adjustment, the NEP24 would have been higher. Hence this contributed to part of the increase between NEP24 and the NEP25. NEP
- The reference cost was developed using the most recent available admitted acute cost data. Updating the national cost models to 2022-23 data submitted by jurisdictions increased the resulting reference cost, contributing a further 4.6% to increasing the NEP.
- An indexation rate is required to bring 2022-23 costs forward to the 2025-26 year for the draft determination. In addition to developing the reference cost, the 2022-23 cost data was also used for the indexation rate calculations. This resulted in a higher indexation rate for the NEP25 (compared to the indexation rate for NEP24) and a further 4.1% increase.

Activity increased over 2022-23 following reductions in 2021-22

For many jurisdictions, 2021-22 represented a period which was still impacted by COVID-19. It was observed that admitted acute separations reduced nationally in 2021-22 by 2.1% before significantly increasing by 4.8% for 2022-23. Furthermore, Gross Weighted Activity Unit (GWAU)[3] volumes (a standardised unit of activity adjusting for casemix) reduced by 1.9% in 2021-22, but rebounded strongly to grow by 7.3% in 2022-23.

This movement in activity (both separations and GWAU) reflected the post COVID-19 recovery phase that many jurisdictions entered in 2022-23, including delivering increased elective surgery activity which had previously been delayed.

The GWAU growth exceeding the increase in separation volumes, indicated that health systems were dealing with a more complex casemix than the prior year, which likely required more resource usage.

Changes to average cost per GWAU

Table 1: Admitted acute average cost per GWAU and growth rate for 2020-21 to 2022-23

	Year			Growth		
Item	2020-21	2021-22	2022-23	2020-21 to 2021-22	2021-22 to 2022-23	Average annual
Average cost per GWAU ($)	$5,435	$5,887	$6,199	8.3%	5.3%	6.8%

While acute admitted in-scope costs (for the NHRA) grew in 2021-22, the reduction in GWAU in that year meant that most jurisdictions saw an increase in the average cost per GWAU, with an increase of 8.3% nationally. This observed trend of the 'sticky' nature of hospital costs not reducing in line with reduced activity necessitated IHACPA's COVID-19 normalisation adjustment in prior years NEP models.

In 2022-23, with the rebound of activity volumes nationally, costs continued to increase leading to an increase in the average cost per GWAU of 5.3%, which varied by jurisdiction. For several jurisdictions, a strong contributor to this growth was an increase in labour costs.

Labour costs contributed to cost increases

Analysis of the national cost model data showed a large increase in total in-scope labour costs across most jurisdictions between 2021-22 and 2022-23.

The Nursing, Medical, Allied Health and Non-clinical cost buckets that are predominantly labour cost driven grew by a combined 13.3% in total across all activity streams (5.4% on a per GWAU basis), inclusive of both direct and overhead costs. These cost buckets made up approximately 50% of costs in 2022-23. The increases in labour costs were driven by a combination of factors impacting the volume and average cost of labour:

[3] GWAU were used as a casemix adjusted measure of activity as this is the measure used to determine the reference cost. See Section 0 for further details.

- Between 2021-22 and 2022-23, there was evidence of increases in health workforce, which grew by 2.2% nationally according to reported statistics from the Australian Institute of Health and Welfare (AIHW). However, some states had significantly more growth, for example Victoria, which showed 9% - 10% growth in medical officers, 6.6% growth in nursing Full Time Equivalents (FTE) and 9.3% growth in allied health FTE. Conversely, growth in FTE in New South Wales appeared to be lower at 1.0% across the state with only 0.8% growth in nursing FTE which is typically the largest component of the workforce.
- Labour costs also increased between 2021-22 and 2022-23 due to a range of factors, including new enterprise bargaining agreements (EBAs), backpay of increases deferred during COVID-19 as well as additional cost of living / 'top up' allowances which all contribute to increases in labour costs. Over the period covered in this report, the EBA increases appeared to be slightly higher in some states compared to others and this was a driver of overall labour cost variations between jurisdictions. The Wage Price Index (WPI) for *Public sector - Health care and social assistance* also indicated growth of 2.5% in the total hourly rates of pay excluding bonuses for the year to 30 June 2023.
- A report by the Queensland Audit jurisdictions also reported the need for more contractor/agency staff, which typically attract a premium.

These factors increase the size and average cost of public hospital workforce, acting as a significant driver to the increase in the NEP.

Oncosts also increasing growth

In addition to growth in labour costs, double-digit growth in total oncosts was observed in all jurisdictions in 2022-23. This cost bucket grew by a total of 22.9% nationally (combined across all activity streams) and ranged from 16.4% to 31.0% by jurisdiction. The equivalent average oncost per GWAU grew by 14.4% over this period.

Drilling down further, it was observed that overheads for the oncost cost bucket grew at a higher rate (30.4% nationally, ranging between 7.3% to 56.8% by jurisdiction) compared to direct oncosts (20.6% nationally, ranging between 17.7% to 40.3% by jurisdiction).

The oncosts cost bucket includes superannuation contributions, long service leave, workers' compensation premiums, and redundancy-related payments. Therefore, while known increases in superannuation, wages and expansion of the workforce, or other short-term increases such as annual or long service leave following COVID-19, would be expected to increase costs in this cost bucket, the overall level of increase still exceeded expectations.

Cost growth pressures may continue into 2023-24

Each year, the NEP is calculated using data from 3 years prior, and although the focus of the review was on the 2022-23 year, some of the insights from the lines of inquiry indicated that components of the cost growth were likely to continue. These may be reflected in the 2023-24 NHCDC cost submission and beyond, impacting future NEP determinations.

- EBAs are typically negotiated and set for several years and hence many of the higher increases observed for the 2022-23 will carry through into 2023-24. This includes some of the provisions for cost of living adjustments in some states.
- The WPI for Public sector - Health care and social assistance also indicated higher growth of 3.8% in the total hourly rates of pay excluding bonuses for the year to 30 June 2024.
- Some jurisdiction-published data already showed higher growth in workforce. For example, the Queensland government *Sector workforce profile* showed that while frontline health practitioners and nurses and midwives grew around 1.5% in the year to March 2023, the same categories grew by 5.7% to 6.6% in the year to March 2024, which may result in higher workforce costs in that jurisdiction.
- Oncosts may also further increase as a result of these FTE increases but also as future increases to the superannuation guarantee charges are built in. Furthermore, there were already media reports of significant increases to workers compensation premiums in Victoria of over 50% for 2023-24 which would also contribute to growth in this bucket.
- The Health Service Plan review of Victoria's health system in August 2024 identified that the system had been put under heavy strain by an ageing population, higher prevalence of chronic conditions and exacerbated by COVID-19. Furthermore, there were recent media reports on the significant cost pressures experienced by the health system in Victoria, with many health services experiencing deficits in 2023-24 and an additional $1.5 billion in funding committed to the system. This additional expenditure would likely flow into the submitted costs in the short term.

Separately to this, activity data for 2023-24 has already been submitted and IHACPA's quarterly activity reporting for 2023-24 indicated continued growth in activity across all streams with a 5.9% increase in NWAU for the year. While it remains to be seen what this translates to in terms of average costs (as the NHCDC for 2023-24 is yet to be finalised by jurisdictions), the increases in activity would likely continue to put further pressure on total funding volumes under the NHRA. Unlike prior years, the NEP25 did not include any COVID-19 normalisation adjustment, and it is unlikely to be incorporated for NEP26 which uses 2023-24 NHCDC data.

Recent quarterly activity reports by IHACPA showed an emerging reduction in average length of stay for admitted acute separations. To the extent that reductions in average length of stay are translated into a greater volume of separations (and hence GWAU) delivered by the cost base, this increase in technical efficiency may reduce the growth in average cost per GWAU.

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Project background

Purpose and approach

Purpose

Scyne Advisory was engaged by the Independent Health and Aged Care Pricing Authority (IHACPA) to conduct a comprehensive review of the activity and cost data used in the development of the draft National Efficient Price (NEP) Determination for 2025-26 (NEP25) and report on growth patterns in this data.

The NEP25 Determination saw significant growth compared to the previous year, in part due to cost increases in the National Hospital Cost Data Collection (NHCDC) between 2021-22 and 2022-23, which served as the basis for the NEP.

Furthermore, the volume of public hospital activity continued to grow year-on-year. Growth in the level of activity estimates for 2025-26, in conjunction with the price, have meant that projected growth (and hence funding) for 2025-26 is expected to be much larger than past years.

Scyne Advisory was appointed to analyse both the cost and activity datasets to identify and isolate areas of above-average growth. The purpose of this work was to gain a deeper understanding of the primary contributors to the growth in the NEP25.

This report presents a national summary of the analysis undertaken as part of this review. A separate detailed report was developed for IHACPA. It is noted that although the analysis was performed on the models underpinning the draft NEP25, there was minimal change between the draft and final NEP25 results.

Scope of this review

The scope of this review was to analyse both the cost and activity datasets and data sources to identify and isolate areas of above average growth. These included:

- Data sets underpinning the NEP25 and historical NEPs
- Quality assurance reports for the NHCDC submissions
- IHACPA's quarterly activity reports
- Data quality statements and Statements of Assurance from states and territories; and
- Enterprise bargaining agreement data where feasible to understand changes in workforce costs and compare against findings in the cost data

The analysis of the cost and activity data focused on the primary activity streams that formed part of the NEP25 Determination developed by IHACPA as at December 2024. These included the following:

- Admitted acute
- Subacute
- Admitted mental health
- Non-admitted; and

- Emergency department

The following activity streams and models were not in scope for the review:

- Community mental health
- Safety and quality adjustments – including avoidable readmissions and hospital acquired complications
- National Efficient Cost model

In performing this review, Scyne Advisory did not act to provide quality assurance over the data preparation and modelling undertaken by IHACPA to develop the NEP25 determination, as IHACPA had separately engaged another third party to provide quality assurance and validation.

Approach to this review

The purpose of this review was to analyse and identify drivers for growth in the NEP25 Determination. The NEP25 Determination used cost data from the National Hospital Cost Data Collection (NHCDC) submitted by jurisdictions for the 2022-23 financial year. Hence, this review analysed cost and activity data for 2022-23 and the prior two years (2020-21 and 2021-22).

The NEP (underpinned by the reference cost) is developed using only the admitted acute stream. Therefore, a strong focus was placed on the review of the admitted acute stream. However, it is acknowledged that activity and cost growth was observed across multiple activity categories. Though not directly impacting the reference cost, growth in average cost for theses streams puts upwards pressure on the price weights and hence funding nationally as a second order impact. The review also considered whether the cost and activity changes were consistent across other streams or influenced by the cost allocation process between streams. Hence this review covered the other streams listed above to identify and understand drivers in activity and cost changes, albeit with a greater focus on drivers of activity growth.

