



# Rapid Business Case supporting submission for the NSWNMA 2024 Award Claim

## NSW NURSES AND MIDWIVES' ASSOCIATION

The evaluation of the revenue opportunity, cost savings and benefits were undertaken by Deloitte Financial Advisory

FINAL REPORT

17 MAY 2024

# Contents

1	Executive summary.....	4
1.1	Background.....	4
1.2	Funding opportunities and initiatives .....	4
1.3	Benefits .....	5
1.4	Summary.....	6
2	Background .....	7
2.1	Purpose.....	7
2.2	Project background.....	7
2.2.1	Recruiting and retaining nurses and midwives .....	7
3	Technical efficiency opportunities.....	12
3.1	Technical efficiency and Commonwealth funding.....	12
3.1.1	Overview of Commonwealth funding .....	12
3.1.2	Overview of the national efficient price.....	13
3.1.3	NSW’s NWAU CAGR is sitting below the national average .....	13
3.1.4	NSW is falling short of its Commonwealth soft funding cap .....	14
3.1.5	Technical efficiency opportunities .....	15
4	Allocative efficiency opportunities.....	18
4.1	Allocative efficiency through sub-acute and aged care .....	18
4.1.1	Allocative Efficiency .....	18
4.1.2	Allocative Efficiency through RAC.....	19
4.1.3	Allocative efficiency through SNAP funding.....	24
5	Cost of Proposed Policy Position.....	28
5.1	Completion of Safe Staffing Levels Across Agreed Clinical Areas.....	28
5.2	Increased wages for Nurses and Midwives .....	29
5.3	Conversion of Assistant in Nursing (AiN) positions to Supernumerary.....	30
6	Benefit Overview .....	32
6.1	Overview .....	32
	Appendix A1: Allocative efficiency approach.....	36
	Appendix A2: Initiative methodology .....	38
	Completion of safe staffing levels.....	38

Conversion of AiN positions to supernumerary.....	38
Increased wages for nurses and midwives.....	39
Appendix A3: Benefits methodology.....	40
Cost savings achieved by reducing turnover .....	40
Improved revenue due to reduced HAC.....	41
Increased spending in the economy as a result of wage growth.....	41
Reduced cost of overtime and agency costs .....	44

# 1 Executive summary

## 1.1 Background

New South Wales (NSW) Health is currently facing difficulties in the recruitment and retention of nurses and midwives. However, it also possesses the potential to attract clinicians back to the State through a number of proposed initiatives outlined in Table 1.

*If NSW were to reduce the number of non-practicing nurses / midwives to align with the national average, it could introduce around **617 experienced nurse / midwives back into the healthcare system.***

As the number of nursing and midwifery graduates continues to decline across Australia and the demand for nurses and midwives increases, it is crucial for NSW Health to ensure the organisation and individual Local Health Districts (LHD's) are attractive places of work.

## 1.2 Funding opportunities and initiatives

Two system-wide funding opportunities have been identified to support the funding and implementation of the proposed initiatives. These funding opportunities include:

- 1) **Technical efficiency** (TE) which aims to secure additional funding from the Commonwealth without increasing patient activity and generate extra funding when the soft and hard cap is surpassed.
- 2) **Allocative efficiency** (AE) which aims to develop strategies that allocate care to the appropriate location within the healthcare system and promote sustainability through the funding model.

*Should both technical and allocative efficiency programs be implemented, this could result in a **financial improvement for the State of \$881.3 million.** Additionally, effectively stepping down patients from acute to sub-acute models could result in a 12.4% reduction in the daily cost for patient admission, unlocking an additional **\$142.8 million in cost savings to the State Government.***

The Commonwealth has already committed to increase its proportion of funding for the State-based health system and this initiative allows the NSW Health to realise this opportunity.

*"Prime Minister, Premiers and Chief Ministers came together to agree on a landmark hospital funding agreement – lifting the current Commonwealth contribution to public hospitals from around 40 per cent to 45 per cent over 10 years. It will see the federal government provide billions of dollars in additional funding – **almost \$200 billion in public hospital funding, including an additional \$13.2 billion in the five years to 2030**" – Minister Butler.*

The proposed initiatives for funding and implementation have been costed in Table 1.

Table 1 – Proposed initiatives and costings






#	Proposed Initiatives	Cost of Implementation
1	Completion of Safe Staffing Levels Across Agreed Clinical Areas	\$204,397,200
2	Increased Wages for Nurses and Midwives	\$862,763,143
3	Conversion of Assistant in Nursing (AiN) Positions to Supernumerary	\$129,588,294

Source: Deloitte (2024).