In conducting the review, the following measures were assessed

- Growth in raw activity volumes (e.g. separation volumes for admitted acute, emergency department presentations or non-admitted service events)
- Growth in the Gross Weighed Activity Unit (GWAU), as measured derived using the NEP24 pricing model parameters. GWAU was chosen as it represents a standardised unit of activity (adjusting for casemix) and also because the reference cost underpinning the NEP25 was derived using GWAU24.
- Growth in total in-scope costs, as defined in the NEP models
- Growth in average cost per GWAU – this measure provides casemix adjusted measure of analysing growth in costs over and above changes in activity volumes and gives an indication of potential improvements in efficiency. Notably, the reference cost (which forms the basis for the NEP) is a measure of average cost per unit of activity.

These key measures were segmented and analysed at multiple levels of granularity to identify drivers of growth, including

- Identifying drivers of growth at jurisdiction, local hospital network (LHN) and hospital level
- Identifying activity growth at a classification level (e.g. AR-DRG, Tier 2 clinic level)
- Identifying trends in growth at the NHCDC cost bucket[4] level (a standardised grouping of hospital costs based on the type of service or resourced used for example, nursing, allied health, operating theatre) to identify drivers of cost growth
- Segmenting data by characteristics important to a specific activity stream for example by triage category for emergency department or analysing the growth in multidisciplinary service events for non-admitted.

In performing this review, other potential cost drivers not listed above, such as length of stay and patient complexity, were not directly examined and further investigations could enhance the understanding of whether these also contributed to the trends in activity and cost observed in 2022-23.

To supplement the activity and cost data analysis, Scyne also undertook a review of supporting information and existing reporting available to IHACPA or through additional research. This included:

- Reviewing the statements of assurance and data quality statements by jurisdictions to identify reasons for significant changes in activity volumes and cost profiles.
- Reviewing the quarterly activity reports produced by IHACPA, analysing the findings and breakdown of activity growth identified by IHACPA.
- Conducting a high-level desktop review using publicly available[5] data to identify, compile, and analyse changes in enterprise bargaining agreement and full-time equivalent (FTE) workforce data to understand changes in healthcare workforce costs by state and territory.

Data used for this review

The modelled output datasets for the draft NEP25 were provided by IHACPA as the basis for this review, to ensure that the definition of in-scope of activity and costs was consistent with the NEP25, including definitions for ABF hospitals, in-scope cost buckets and other trimming rules applied to derive the final model output datasets.

The final modelled output datasets were also provided for NEP23 and NEP24.

Raw activity and NHCDC submissions were used where further analysis was required to understand the impact of IHACPA's modelling process and/or exclusions used to derive the final datasets.

In November 2022, the Australian Capital Territory (ACT) implemented a significant health ICT infrastructure project, the Digital Health Record (DHR). DHR replaced 40 legacy systems, resulting in key data sources for ACT reporting being replaced. This impacted the ACT's ability to submit 2022-23 costing data for the National Hospital Cost Data Collection

[4] The NHCDC cost bucket matrix for 2022-23 is defined in the data request specifications on IHACPA's website (National Hospital Cost Data Collection (NHCDC) Public Sector 2022–23 | Resources | IHACPA)

[5] This information is derived from publicly available sources and may not constitute a comprehensive or exhaustive list of the enterprise bargain agreements or FTE workforce changes occurring during this reporting period

(NHCDC). Consequently, the ACT was excluded from the analysis and, therefore, from this report. References to 'all jurisdictions' in this report should be understood as excluding the ACT.

In addition to the modelled output datasets, the following additional information and data were used in this review:

- Statements of assurance from the jurisdictions and provided to IHACPA with activity data submissions for 2020-21 to 2022-23. At the time of this review, activity for 2023-24 had been submitted and was also made available.
- Data quality statements from the jurisdiction and provided to IHACPA with NHCDC submissions from 2020-21 to 2022-23 inclusive.
- IHACPA NHCDC cost report and appendices for 2020-21 to 2022-23
- IHCAPA quarterly activity reports for 2020-21 to 2023-24 inclusive.

Background to the NEP development process

IHACPA enables the implementation of national activity based funding (ABF) for Australian public hospital services through the annual determination of the national efficient price (NEP) and national efficient cost (NEC). These determinations play a crucial role in calculating the Commonwealth funding contribution to Australian public hospital services. As previously discussed, the NEC model, and hence the determination was excluded from the scope of this review. The sections below describe the key components for determining the NEP only.

The NEP is based on the average cost of an admitted acute episode of care provided in public hospitals during a financial year. IHACPA undertakes the following key activities to develop the NEP:

1. **Data collection and preparation** – the NEP is developed utilising public hospital activity and cost data submitted by jurisdictions, for all streams that form part of the national cost models which include admitted acute, subacute and non-acute admitted, emergency department, non-admitted and admitted and community mental health. The main source of cost data is the NHCDC, with 2022-23 data used to develop the draft NEP25 determination.
   The cost and activity data are prepared for modelling which included processes to trim outliers as well as data preparation steps to remove costs that are funded under other Commonwealth programs such as Pharmaceutical Benefits Scheme (PBS) and blood product costs. This is to ensure that these costs do not form part of the funding under the NHRA and hence funded twice by the Commonwealth.
2. **Development of that national cost models for each stream** – modelling is performed using a range of statistical methods to calculate average costs per unit of activity under the agreed specifications. Each episode of patient care is allocated a national weighted activity unit (NWAU), which is a measure of hospital activity expressed as a common unit that enables comparison across different activities and streams. The models also derive the Gross Weighted Activity Unit (GWAU), which is equal to the NWAU but without private patient and safety and quality adjustments, calculated for all episodes irrespective of funding source.

The national cost models also calculate relevant loadings used to adjust for legitimate and unavoidable cost differences (as specified in Clause A47 of the NHRA) such as the indigenous loading, patient and treatment remoteness loadings and other adjustments.

3. **Derivation of the reference cost** – the admitted acute model is used to derive the reference cost, a standardised mean representing the average cost per unit of activity, using GWAU as the basis. The reference cost is used to transform the average cost parameters from the national cost models into cost weights, enabling comparison of relative costs of activity within, and across streams.
4. **Calculation of indexation to convert to a pricing model** – 2022-23 NHCDC data was used to develop the NEP25 determination (applicable for the 2025-26 financial year). An indexation rate is therefore necessary to inflate the 2022-23 cost models to a level reflective of anticipated costs in 2025-26. The indexation rate is determined using data from the previous five years, with additional adjustments to account for additional expected increases such as increase to the superannuation guarantee charge.
   The indexation rate and other inflation adjustments are applied to the reference cost to derive the NEP.

Further details on the development of the NEP are available in the NEP determination and National Pricing Model Technical Specifications published by IHACPA for each year.

Key findings

The following section presents the key findings from Scyne's analysis, highlighting the most significant insights derived throughout this engagement. These findings represent the primary factors identified across all care streams, contributing to the uplift of the NEP25 Determination.

Analysis on reference cost and growth in NEP

Each year, IHACPA uses updated hospital activity and cost data to set the National Efficient Price (NEP). The NEP25 (NEP for 2025-26) of $7,258 (per activity unit) represented a significant increase of 12.3% compared to NEP24 ($6,465).

Responsibility for public hospital funding under the NHRA is shared between the Commonwealth and state and territory governments. Although the analysis focused on the growth between the published NEP24 and draft NEP25, growth in Commonwealth funding is calculated using efficient price growth which was 5.9%. Funding calculations are also impacted by other factors including a national funding cap of 6.5%.

Table 2: Growth in NEP and reference cost for NEP21 to NEP25 inclusive

		NEP21	NEP22^	NEP23^	NEP24^	NEP25
NHCDC data year used		**2018-19**	**2019-20**	**2020-21**	**2021-22**	**2022-23**
Reference cost		$5,167	$5,307	$5,492	$5,668	$6,114
Growth in reference cost	($)		$140	$185	$176	$446
	(%)		2.7%	3.5%	3.2%	7.9%
National Efficient Price (NEP)		$5,597	$5,797	$6,032	$6,465	$7,258
Growth in NEP	($)		$200	$235	$433	$793
	(%)		3.6%	4.1%	7.2%	12.3%

^COVID-19 normalisation adjustment applied to NEP22, NEP23 and NEP24

Table 2 summarises the change in the previous five NEP Determinations as well as the reference cost underpinning the NEP, a standardised mean cost of an activity unit. Table 2 clearly shows that the increase in the NEP of 12.3% between the NEP24 and NEP25 determinations was well above the increases observed in prior years.

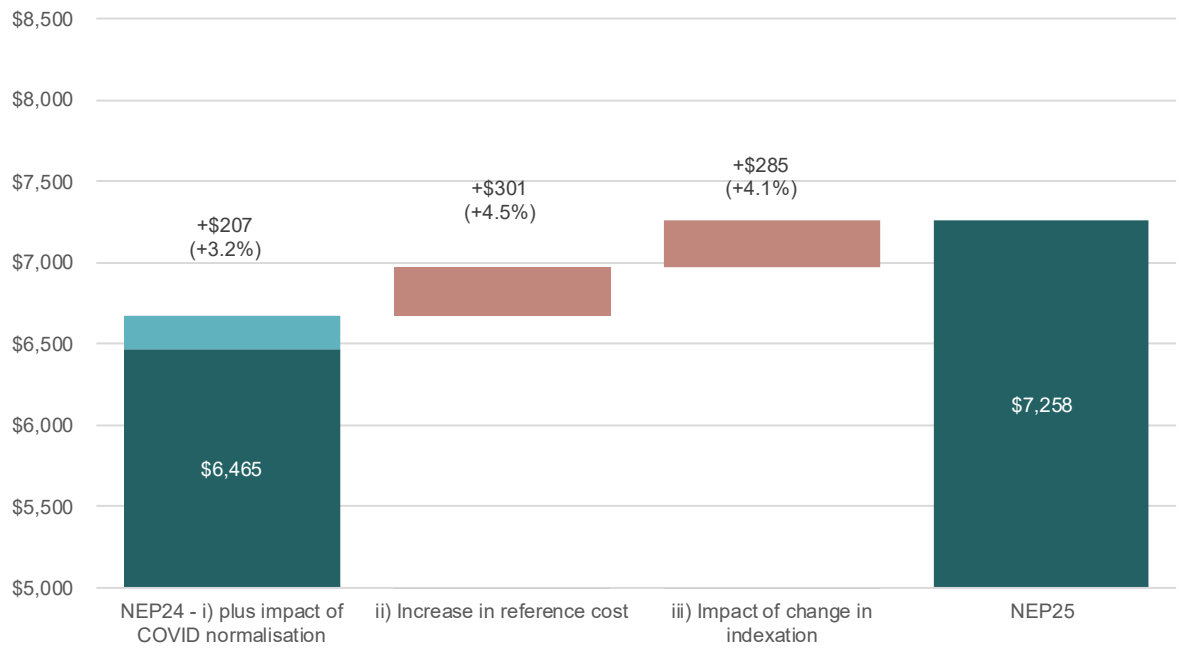
The year on year change in the NEP is influenced by several factors:

- Changes in the reference cost – a standardised mean cost of an activity unit derived using that year's acute admitted cost model (in this instance, using 2022-23 cost data)

- Changes in the indexation rate – cost data is lagged by three years compared to the year for which the NEP is applied (i.e. the NEP25 is set using 2022-23 cost data) and an indexation rate is required to inflate the reference cost to the year for which the NEP is applied
- Other adjustments applied in the derivation of the NEP – historically this has included adjustments for items such as COVID-19 normalisation or known increases in the superannuation guarantee charge.

Figure 2 further breaks down these movements as they specifically related to the changes between the NEP24 and NEP25.

Figure 2: Breakdown of changes from NEP24 to NEP25



The 12.3% increase in NEP can be explained using the step-by-step changes shown in Figure 2

i. During the COVID-19 pandemic, it was observed that a large proportion of hospital cost were inflexible and the observed reduction in public hospital activity (outside of expected long term trends) did not coincide with a reduction in costs. This led to a significant increase in the average cost per unit of activity which was addressed in the NEP24 Determination by the COVID-19 normalisation adjustment where the reference cost was multiplied by a factor of 0.966511 for the final NEP24 determination[6].

   Removing the COVID-19 normalisation adjustment would have increased the calculated NEP24 figure by $207 to $6,672 (or approximately **3.2%**) compared to the published NEP24 of $6,465.

[6] See IHACPA National Pricing Model 2024-25 technical specifications March 2024 for further details

ii. A key driver of this increase in NEP is the increase in the reference cost resulting from increased costs submitted for the 2022-23 NHCDC used in the national cost models. Table 2 showed that the updated reference cost was $6,117 for the NEP25 which was a 7.9% increase from the reference cost published in the NEP24.

    However, as explained above, a portion of the increase in reference cost was related to the COVID-19 normalisation adjustment. After accounting for the COVID-19 normalisation, updating the national cost models for 2022-23 cost data resulted in a further 4.6% increase to the NEP.

    The 4.6% increase reflected increases in the average cost per unit of acute admitted activity, which were driven by increases in in-scope costs over and above any activity volume changes (as measured by GWAU).

iii. Finally, increases in the costs submitted for 2022-23 also increased the indexation rate used to transform the reference cost into the NEP, as this latest data is included in IHACPA's indexation methodology. The calculated indexation rate for the draft NEP25 was 5.6% (compared to 4.2% for NEP24). The increase in the indexation rate (applied over the three year forecast period) therefore contributed **4.1%** of the increase in the NEP25.

The subsequent sections of this report focus on the drivers that impact the growth in item ii above, reflecting the growth in the activity and cost inputs submitted by jurisdictions.

It is noted that the reference cost is calculated using a different set of cost model parameters each year (i.e. different GWAU versions are used as the denominator for the average cost per unit). The rest of the analysis presented in this report standardises for cost model changes between the two years by using GWAU24 as the unit of activity measure for all years.

Key finding 1: Activity significantly increased between 2021-22 and 2022-23

This review analysed the drivers of activity and cost growth across several activity streams including admitted acute, subacute, admitted mental health, emergency department and non-admitted. Although the NEP is derived using only admitted acute activity and cost data, growth in activity volumes in the other streams also determine funding under the NHRA. As such, this report gives particular focus to understanding changes in activity growth.

Admitted acute activity

For many jurisdictions, 2021-22 represented a period which was still impacted by COVID-19. In particular, admitted acute separations reduced or had low growth for many jurisdictions for 2021-22, with these reductions underpinning IHACPA's decision to continue adopting a COVID-19 normalisation adjustment for NEP24. This trend reversed in 2022-23, with all jurisdictions exhibiting growth in separation volumes as well as GWAU, though the rate of growth varied by jurisdiction.

Table 3: Growth in admitted acute separations and GWAU for 2020-21 to 2022-23

	Growth Rate	
Item	**2020-21 to 2021-22**	**2021-22 to 2022-23**
Separations	-2.1%	4.8%
GWAU	-1.9%	7.3%

As shown in Table 3, growth in GWAU (as measured by GWAU24) grew at a faster rate than growth in separations, indicating a potential shift to a higher complexity casemix.

The activity patterns were quite consistent when reviewed across Major Diagnostic Categories (MDCs) which groups diagnoses across specialties. Activity reduced across most MDCs[7] in 2021-22 with the exception of a small number of MDCs which saw growth - mostly those related to ventilation, respiratory disease categories and infectious diseases which was consistent with growth in COVID-19 activity. In 2022-23, with the lifting of elective surgery restrictions, most MDCs showed a rebound and the COVID-19 related MDCs continued to see growth.

Emergency department, non-admitted, subacute and mental health

Table 4: Growth in episodes and GWAU for all other streams for 2020-21 to 2022-23

	Growth in episodes		Growth in GWAU	
Item	**2020-21 to 2021-22**	**2021-22 to 2022-23**	**2020-21 to 2021-22**	**2021-22 to 2022-23**
Emergency Department	-1.6%	4.7%	-1.3%	6.8%
Non-admitted	7.1%	2.6%	4.5%	6.1%
Subacute	6.0%	9.4%	7.4%	11.1%
Admitted Mental Health	-4.6%	13.6%	3.9%	12.6%

As shown in Table 4, a similar trend to acute admitted was exhibited for emergency department presentations, with reductions in presentations and GWAU for 2021-22 followed by significant increases in 2022-23. In contrast, non-admitted service events exhibited growth across both years, with significant variation by jurisdiction.

Significant increases in activity and GWAU were also observed in subacute and mental health, with both streams displaying strong growth across both years.

Further detailed analysis on the drivers of the activity growth for all streams is presented in the later sections of this report.

[7] In the Australian Refined Diagnosis-Related Groups (AR-DRG) system, a Major Diagnostic Category (MDC) is a broad classification that groups diagnoses based on the affected organ system or medical specialty. Each MDC is further divided into Diagnosis-Related Groups (DRGs), which refine classifications based on specific conditions and treatments.

Key finding 2: Hospital costs increased over and above increases in activity

The reduced GWAU from 2020-21 to 2021-22 meant that most jurisdictions saw an increase in the average cost per GWAU, with an increase of 8.3% nationally in the admitted acute care stream. This observed trend of the 'sticky' nature of hospital costs not reducing in line with reduced activity necessitated IHACPA's COVID-19 normalisation adjustment in prior years NEP models.

However, as activity volumes (separations, presentation, etc.) and GWAU rebounded in 2022-23, costs continued to increase, leading to an increase in the average cost per GWAU of 5.3% for the admitted acute stream that is used to develop the NEP.

Table 5: Growth in total in-scope cost and average cost per GWAU for all streams for 2020-21 to 2022-23

	Growth in total in-scope cost ($bn)			Growth in cost per GWAU		
Item	2020-21 to 2021-22	2021-22 to 2022-23	Average annual	2020-21 to 2021-22	2021-22 to 2022-23	Average annual
Admitted acute	6.3%	13.0%	9.6%	8.3%	5.3%	6.8%
Emergency Department	10.9%	14.5%	12.7%	12.4%	7.2%	9.8%
Non-admitted	11.0%	11.7%	11.4%	6.2%	5.3%	5.8%
Subacute	13.0%	19.2%	16.0%	5.2%	7.3%	6.2%
Admitted Mental Health	19.3%	18.0%	18.6%	14.8%	4.8%	9.7%

Table 5 shows that, similar to the admitted acute stream, average cost per GWAU also increased across all the other streams, over and above increases in GWAUs that were observed in 2022-23.

Key finding 3: Labour costs have contributed to cost increases in most jurisdictions

Analysis of the input costs to the national cost models showed a material increase in total in-scope labour costs across most jurisdictions and across all streams between 2021-22 and 2022-23 evidenced by the significant rises in the Nursing, Medical, Allied Health and Non-clinical cost buckets which are predominantly labour cost driven. These grew by a combined 13.3% in total across all activity streams (5.4% on a per GWAU basis) and labour cost growth was observed across most jurisdictions.

A review of publicly available data on EBAs and FTE growth for the four largest jurisdictions provided some insights into the reasons for growth in labour costs. These include:

- **New employee wage agreements**: Significant industrial relations activity occurred in 2022-23, with many jurisdictions signing new wage agreements for multiple employee cohorts. These new agreements included increased wages and allowances

compared to previous years, raising the cost base of the existing workforce. The increases observed in the relevant EBAs for the period varied by workforce category but ranged from 2.5% to 4.0%.

Additionally, EBAs for Victoria showed that an additional week of annual leave was granted to employees covered under the Health and Allied Services Managers and Administrative Workers (Victorian Public Sector) (Single Interest Employers Agreement (2021-2025), effective from April 2022. All else being equal this would have increased the leave balance of the workforce further contributing to an increase in oncosts.

- **Back paid wages:** Some wage agreements were signed after the initial increases should have been applied. Consequently, wages needed to be backpaid to relevant workforce categories covered under those EBAs for parts of the 2021-22 financial year. Due to the timing of these payments, it is likely that they were included in the 2022-23 costs.
- **Additional payments:** A range of ad-hoc extra payments were made to staff in 2022-23. These payments varied by state and employee group but were generally made in recognition of the cost-of-living pressures on the workforce. The additional payments were quite varied, and paid either as a set dollar amount ranging between $500 to $3,000 or as a percentage of wages e.g. the allowance in Queensland was up to 3% of base salary.

Growth in workforce: The increase in wage costs was compounded by the growth in the number of workers. A range of publicly available data sources confirmed that there has been an expansion of the full-time equivalent (FTE) public health workforce across the majority of jurisdictions, further contributing to the increase in healthcare cost delivery. For example, reported statistics from the Australian Institute of Health and Welfare (AIHW) indicated health workforce grew by 2.2% nationally. However, some states had significantly more growth, for example Victoria, which showed 9% - 10% growth in medical officers, 6.6% growth in nursing FTE and 9.3% growth in allied health FTE. Conversely, growth in FTE in New South Wales appeared to be lower at 1.0% across the state and only 0.8% growth in nursing FTE which is typically the largest component of the workforce.