*In addition to the reinvigorating the non-practising nurse / midwife cohort, the allocative efficiency program can provide **an additional 672 nursing FTEs** to support the roles required to complete the implementation of safe staffing levels.*

## 1.3 Benefits

Implementing the initiatives will also provide a range of tangible and intangible benefits for patients, nurses and midwives, LHD's and the State. These benefits include:

-  Avoided cost of turnover.
-  Improved Commonwealth revenue due to reduced HAC.
-  Increased spending in the economy.
-  Reduced cost of overtime and agency costs.
-  Enhanced patient outcomes.

*Assuming all three initiatives are implemented, and it results in a 3.0% improvement in turnover and, one third reduction in HACs, the following benefits could be achieved:*

- 1) A reduction in the nursing and midwifery turnover by 3% could result in an avoided cost of **\$86.0 million**.*
- 2) A reduction of HACs by one-third could result in an improved Commonwealth revenue of **\$30.3 million**.*
- 3) A 15% wage increase for the nursing and midwifery workforce could lead to an economic benefit of **\$539.2 million**.*
- 4) By recruiting additional nurses and midwives to complete the implementation of safe staffing levels and converting AiN positions to supernumerary, the state could save **\$54.0 million** in overtime and agency fees and an economic benefit of **\$129.8 million** through new job creation.*

# 1.4 Summary

Table 2 highlights the potential revenue and savings for the State by implementing TE and AE programs, as well as the cost of implementing proposed initiatives along with their benefits. The evaluation of the revenue opportunity, cost savings and benefits were undertaken by Deloitte Financial Advisory.

Table 2 – Potential revenue, costings and benefit

Summary of programs and initiatives	Revenue & savings	Costs	Reference
<b>Potential revenue &amp; savings</b>			
Additional Commonwealth revenue from TE	\$370.4m	-	3.1.5
Additional Commonwealth revenue from AE	\$277.5m	-	4.1.3
Cost savings from RAC optimisation	\$233.4m	-	4.1.2
Cost savings from sub-acute optimisation	\$142.8m	-	4.1.3
<b>Proposed cost of initiatives</b>			
Completion of safe staffing levels	-	(\$204.4m)	5.1
Increased wages for nurses and midwives	-	(\$862.8m)	5.2
Conversion of AiN positions to supernumerary	-	(\$129.6m)	5.3
<b>Total</b>	<b>\$1,024.1m</b>	<b>(\$1,196.8m)</b>	
Summary of benefits	Revenue & savings	Economic benefits	Reference
Cost savings achieved by reducing the nursing turnover by 3%	\$86.0m		Table 18
Increased Commonwealth revenue due to a reduction of HACs by one-third	\$30.3m		Table 19
Reduced cost of overtime and agency costs	\$54.0m		Table 21
Increased spending in the economy as a result of the 15% wage growth		\$539.2m	Table 20
Increased spending in the economy as a result of recruiting additional nurses and midwives to complete the implementation of safe staffing levels and converting AiN positions to supernumerary		\$129.8m	Table 20
<b>Total</b>	<b>\$170.3m</b>	<b>\$669.0m</b>	

Source: Deloitte (2024)

# 2 Background

## 2.1 Purpose

The New South Wales Nurses and Midwives Association (NSWNMA) has prepared this document to demonstrate the system-wide opportunity for New South Wales (NSW) to capture untapped Commonwealth funding, and present initiatives to improve and progress the *Public Health System Nurses and Midwives (State) Award 2024*.

This document will act as a precursor for a Treasury Business Case to improve the aforementioned agreement. The evaluation of the revenue opportunity, cost savings and benefits were undertaken by Deloitte Financial Advisory.

## 2.2 Project background

The healthcare system is struggling to keep up with increasing demand for services, leading to rising costs, resource shortages and greater budget allocations required from both State and Commonwealth Governments. This increased demand, driven by factors including the growing prevalence of chronic diseases, is putting immense pressure on the healthcare system and impacting hospital performance. This pressure is reflected in the deteriorating performance of front-end emergency services.