Further details on factors influencing labour growth are provided in the section *Factors influencing labour costs*.

Key finding 4: Significant growth in oncosts was observed across all jurisdictions

In addition to growth in labour costs, double-digit growth in total oncosts was observed in all jurisdictions in 2022-23, with this cost bucket growing by a total of 22.9% (combined across all activity streams). This ranged from 16.4% to 31.0% by jurisdiction.

Table 6: Average oncost per GWAU and growth rate for 2020-21 to 2022-23

	Year			Growth rate	
Item	**2020-21**	**2021-22**	**2022-23**	**2020-21 to 2021-22**	**2021-22 to 2022-23**
Average oncost per GWAU ($)	$420	$488	$558	16.1%	14.4%

On an average oncost per GWAU basis, there was also double-digit growth in most jurisdictions, with an overall growth rate of 14.4% nationally, outpacing the overall observed growth of 5.3% in average cost per GWAU.

Drilling down further, it was observed that overheads for the oncost cost bucket in 2022-23 grew at a higher rate (30.4% nationally, ranging between 7.3% to 56.8% by jurisdiction) compared to direct oncosts (20.6% nationally, ranging between 17.7% to 40.3% by jurisdiction).

The oncosts cost bucket includes superannuation contributions, long service leave, workers' compensation premiums, and redundancy-related payments. Therefore, while known increases in wages and the superannuation guarantee from 10.5% to 11.0% for 2022-23, as well as an expansion of the workforce would be expected to increase costs in this cost bucket, the overall level of increase still exceeds expectations.

The trend of increased oncosts (both total and per GWAU) was observed across the majority of activity streams and jurisdictions, and further detail is presented in the sections later in this report.

The four key findings described above summarise the key changes in cost for NEP25. The following sections provide further insight into the factors influencing changes to labour costs, as well as specific factors that influenced cost growth in each care type.

Factors influencing labour costs

A key driver of the overall increase in total in-scope cost was the increase in labour costs. As such, Scyne conducted a desktop review of publicly available sources by workforce category for each the four largest jurisdictions, to understand the key factors influencing labour costs for the 2022-23 financial year. Typically, such agreements are negotiated for multiple years and to the extent information was also available in these documents for 2023-24, this information was also considered (see the section *Cost growth pressures may continue into 2023-24*). Otherwise, agreements outside these periods were not included in this review. A summary of these findings for jurisdictions with the most significant impact are shown below.

Queensland

Desktop research has highlighted the following factors that may have contributed to the growth in labour costs:

- New certified agreements[8] were signed for Queensland Health employee nursing staff, medical officers, allied health professionals and non-clinical staff in 2022-23. See Appendix A for further details.
    - While different agreements were signed for each employee group, the quantum of the 2022-23 increase was consistently 4%.
    - All agreements were signed after their formal date of effect, necessitating back payments of varying sizes. Consequently, wages needed to be back paid to relevant individuals for parts of the 2021-22 financial year.
    - Cost-of-living adjustment (COLA) payments were introduced in the new agreements to help employees keep up with inflation and rising living costs. These payments are capped at a maximum of 3% of base wages each year during the term of the agreement, provided the annual Consumer Price Index (CPI) exceeds the agreed-upon wage increase.
    - The Queensland Government maintained its contribution of up to 12.75% of an employee's annual salary towards superannuation in 2022-23. Consequently, there were no additional increases to superannuation during this period.
- Additional data from the Queensland Audit Office's *Health 2023*[9] report identified:

[8] Queensland Government. Queensland Health Careers. Awards, agreements and orders. https://www.careers.health.qld.gov.au/working-for-us/awards-agreements-and-orders

[9] Queensland Audit Office. Health 2023 (Report 6: 2023–24). https://www.qao.qld.gov.au/reports-resources/reports-parliament/health-2023

  - A 2.9% increase in the number of full-time equivalent (FTE) staff working across the 16 Queensland Hospital and Health Services.
  - Increased costs due to the use of external clinical contractors and agency staff to manage workforce shortages and cover employee leave and backfill, as well as an increase in agency rates and fees.

- The AIHW's Hospital resources data tables[10] for public hospital services in 2021-22 and 2022-23 also reported FTE growth in salaried medical officers (3.8%), nurses (2.0%) and diagnostic and allied health professionals (2.5%) over this period (see Appendix B).

The trend of cost growth is expected to continue into 2023-24, fuelled by further 4% wage increases for the majority of employees, the disbursement of the first year's allied health and non-clinical COLA payments, and the implementation of new employee agreements for nursing, medical, allied health, and non-clinical staff at Mater Health. Additionally, the Queensland Government's 'Sector Workforce Profile'[11] reports a 6.5% increase in health workforce FTE for the year ending March 2024, compared to a 1.6% rise for the year ending March 2023.

Victoria

Desktop research has highlighted the following factors that may have contributed to the growth in labour costs:

- New agreements[12] were signed for some Victorian public health employees during FY23, including medical specialists, doctors in training, allied health professionals and mental health employees. Nursing staff also received a pay increase as a part of an agreement signed in February 2022. While the wage increases varied by cohort, they were in the range of 2-3%. See Appendix A for further details.
- There was a significant increase in the number of healthcare employees. According to the Victorian Public Sector Commission's 'Number of employees 2023'[13] publication, in 2022-23 there was:
  - 5.2% rise in public healthcare employment (5,355 FTE)
  - 10.5% rise in nurses and midwives (4,005 FTE)
- The AIHW's Hospital resources data tables[10] for 2021-22 and 2022-23 also reported material FTE growth across majority of workforce categories. In addition to strong growth in nurses, the AIHW reported a 9.6% increase in salaried medical officers and a 9.3% increase in diagnostic and allied health professionals over this period (see Appendix B).

[10] Australian Institute of Health and Welfare - Average full-time equivalent staff, by staffing category, public hospital services, states and territories. https://www.aihw.gov.au/hospitals/latest-updates-and-downloads/data

[11] Queensland Government, For government employees. Sector workforce profile. https://www.forgov.qld.gov.au/pay-benefits-and-policy/state-of-the-sector-report/our-people/sector-workforce-profile

[12] Western Health. Awards and Agreements. https://www.westernhealth.org.au/Careers/AwardsAgreements/Pages/default.aspx

[13] Victorian Public Sector Commission. 2023 Workforce data (state of the public sector). Employee and executive numbers 2023. Number of employees 2023. https://vpsc.vic.gov.au/workforce-data-state-of-the-public-sector/past-releases/2023-workforce-data-state-of-the-public-sector/employee-and-executive-numbers-2023/number-of-employees-2023/

Costs are expected to grow further into 2023-24, driven by wage increases for the majority of employees and additional workforce growth. While the Victorian Public Sector Commission's latest publication ('Number of Employees 2024') does not include growth figures for nurses, it does note a 7% increase in public healthcare employment (7,563 FTE).

Western Australia

Desktop research has highlighted the following factors that may have contributed to the growth in labour costs:

- During the 2022-23 period, majority of Western Australia's public sector workforce accepted the State Government's wages policy through union-based negotiations. New agreements were reached at different times throughout the year, covering medical, allied health, and non-clinical staff. Under the policy, wages for public sector employees increased by the greater value of $60 per week or 3.0% per annum. In addition, superannuation also increased by 0.5%. Western Australia nurses received an equivalent pay increase via an administrative agreement as negotiations for the updated industrial agreement were still ongoing during this period. See Appendix A for further details.
- Workers covered by industrial agreements[14] also received a one-off COLA payment in recognition of cost-of-living pressure. This payment ranged from $2,500 to $3,000, depending on workforce category and union negotiations.
- Comparison of the State of the Western Australia Government Sector Workforce reports for 2021-22[15] and 2022-23[16] showed FTE growth across multiple health workforce categories, totalling 4.5% (1,109 FTE):
    - 7.6% increase in medical practitioners (364 FTE)
    - 7.5% increase in nursing support and personal care workers (208 FTE)
    - 5.3% increase in health professionals (179 FTE)
    - 2.6% increase in nurses and midwives (358 FTE)
- The AIHW's Hospital resources data tables[10] for 2021-22 and 2022-23 also reported FTE growth for majority of the referenced workforce categories over this period (see Appendix B).
- Analysis of the 2023-24 Western Australia Government Sector Workforce report[17] indicates a further 4.5% increase in FTE across these four workforce categories, a trend expected to impact WA's cost base in the upcoming period.

[14] Government of Western Australia. Department of Health. Awards and Agreements archive. https://www.health.wa.gov.au/Articles/A_E/Awards-and-Agreements/Awards-and-Agreements-archive

[15] Government of Western Australia. Public Sector Commission. State of the WA Government Sector Workforce 2021-22. https://www.wa.gov.au/system/files/2023-11/sots_2021-22.pdf

[16] Government of Western Australia. Public Sector Commission. State of the WA Government Sector Workforce 2022-23. https://www.wa.gov.au/system/files/2023-12/sots_2022-23.pdf

[17] Government of Western Australia. Public Sector Commission. State of the WA Government Sector Workforce 2023-24. https://www.wa.gov.au/system/files/2024-09/state_of_western_australia_government_sector_workforce_report_2023-24.pdf

New South Wales

Desktop research has highlighted the following factors that may have contributed to the growth in labour costs:

- Salary increases for New South Wales Health employees were limited to the maximum allowable wage increases set by the New South Wales state government. As such, New South Wales Health employees received a salary increase of 3.0% (comprising a pay rise and a 0.5% increase to superannuation) from 1 July 2022 as part of the New South Wales Public Sector Wages Policy 2022[18].
- In addition to the 3.0% wage increase, a one-off $3,000 (including superannuation) thank you payment was made to all employees on New South Wales Health payroll in recognition of their work during the COVID-19 pandemic.
- According to the New South Wales Government's annual workforce profile reports[19], the New South Wales Health Service increased by 4,008 FTE (3.1%) in the 2022-23 year, doubling the increase of the prior year. While the 2022-23 FTE growth rate of medical practitioners (3.0%) was broadly in line with the prior year (3.5%), nursing FTE growth of 3.0% was triple that of the 2021-22 financial year (0.9%).
- The AIHW's Hospital resources data tables[10] for 2021-22 and 2022-23 also reported FTE growth in salaried medical officers and nurses over this period, as well as growth in diagnostic and allied health professionals (1.7%) (see Appendix B).

Labour costs are likely to continue rising in the 2023-24 year. The 2024 Workforce Profile Report[20] reveals that FTE growth in 2023-24 was 3.7%, surpassing the rates of the previous two years. Additionally, the New South Wales Government's wages policy[18] has allowed for annual increases of up to 4.0%, effective from July 1, 2023.

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[18] NSW Government Premier & Cabinet. M2022-05 NSW Public Sector Wages Policy 2022. https://arp.nsw.gov.au/m2022-05-nsw-public-sector-wages-policy-2022/

[19] NSW Government. Public Service Commission. Workforce Profile Report 2023. https://www.psc.nsw.gov.au/assets/psc/PSC-2023-Workforce-Profile-Report.pdf

[20] NSW Government. Premier's Department. Workforce Profile Report 2024. https://www.nsw.gov.au/sites/default/files/noindex/2025-03/workforce-profile-report-2024.pdf

Analysis by care type

The following sections present more detailed findings from the review of activity and cost for each activity stream – acute admitted, emergency department, non-admitted, subacute and admitted mental health.

Admitted acute

The admitted acute stream is the largest stream by in-scope cost, making up approximately $37.5bn in in-scope cost in the national cost models in 2022-23 and with over 6.1 million in-scope separations used for modelling. Importantly, the acute admitted model is the only stream that is used to develop the reference cost, and hence the NEP.

Table 7: Acute separations, GWAU, in-scope cost and average cost per GWAU for 2020-21 to 2022-23

	Year			Growth		
Item	**2020-21**	**2021-22**	**2022-23**	**2020-21 to 2021-22**	**2021-22 to 2022-23**	**Average annual**
Separations	5,977,876	5,850,312	6,130,114	-2.1%	4.8%	1.3%
GWAU	5,735,545	5,629,209	6,042,640	-1.9%	7.3%	2.6%
Cost ($m)	$31,174	$33,136	$37,461	6.3%	13.0%	9.6%
Average cost per GWAU ($)	$5,435	$5,887	$6,199	8.3%	5.3%	6.8%

The following sections present detailed analysis on the growth in activity and cost for the admitted acute stream. The following data caveats and definitions should be noted for the analysis:

- The figures presented exclude all separations from the Australian Capital Territory as cost data was not submitted in 2022-23
- The draft NEP25 modelled output datasets also contained an issue relating to contracted dialysis separations. As such, L61Z (haemodialysis) separations and costs from Western Australia were removed across the three years.
- Cost refers to “in-scope cost” for NEP modelling purposes after applying IHACPA data preparation rules, that is, after removing blood costs, teaching training and research (TTR) costs (for Victoria), Pharmaceutical Benefits Scheme (PBS) and other data preparation stages.
- The GWAU version used for all years is GWAU24.

Activity growth for admitted acute

As previously discussed, admitted acute activity decreased between 2020-21 and 2021-22, before increasing again in 2022-23.

Table 8: Growth in admitted acute separations and GWAU for 2020-21 to 2022-23

	Growth Rate	
Item	**2020-21 to 2021-22**	**2021-22 to 2022-23**
Separations	-2.1%	4.8%
GWAU	-1.9%	7.3%

Table 8 summarises the growth in separations and GWAU. Separations reduced by 2.1% in 2021-22. The changes in the number of separations across jurisdictions was mixed in 2021-22 as many jurisdictions were still impacted by COVID-19 and the impacts (for example elective surgery restrictions) were often state specific. In 2022-23 activity rebounded and growth was positive across all jurisdictions. This trend was similar for growth in GWAU, with an overall reduction of 1.9% in 2021-22 before increasing by 7.3% in 2022-23.

The growth in GWAU of 7.3% in 2022-23 was higher than the 4.8% increase in separations. By jurisdiction, the growth in GWAU ranged from 5.2% to 10.0%. Analysis into the average age profile of acute admitted separations over the period did not indicate a significant difference in 2022-23, but examination of the average GWAU per separation indicated an increase in complexity and change in casemix over the period.

Further analysis into the activity growth for admitted acute showed a consistent pattern when considering diagnosis groups under the Australian Refined Diagnosis Related Group (AR-DRG) classification used in the national cost models for pricing admitted acute activity.

- In 2021-22, the majority of Major Diagnostic Categories (MDCs) saw reductions in activity with the exception of the following MDC groups which were potentially COVID-19 related:
    - MDC 00 – Pre MDC – driven by increases in the adjacent DRGs A13 Ventilation >= 336 Hours, A14 Ventilation >= 96 Hours and < 336 Hours and A40 ECMO
    - MDC 04 – Diseases and Disorders of the Respiratory System – driven by increases in E40 Respiratory System Disorders with Ventilator Support, E41 Respiratory System Disorders with Non-Invasive Ventilation and E67 Respiratory Signs and Symptoms
    - MDC 18 – Infectious and Parasitic Diseases – driven by T62 Fever of Unknown Origin and T63 Viral Illnesses
- Conversely, the increase an activity in 2022-23 was observed across the majority of MDCs as restrictions on elective surgeries were lifted and allowed facilities to operate at more normal capacities. For example, MDC 08 which includes joint replacement surgeries, saw the largest decrease from a GWAU volume perspective driven by reductions in I04 Knee Replacement which decreased by over 17,000 GWAU (-30.4%) in 2021-22 before growing by about the same amount in 2022-23.
- The COVID-19 related MDCs mentioned above continued to see high growth in 2022-23, as COVID-19 circulated amongst the population.
- Although there was variability in the rate of increase by MDC, the pattern of increase across most MDCs was observed across all jurisdictions.

Cost growth for admitted acute

Total in-scope cost grew over each year, increasing by 6.3% in 2021-22 and 13.0% in 2022-23. While total costs will grow with activity, all else being equal, the level of cost growth outpaced the growth in separations and GWAU, which has directly impacted the growth in the reference cost in between NEP24 and the NEP25.

This growth in total in-scope costs was observed for all jurisdictions costs across both years. While COVID-19 had the effect of decreasing separations overall in 2021-22, it has been observed that hospital costs are “sticky” and do not reduce as quickly as activity, given the need to maintain a level of existing workforce level and other operational costs. This was also the reason a COVID-19 normalisation adjustment was adopted for NEP24. Furthermore, during 2021-22 health services experienced higher operating costs associated with the pandemic response (e.g. personal protective equipment, pathology testing, vaccinations, other infection control measures), noting some of these may have fallen in the scope of the National Partnership for COVID-19 Response (NPCR). The increase in cost was spread across all MDCs, indicating that the increase was systemic across entire hospitals, rather than specific wards or specialties.

Table 9: Admitted acute average cost per GWAU for 2020-21 to 2022-23

	Year			Growth		
Item	**2020-21**	**2021-22**	**2022-23**	**2020-21 to 2021-22**	**2021-22 to 2022-23**	**Average annual**
Average cost per GWAU ($)	$5,435	$5,887	$6,199	8.3%	5.3%	6.8%

The **average cost per GWAU** increased in both years, growing by 8.3% in 2021-22 driven mainly by reductions in GWAU volumes as previously discussed. The average cost per GWAU then subsequently increased by 5.3% in 2022-23, with the increases varying by jurisdiction ranging from 1.0% to 13.5%.

Table 10 below breaks down the increase in average cost per GWAU into a more granular cost bucket level. Although there are components of labour costs among many of the cost buckets, for the purpose of the analysis in this report, the Ward Nursing, Ward Medical, Allied Health and Non-

Clinical cost buckets have been considered as the primarily labour driven cost buckets unless otherwise specified.

Table 10: Growth in cost per GWAU by cost bucket for 2020-21 to 2022-23

	Year			Growth		
Cost Bucket	**2020-21**	**2021-22**	**2022-23**	**2020-21 to 2021-22**	**2021-22 to 2022-23**	**Average annual**
Ward Nursing	$1,030	$1,103	$1,180	7.1%	7.0%	7.0%
Operating Room	$823	$856	$886	4.0%	3.5%	3.7%
Ward Medical	$679	$738	$771	8.6%	4.5%	6.5%
Oncosts	$416	$485	$549	16.6%	13.2%	14.9%
Critical	$448	$499	$504	11.2%	1.0%	6.0%
Ward Clinical Supplies	$428	$486	$487	13.7%	0.1%	6.7%
Non-Clinical	$356	$383	$402	7.6%	4.9%	6.2%
Pharmacy	$261	$284	$304	8.6%	7.1%	7.8%
Hotel	$201	$217	$238	7.9%	9.6%	8.7%
Allied Health	$180	$205	$208	13.5%	1.4%	7.3%
Pathology	$154	$165	$176	6.9%	7.1%	7.0%
Prosthesis	$168	$151	$167	-10.3%	10.6%	-0.4%
Imaging	$140	$153	$158	9.0%	3.5%	6.2%
Special Procedure Suites	$68	$75	$75	9.8%	0.8%	5.2%
Emergency Department	$55	$57	$57	3.8%	-0.4%	1.7%
Patient Transport	$26	$31	$39	16.4%	25.8%	21.0%
Total	**$5,435**	**$5,887**	**$6,199**	**8.3%**	**5.3%**	**6.8%**

The observed growth in average cost per GWAU between 2020-21 and 2022-23 varied between cost buckets. Some of the small cost buckets above such as patient transport are more influenced by random variation year-on-year and as such, may appear as large percentage changes even though they are only small absolute differences. Hence, the analysis focused on the changes in larger cost buckets and the following drivers in growth were observed when examining the growth in average cost per GWAU at a more granular cost bucket level:

- **Oncosts** saw the largest increase across both periods, with a growth rate of 16.6% in 2021-22 and a further increase of 13.2% in 2022-23. As previously discussed, this was a strong area of growth for most jurisdictions, largely driven by increases to the superannuation guarantee as well as increases in overall FTE numbers. Over this period, overheads for oncosts outstripped the growth in direct oncosts.
- **Labour cost buckets** including Nursing, Medical, Allied Health and Non-clinical all saw large increases in 2021-22. While increases in FTE and new EBAs increased labour costs

over this period, this is further exacerbated by the overall decreases observed in GWAU for the same period with the workforce costs spread across a lower volume of GWAU resulting in higher cost per GWAU. Labour costs had further growth in 2022-23 but at a slower rate than 2021-22.

- While the Prosthesis cost bucket is smaller in size, the cost per GWAU decreased in 2021-22 before rebounding in 2022-23. This points to the change in hospital casemix, with fewer elective surgeries in 2021-22 resulting in an overall lower use of prosthetics per GWAU before increasing again in 2022-23.

Emergency Department

The Emergency Department (ED) stream had approximately 8.1 million presentations in 2022-23 with over $7.7 billion in in-scope costs. ED costs are not directly used to calculate the reference cost, and hence a greater focus was placed on the analysis of ED activity.

Table 11: ED presentations, GWAU, in-scope cost and average cost per GWAU for 2020-21 to 2022-23

	Year			Growth Rate		
Item	2020-21	2021-22	2022-23	2020-21 to 2021-22	2021-22 to 2022-23	Average annual
Presentations	7,853,411	7,728,715	8,090,714	-1.6%	4.7%	1.5%
GWAU	1,203,260	1,187,306	1,267,938	-1.3%	6.8%	2.7%
In-scope cost ($m)	$6,075	$6,737	$7,716	10.9%	14.5%	12.7%
Average cost per GWAU ($)	$5,049	$5,674	$6,086	12.4%	7.2%	9.8%

Table 11 presents a summary of the volume of ED presentations, GWAU, in-scope cost and average cost per GWAU for 2020-21 to 2022-23.

The following sections present detailed analysis on the growth in activity and cost for the ED stream. As with other streams, the figures presented exclude all separations from the Australian Capital Territory as cost data was not submitted in 2022-23.

Activity growth for Emergency Department

Activity volumes for the ED stream followed a similar pattern to admitted acute, with an overall reduction in ED presentations by 1.6% in 2021-22 followed by an increase in presentations by 4.7% in 2022-23.

Table 12: Total ED presentations, GWAU and growth rates for 2020-21 to 2022-23

	Year			Growth Rate		
Item	2020-21	2021-22	2022-23	2020-21 to 2021-22	2021-22 to 2022-23	Average annual
Presentations	7,853,411	7,728,715	8,090,714	-1.6%	4.7%	1.5%
GWAU	1,203,260	1,187,306	1,267,938	-1.3%	6.8%	2.7%

Table 12 compares the volume and growth in total activity (presentations and GWAU) over the three years.

Changes in **GWAU** followed a similar pattern of growth in total presentations, with a 1.3% reduction in 2021-22 followed by a 6.8% increase in 2022-23. Between jurisdictions, growth in GWAU volumes was varied, ranging from 1.5% to 9.5%. However, the growth in GWAU was higher than the growth in presentations, indicating a change in casemix and increasing complexity of ED presentations.

Changes in Australian Emergency Care Classification (AECC) end classes were examined to understand the drivers of growth and the casemix of ED presentations. These AECC end classes provide a diagnosis and complexity level for each ED presentation.

Significant growth was observed across several AECC end classes, with experience being broadly consistent by jurisdiction. Some key observations:

- AECC end class E001Z (Not attended by a healthcare professional) made up 5.7% of total presentations in 2022-23. The separations in this end class saw strong growth across all jurisdictions. In particular, growth in 2022-23 was sustained from 2021-22, leading to a year-on-year growth rate ranging between 5.8% to 31.1% across jurisdictions.
- AECC end class E1820A (Viral illnesses Complexity level A) and E1820B (Viral illnesses Complexity level B) made up 2.5% of total presentations in 2022-23 and had significant increases in presentations for 2021-22 of 568.6% and 155.3% respectively. These presentations may have been related to COVID-19 activity given that the codes are related to viral illnesses. This significant growth was sustained into 2022-23 by the majority of jurisdictions.

Table 13: Total presentations by triage category for 2020-21 to 2022-23

		Year			Growth Rate		
Triage Category		**2020-21**	**2021-22**	**2022-23**	**2020-21 to 2021-22**	**2021-22 to 2022-23**	**Average annual**
1	Resuscitation	63,942	63,158	72,325	-1.2%	14.5%	6.4%
2	Emergency	1,136,948	1,216,184	1,323,392	7.0%	8.8%	7.9%
3	Urgent	2,991,153	3,055,986	3,270,823	2.2%	7.0%	4.6%
4	Semi-urgent	2,952,808	2,799,900	2,884,401	-5.2%	3.0%	-1.2%
5	Non-urgent	706,247	591,757	538,273	-16.2%	-9.0%	-12.7%
Overall		**7,851,098**	**7,726,985**	**8,089,214**	**-1.6%**	**4.7%**	**1.5%**

The higher growth in GWAU was also driven by increases to more urgent triage categories. As shown in Table 13, there was strong growth in the volume of presentations in the more urgent ED triage category 1 (+14.5%), category 2 (+8.8%) and category 3 (7.0%). Correspondingly, GWAU for these triage categories grew at an even higher rate, indicating that complexity levels may also have increased with the increasing urgency.

Cost growth for Emergency Department

Table 14: Growth in total in-scope cost and average cost per GWAU for ED for 2020-21 to 2022-23

	Year			Growth Rate		Growth in average cost per GWAU	
Item	2020-21	2021-22	2022-23	2020-21 to 2021-22	2021-22 to 2022-23	2020-21 to 2021-22	2021-22 to 2022-23
Total in-scope cost ($m)	$6,075.1	$6,737.1	$7,716.2	10.9%	14.5%	12.4%	7.2%

Table 14 summarises growth rates of total in-scope cost and average cost per GWAU. Overall, there were significant increases in both total in-scope cost and average cost per GWAU across all jurisdictions. The increase in average cost per GWAU for 2021-22 was higher than for 2022-23. As with admitted acute, reductions in presentation and GWAU volumes were not matched by reductions in in-scope cost, leading to a higher increase in the average cost per GWAU. The average annual increase in average cost per GWAU ranged between 6.1% and 16.1% by jurisdiction.

Table 15: ED average cost per GWAU by cost bucket for 2020-21 to 2022-23

	Year			Growth Rate		
Cost Bucket	2020-21	2021-22	2022-23	2020-21 to 2021-22	2021-22 to 2022-23	Average annual
Labour	$3,466	$3,849	$4,087	11.1%	6.2%	8.6%
Imaging	$545	$599	$644	9.9%	7.5%	8.7%
Oncosts	$393	$467	$549	18.8%	17.6%	18.2%
Pathology	$347	$411	$412	18.4%	0.2%	9.0%
Patient Transport	$106	$103	$118	-2.8%	14.6%	5.5%
Hotel	$115	$133	$144	15.7%	8.3%	11.9%
Ward Clinical Supplies	$46	$64	$43	39.1%	-32.8%	-3.3%
Pharmacy	$25	$39	$41	56.0%	5.1%	28.1%
Critical	$1	$3	$39	200.0%	1200.0%	524.5%
Prosthesis	$3	$3	$4	0.0%	33.3%	15.5%
Operating Room	$2	$2	$3	0.0%	50.0%	22.5%
Special Procedure Suites	$1	$1	$1	0.0%	0.0%	0.0%
Overall	**$5,050**	**$5,674**	**$6,085**	**12.4%**	**7.2%**	**9.8%**

The table above shows the breakdown by cost bucket, with the ED, Ward Medical, Ward Nursing, Allied, and Non-Clinical cost buckets combined into a single cost bucket referred to as “labour”. As with admitted acute, some cost buckets were very small (low cost) and influenced by random

variation year-on-year, resulting in large percentage changes even though the absolute changes are small.

As shown in Table 15, high increases in average cost per GWAU were observed in the Labour, Imaging and Oncosts cost buckets for 2022-23.

- Average cost of Labour per GWAU grew 8.6% per annum between 2020-21 and 2022-23, with higher growth observed between 2020-21 to 2021-22.
- As previously discussed, the increase in oncosts was a consistent trend observed across all streams, with average oncosts per GWAU growing by 17.6% in ED for 2022-23.
- Growth in average cost per GWAU for Pathology was concentrated in 2021-22 with an 18.4% increase, although experience was varied across jurisdictions, with large growth in some states offset by reductions in others.

Non-admitted

The non-admitted (outpatient) stream is the largest stream from an activity perspective, with over 24 million service events delivered in 2022-23 and close to $10 billion in in-scope costs.

Table 16: Non-admitted service events, GWAU, in-scope cost and average cost per GWAU for 2020-21 to 2022-23

	Year			Growth Rate		
Item	2020-21	2021-22	2022-23	2020-21 to 2021-22	2021-22 to 2022-23	Average annual
Service events	22,225,877	23,803,551	24,417,332	7.1%	2.6%	4.8%
GWAU	1,260,706	1,317,762	1,398,499	4.5%	6.1%	5.3%
In-scope cost ($m)	$7,697	$8,547	$9,550	11.0%	11.7%	11.4%
Average cost per GWAU ($)	$6,105	$6,486	$6,829	6.2%	5.3%	5.8%

Table 16 presents average cost per GWAU and growth rates by jurisdiction for 2020-21 to 2022-23.

The following sections present detailed analysis on the growth in activity and cost for the non-admitted stream. The following data caveats and definitions should be noted for the analysis:

- As with other streams, the figures presented exclude all separations from the Australian Capital Territory as cost data was not submitted in 2022-23.
- The IHACPA national cost models only include patient level non-admitted activity and do not include any aggregate level data submission. See below for further discussion on these data source.

Activity growth for non-admitted

Historically, this activity stream has shown large volumes of growth as jurisdictions have improved their reporting over time, with a move from aggregate towards patient level data.

Table 17: Total non-admitted service events, GWAU and growth rates for 2020-21 to 2022-23

	Year			Growth Rate		
Item	2020-21	2021-22	2022-23	2020-21 to 2021-22	2021-22 to 2022-23	Average annual
Service events	22,225,877	23,803,551	24,417,332	7.1%	2.6%	4.8%
GWAU	1,260,706	1,317,762	1,398,499	4.5%	6.1%	5.3%

Total **service events** grew by 2.6% in 2022-23, which was lower than the growth observed in 202122 (7.1%). Experience was mixed across jurisdictions, with reductions in some jurisdictions offsetting growth in other jurisdictions.

Total **GWAU** also saw increases across both years, increasing by 4.5% in 2021-22 and 6.1% in 2022-23. The increase in GWAU for 2022-23 (+6.1%) was greater than the increase in total service events (+2.6%). Growth in GWAU once again showed variation by jurisdiction, ranging from a 1.4% decrease to a 21.6% increase. The higher growth in GWAU compared to service events indicated a shift to a slightly higher complexity case-mix of outpatient service events.

As the non-admitted national cost models only use patient level data, it is possible that some of the growth is due to jurisdictions transitioning from aggregate to patient level non-admitted activity data. If some jurisdictions have not yet transitioned fully to patient level reporting (and costing) then overall non-admitted activity may be under-counted with further growth still expected in future submissions due to better reporting. Furthermore, transitions to patient level costing could also lead to higher GWAU growth as GWAUs calculated using aggregate data do not have loadings (e.g. indigenous adjustment multidisciplinary clinic adjustment) applied. Shifting the activity profile to patient level activity could result in higher growth in GWAU for this reason.

Cost growth for non-admitted

Table 18: Growth in total in-scope cost and average cost per GWAU for non-admitted for 2020-21 to 2022-23

	Year			Growth Rate		Growth in average cost per GWAU	
Item	2020-21	2021-22	2022-23	2020-21 to 2021-22	2021-22 to 2022-23	2020-21 to 2021-22	2021-22 to 2022-23
Total in-scope cost ($m)	$7,697.2	$8,546.9	$9,549.8	11.0%	11.7%	6.2%	5.3%

Table 18 summarises growth rates of total in-scope cost and average cost per GWAU.

Total in-scope cost for non-admitted increased consistently over 2020-21 to 2022-23, increasing from $7.7bn to $9.5bn over that time (11.4% average growth per annum). GWAU volume also increased over that period as previously discussed, and hence average cost per GWAU grew at a lower rate at 5.3% in 2022-23.

Table 19: Non-admitted average cost per GWAU by cost bucket for 2020-21 to 2022-23

	Year			Growth Rate		
Cost Bucket	**2020-21**	**2021-22**	**2022-23**	**2020-21 to 2021-22**	**2021-22 to 2022-23**	**Average annual**
Ward Medical	$1,120	$1,174	$1,239	4.8%	5.5%	5.2%
Pharmacy	$893	$887	$1,055	-0.7%	18.9%	8.7%
Ward Nursing	$842	$938	$982	11.4%	4.7%	8.0%
Allied Health	$705	$754	$764	7.0%	1.3%	4.1%
Non-Clinical	$593	$631	$656	6.4%	4.0%	5.2%
Ward Clinical Supplies	$669	$709	$621	6.0%	-12.4%	-3.7%
Oncosts	$429	$493	$569	14.9%	15.4%	15.2%
Pathology	$256	$245	$218	-4.3%	-11.0%	-7.7%
Special Procedure Suites	$96	$145	$163	51.0%	12.4%	30.3%
Operating Room	$105	$105	$122	0.0%	16.2%	7.8%
Hotel	$90	$101	$103	12.2%	2.0%	7.0%
Prosthesis	$16	$12	$16	-25.0%	33.3%	0.0%
Patient Transport	$10	$7	$15	-30.0%	114.3%	22.5%
Emergency Department	$3	$5	$7	66.7%	40.0%	52.8%
Critical	$2	$4	$2	100.0%	-50.0%	0.0%
Overall	**$6,105**	**$6,486**	**$6,829**	**6.2%**	**5.3%**	**5.8%**

While growth in **average cost per GWAU** overall was reasonably consistent between the two years, growth at a cost bucket was much more varied as shown in Table 19. As with other care streams, some cost buckets are very small (low cost) and influenced by random variation year-on-year. This is especially true in the non-admitted setting where costs buckets such as critical care, prosthesis and patient transport are not main cost drivers, resulting in large percentage changes even though the absolute changes are small.

- As with other activity streams, the Oncosts cost bucket exhibited consistently higher growth across both years compared to other cost buckets, and increased by an average of 14.0% per annum between 2020-21 and 2022-23. This growth was observed consistently across all jurisdictions.
- The labour cost buckets (Ward Medical, Ward Nursing, Allied Health and Non-clinical) showed growth across both years, though growth was generally higher for 2021-22. Within jurisdictions, there were variations in growth for these cost buckets.

Subacute

The subacute stream is the second smallest stream in terms of total activity (separations and GWAU) and is the smallest stream in terms of total in-scope costs. As such, year on year experience for this stream is generally volatile. The subacute stream reported approximately 218,000 episodes in 2022-23, with $3.9 billion in in-scope costs.

For the purpose of the analysis and keeping consistent with the coverage of IHACPA's national cost models, the subacute stream consists of subacute care types (rehabilitation, palliative care, geriatric evaluation and management and psychogeriatric care) as well as non-acute (maintenance) care types.

Table 20: Subacute episodes, GWAU, in-scope cost and average cost per GWAU for 2020-21 to 2022-23

	Year			Growth Rate		
Item	2020-21	2021-22	2022-23	2020-21 to 2021-22	2021-22 to 2022-23	Average annual
Episodes	188,168	199,381	218,198	6.0%	9.4%	7.7%
GWAU	535,225	575,007	638,654	7.4%	11.1%	9.2%
In-scope cost ($m)	$2,881	$3,256	$3,880	13.0%	19.2%	16.0%
Average cost per GWAU ($)	$5,384	$5,663	$6,075	5.2%	7.3%	6.2%

The following sections present detailed analysis on the growth in activity and cost for the subacute stream. The following data caveats and definitions should be noted for the analysis:

- As with other streams, the figures presented exclude all separations from the Australian Capital Territory as cost data was not submitted in 2022-23.
- Palliative care is captured using phase of care rather than as admitted separations. The analysis in this section refers to subacute 'episodes' when counting raw subacute activity volumes.
- In developing the national pricing models, IHACPA performs a 'subacute roll up' whereby some subacute are removed from the subacute model and combined and priced in the acute model. The activity and cost in the subacute analysis is consistent with IHACPA's models.

Activity growth for subacute

Unlike admitted acute, activity volumes for the subacute stream grew consistently between 2020-21 and 2022-23, with a 9.4% increase in subacute episodes for 2022-23 as shown in Table 20.

Table 21: Total subacute GWAU and growth rates for 2020-21 to 2022-23

	Year			Growth Rate		
Item	**2020-21**	**2021-22**	**2022-23**	**2020-21 to 2021-22**	**2021-22 to 2022-23**	**Average annual**
GWAU	535,225	575,007	638,654	7.4%	11.1%	9.2%

As shown in Table 21, the pattern of increase in **GWAU** was similar, with an increase of 11.1% in 2022-23, although there was significant variation by jurisdiction and the growth in **GWAU** ranged from a reduction of 10.3% to an increase of 20.7%. In both years, GWAU grew faster than episode volumes, indicating the increasing complexity in subacute separations.

Table 22: Subacute GWAU by care type for 2020-21 to 2022-23

	Year			Growth Rate		
Care Type	**2020-21**	**2021-22**	**2022-23**	**2020-21 to 2021-22**	**2021-22 to 2022-23**	**Average annual**
Rehabilitation	259,057	259,608	284,056	0.2%	9.4%	4.7%
Maintenance	81,235	114,270	134,740	40.7%	17.9%	28.8%
GEM	116,665	114,806	128,488	-1.6%	11.9%	4.9%
Palliative Care	67,136	75,980	79,868	13.2%	5.1%	9.1%
Psychogeriatric Care	11,177	10,375	11,521	-7.2%	11.0%	1.5%
Overall	**535,270**	**575,039**	**638,673**	**7.4%**	**11.1%**	**9.2%**

Table 22 shows the growth in GWAU by care type.

- Rehabilitation care is the largest care type by GWAU and grew by 9.4% in 2022-23, accounting for almost 45% of GWAU.
- Maintenance care grew significantly in 2022-23 (17.9% increase in GWAU). The average GWAU per episode also increased over this time, indicating an increasingly complex patient cohort receiving maintenance care, with average length of stay also increasing over time.
- Geriatric Evaluation and Management also grew strongly in 2022-23, with an 11.9% increase in GWAU.

Cost growth for subacute

Table 23: Growth in average cost per GWAU for subacute for 2020-21 to 2022-23

	Year			Growth Rate		
Item	**2020-21**	**2021-22**	**2022-23**	**2020-21 to 2021-22**	**2021-22 to 2022-23**	**Average annual**
Average cost per GWAU ($)	$5,384	$5,663	$6,075	5.2%	7.3%	6.2%

Total in-scope cost grew by 19.2% in 2022-23 for the subacute stream. However, there was also significant activity volume growth as previously discussed and hence when adjusted for GWAU growth, the average cost per GWAU grew by 7.3%.

Table 24: Subacute average cost per GWAU by cost bucket for 2020-21 to 2022-23

	Year			Growth Rate		
Cost Bucket	**2020-21**	**2021-22**	**2022-23**	**2020-21 to 2021-22**	**2021-22 to 2022-23**	**Average annual**
WardNurs	1,798	1,841	1,971	2.4%	7.1%	4.7%
WardMed	709	720	789	1.6%	9.6%	5.5%
WardClinicalSupplies	542	652	686	20.3%	5.2%	12.5%
Allied	662	674	675	1.8%	0.1%	1.0%
Non Clinical	577	606	656	5.0%	8.3%	6.6%
Oncosts	495	526	608	6.3%	15.6%	10.8%
Hotel	314	319	347	1.6%	8.8%	5.1%
Pharm	139	150	156	7.9%	4.0%	5.9%
Path	57	68	68	19.3%	0.0%	9.2%
PatTran	31	39	46	25.8%	17.9%	21.8%
Imag	42	45	44	7.1%	-2.2%	2.4%
OR	8	8	12	0.0%	50.0%	22.5%
Critical	7	8	11	14.3%	37.5%	25.4%
SPS	2	3	3	50.0%	0.0%	22.5%
Pros	2	2	2	0.0%	0.0%	0.0%
ED	1	1	1	0.0%	0.0%	0.0%
Overall	**5,386**	**5,662**	**6,075**	**5.1%**	**7.3%**	**6.2%**

As with the other streams, the growth in subacute was driven by strong growth in the labour cost buckets, which is to be expected given the underlying drivers of labour cost growth previously discussed. In particular, there was strong growth from the Nursing (7.1%), Medical (9.6%) and Non-Clinical (8.3%) cost buckets. Growth in the smaller cost buckets was more influenced by random variation year-on-year, resulting in large percentage changes even though the absolute changes are small.

Admitted mental health

The admitted mental health stream had approximately 115,000 episodes and over $2.5 billion in in-scope cost in 2022-23. Data reporting for this stream has continued to change over time since the introduction of the Australian Mental Health Care Classification (AMHCC) for pricing. Further observations on how this has impacted jurisdictions are presented below.

Table 25: Admitted mental health episodes, in-scope cost and average cost per GWAU for 2020-21 to 2022-23

	Year			Growth		
Item	2020-21	2021-22	2022-23	2020-21 to 2021-22	2021-22 to 2022-23	Average annual
Episodes	105,970	101,071	114,787	-4.6%	13.6%	4.1%
GWAU	370,499	384,932	433,397	3.9%	12.6%	8.2%
In-scope cost ($m)	$1,829	$2,182	$2,575	19.3%	18.0%	18.6%
Average cost per GWAU ($)	$4,938	$5,669	$5,942	14.8%	4.8%	9.7%

The **number of episodes** decreased between 2020-21 and 2021-22, by -4.6%, before increasing significantly again by 13.6% in 2022-23.

By comparison, the volume of **GWAU** increased across both 2021-22 and 2022-23. GWAU grew by 3.9% and 12.6%, which highlights changes to casemix and/or complexity in 2021-22 given that the number of episodes decrease over the same period.

There is some evidence that reporting for mental health care episodes is improving, as some jurisdictions had more activity being reported under the phase of care, in line with observations in IHACPA's quarterly activity reporting and NHCDC reporting. The shift towards more granular phase level reporting as well as fewer episodes ending up in an ungroupable end class may also be contributing to the increase in GWAU. However, we note that in their data quality statements, several jurisdictions continue to indicate that reporting for mental health was challenging.

Total in-scope cost continued to grow each year, increasing by 19.3% in 2021-22 and 18.0% in 2022-23. Admitted mental health exhibited the highest cost growth across all streams, though it still remains the smallest stream. The level of cost growth has outpaced the growth in episodes and GWAU resulting in increases to the average cost per GWAU over the same period.

Table 26: Admitted mental health average cost per GWAU for 2020-21 to 2022-23

	Year			Growth Rate		
Item	2020-21	2021-22	2022-23	2020-21 to 2021-22	2021-22 to 2022-23	Average annual
Average cost per GWAU ($)	$4,938	$5,669	$5,942	14.8%	4.8%	9.7%

The **average cost per GWAU** increased in both years, increasing by 14.8% in 2021-22 and 4.8% in 2022-23, driven by cost growth across most jurisdictions.

Growth in the average cost per GWAU puts upwards pressure on the price weights and hence funding nationally as a second order impact.

Cost growth pressures may continue into 2023-24

The focus of this review was to understand areas of growth in the NEP25, with a focus on changes to 2022-23. Through the review, there were indications that components of cost growth observed in 2022-23 are likely to continue and be reflected in the 2023-24 NHCDC cost submission and beyond.

- EBAs are typically negotiated and set for several years and hence many of the higher increases observed for the 2022-23 will carry through into 2023-24. This includes some of the provisions for cost of living adjustments in some states.
- Some jurisdiction published data are already showing higher growth in workforce. For example the Queensland government *Sector workforce profile* showed that while frontline health practitioners and nurses and midwives grew around 1.5% in the year to March 2023, the same categories grew by 5.7% to 6.6% in the year to March 2024, which would result in higher workforce costs in that jurisdiction.
- Oncosts may also further increase as a result of these FTE increases but also as future increases to the superannuation guarantee charges are built in, with two further 0.5% increases between 2023-24 and 2024-25 (reaching 12.0% from 1 July 2025). Furthermore, there were already media reports[21] of significant increases to workers compensation premiums in Victoria of over 50% for 2023-24 which would also contribute to growth in this bucket.
- The Health Service Plan review of Victoria's health system in August 2024 identified that the system had been put under heavy strain by an ageing population, higher prevalence of chronic conditions and exacerbated by COVID-19. Furthermore, there have been recent media reports on the significant cost pressures experienced by the health system in Victoria, with many health services experiencing deficits in 2023-24 and an additional $1.5 billion in funding committed to the system. This additional expenditure will likely flow into the submitted costs in the short term.

Separately to this, activity data for 2023-24 has already been submitted and IHACPA's quarterly activity reporting for 2023-24 indicates continued growth in activity across all streams with a 5.9% increase in NWAU for the year. While it remains to be seen what this translates to in terms of average costs (as the NHCDC for 2023-24 is yet to be finalised by jurisdictions), the increases in activity will likely continue to put further pressure on total funding volumes under the NHRA.

Recent quarterly activity reports by IHACPA show an emerging reduction in average length of stay for admitted acute separations. To the extent that reductions in average length of stay are translated into a greater volume of separations (and hence GWAU) delivered by the same cost base, this increase in efficiency may reduce the growth in average cost per GWAU.

[21] https://www.theage.com.au/politics/victoria/cash-strapped-hospitals-crunched-by-soaring-workers-compensation-bills-20241119-p5krtv.html

Unlike NEP22, NEP23 and NEP24, the NEP25 did not include any COVID-19 normalisation and it is unlikely to be incorporated for NEP26.

Appendix A – Employee Agreements

Queensland

Table 27: Summary of material changes to Queensland Health employee agreements in 2022-23

Category	Nursing	Medical	Allied Health	Non-clinical
Wages	• 4% increase for 12 months (from Jul 2022) • Subsequent 4% increase for 3 months (from Apr 23)	• 4% increase for 12 months (from Jul 22)*	• 4% increase for 8.5 months (from Oct 22)*	• 4% increase for 10 months (from Sep 22)
Additional in-scope costs	• FY23 COLA payment (3% base wages) • Introduction of double time Sunday penalty rate for 7 months (from Dec 22)	• None identified	• None identified	• None identified
Potentially in-scope costs	• Backpay of 4% increase for 3 months (Apr–Jun 22).	• FY23 COLA payment calculated on 30 June 23, paid by Sep 23. Impact in FY23 could be 3%.	• None identified	• None identified

** Although these payments were made in July/August 2023, the agreements were certified in May/June 2023, meaning the costs are expected to have been incurred during the 2022-23 fiscal year.*

Victoria

Table 28: Summary of material changes to Victoria Health employee agreements in 2022-23

Category	Nursing	Medical	Allied Health	Non-clinical
Wages	• 3% increase for 7 months (from Dec 22) • 2-3% increase for 12 months (from Jul 22) for mental health nursing staff **	• 2.75% increase for 12 months (from Jul 22)*	• 2% increase for 12 months (from Jul 22)* • Subsequent 2% increase for 4-6 months (from Dec 22 or Mar 23) • 2% increase for 12 months (from Jul 22) for mental health professionals **	• Variable increases across staff categories. All applicable from 1 July 2022. • 2% increase for 12 months (from Jul 22) for non-clinical mental health professionals **
Additional in-scope costs	• $1,800 retention payment for mental health nursing staff **	• One-off payment - 2.5% of wages for 2 months • 25-50% loading for 6pm-12am on Fridays from Mar 23. • +4 weeks paid parental leave for primary carer, + 1 week for non-primary carer. • Access to long service leave after 7 years.	• One-off payment - 2% of wages for 3-5 months • $500-$2000 lump-sum skills incentive payment for FY21 and FY22 • One-off payment - 0.3% of wages for staff at the highest increment within their grade on 1 Mar 23. • $1,800 retention payment for mental health professionals **	• Additional week of annual leave following new agreement in April 22. • $1,800 retention payment for mental health professionals **
Potentially in-scope costs	• None identified	• Backpay of 2.75% increase for 4 months (Mar - Jun 22).	• Backpay of 2% increase for 4-7 months (Mar-Jun 22 or Dec 21-Jun22). • One-off payment - 0.3% of wages for staff at the highest increment in their grade on 1 Mar 22.	• None identified

** This payment should have commenced in March 2022, however the agreement was not certified until November 2022 so the increase has been included as a 2022-23 change.*

*** These employees are covered by Victorian Public Mental Health Services Enterprise Agreement 2020-2024*

Western Australia

Table 29: Summary of material changes to WA Health employee agreements in 2022-23

Category	Nursing	Medical	Allied Health	Non-clinical
Wages	• Max of $60/week or 3% increase for (from Oct 22) • 0.5% per annum increase in superannuation	• $1000 increase to annual salary for 12 months (from Jul 22) • 0.5% per annum increase in superannuation	• Max of $60/week or 3% increase for 12 months (from Jul 22) for HSU members • 0.5% per annum increase in superannuation •	• Max of $60/week or 3% increase for 12 months (from Jul 22) for HSU members • $60/week wage for 11 months for Hospital Support workers (from Aug 22) • 0.5%per annum increase in superannuation
Additional in-scope costs	• One-off $3,000 COLA payment	• One-off $2,500 COLA payment	• One-off $2,500-3,000 COLA payment	• One-off $2,500-3,000 COLA payment
Potentially in-scope costs	• None identified	• None identified	• None identified	• None identified

Appendix B – AIHW FTE Growth

The Australian Institute of Health and Welfare's (AIHW) National Public Hospital Establishments Database (NPHED) holds detailed information on public hospitals across Australia. The below figures have been derived from the NPHED average FTE staff data tables for 2021-22 and 2022-23. As such, any limitations to the underlying dataset apply to these figures. While these figures provide mostly comparable FTE figures across the country, it is recognised that the groupings may not be in complete alignment with the scope of data used for this analysis. The growth in total staff numbers is an average growth rate of the labour categories, weighted by total FTE in each category.

Table 30: Average FTE growth, by staffing category, public hospital services, states and territories, 2021-22 vs 2022-23

Labour category	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Specialist salaried medical officers	6.4%	10.1%	2.5%	-	3.2%	9.3%	1.4%	-10.5%	5.4%
Other salaried medical officers	2.1%	9.4%	4.4%	6.6%	0.0%	8.3%	4.8%	-	5.1%
Salaried medical officers—total	3.4%	9.6%	3.8%	6.6%	1.1%	8.7%	3.7%	-10.5%	5.2%
Nurses—total	0.8%	6.6%	2.0%	3.5%	5.8%	8.3%	1.7%	-25.1%	2.9%
Diagnostic and allied health professionals	1.7%	9.3%	2.5%	-0.1%	-13.1%	0.9%	3.2%	-40.1%	2.3%
Administrative and clerical staff	0.2%	2.9%	-0.6%	2.1%	-9.0%	5.4%	-1.9%	-57.0%	-0.9%
Domestic and other personal care staff	-0.4%	7.5%	-0.3%	6.3%	-6.5%	10.2%	10.5%	-20.4%	1.8%
Total staff	**1.0%**	**6.9%**	**1.5%**	**3.3%**	**-0.8%**	**7.3%**	**2.6%**	**-32.6%**	**2.2%**

Definitions and data limitations as per AIHW

a) *Where average FTE staff numbers were not available, staff numbers at 30 June at the end of the reporting period were used. Staff contracted to provide products (rather than labour) are not included.*

b) *For NSW, Other personal care staff are included in Diagnostic and allied health professionals and Domestic and other staff.*

c) *For Victoria, Other personal care staff were included in Domestic and other staff*

d) *For WA and the NT, Salaried medical officers includes both Specialist medical officers and Other salaried medical officers.*

e) *For Tasmania, data for Other personal care staff were not supplied separately and are included in other staffing categories.*

f) *Salaried medical officers does not include non-salaried visiting medical officers.*

g) *Nurses–total includes Registered nurses, Enrolled nurses, Student nurses and Trainee nurses.*

h) *Administrative and clerical staff may include staff working to support clinicians, such as ward clerks.*

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