Although there have been advancements in delivering healthcare outside of hospitals, hospitals remain highly utilised with demand outstripping current capacity. The delivery of healthcare services is highly dependent on the ability to attract and retain a skilled nursing and midwifery workforce, and the growing pressure on hospital services translates to growing demand for healthcare workers. Nurses and midwives are essential for building healthy communities and fundamental to solving the healthcare crisis present in NSW. Moreover, the cost of delivering healthcare is rising at a faster rate than funding reimbursement. Consequently, numerous Local Health Districts (LHD) are experiencing structural deficits and are depending on additional State funding.

The Commonwealth Government is devoting an increasing share of its budget to aged care and disability services – investments that were made in part in recognition to reduce the burden of aged care and disability patients on the healthcare system. The dividends from these investments to reduce system pressures are still yet to be realised.

### 2.2.1 Recruiting and retaining nurses and midwives

A critical challenge for the healthcare system lies in securing nurses and midwives, both in recruiting and retaining them in the job. In NSW, there are 101,080 practising Registered Nurses (RN)<sup>1</sup> and 8,420 practising midwives.<sup>2</sup> However, as evidenced in Figure 1 and Figure

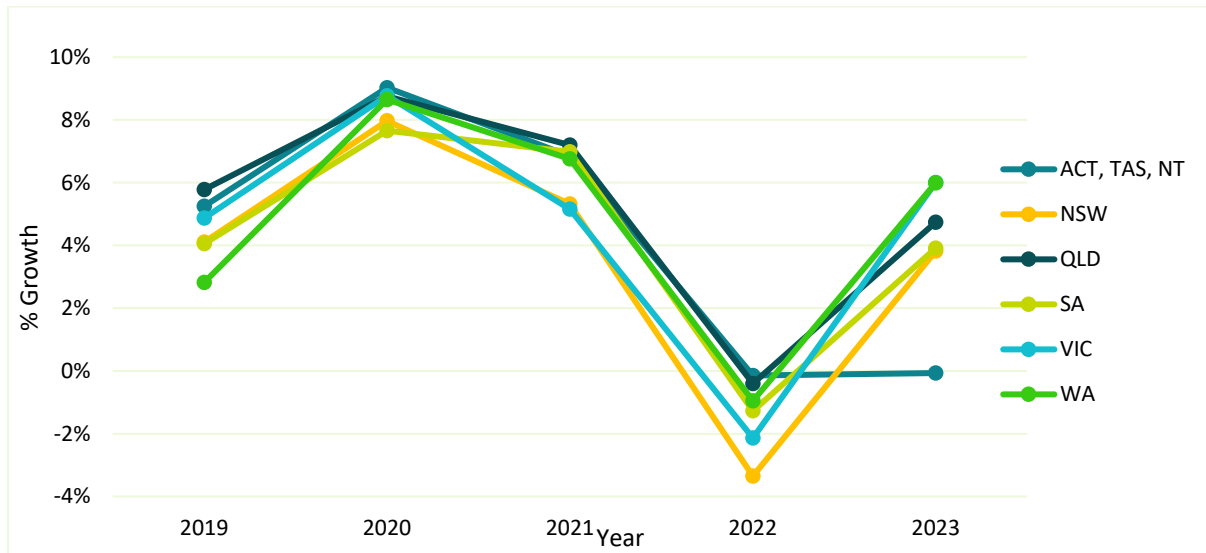
---

<sup>1</sup> For this analysis, RN's refers to both RN's (only) and RN's and EN's.

<sup>2</sup> For this analysis, midwives refers to both midwives (only) and midwives & RN's.

2, there is a persistent shortfall in attracting these positions in NSW. This underperformance highlights the ongoing challenge of attracting nurses and midwives in comparison to NSW's main competitors, Queensland and Victoria, this is particularly evident in neighbouring regions where nursing and midwifery staff tend to work for Queensland or Victoria respectively.

Figure 1- Percentage growth in practising RN's year on year in each state / territory



Source: Deloitte analysis based on Nursing Midwifery Board data (2024)  
 Note 1: For this analysis, RN's refers to both RN's (only) and RN's and EN's.

Figure 2- Percentage growth in practising midwives year on year in each state / territory



Source: Deloitte analysis based on Nursing Midwifery Board data (2024)  
 Note 1: For this analysis, midwives refers to both midwives (only) and midwives & RN's.



This is due to several reasons:

- There is a shortage of new nurses and midwives willing to work under the existing conditions, resulting in understaffing in hospitals adding pressure to the existing nursing and midwifery workforce. This, in turn, increases their workload and stress levels, leading to significant burnout.
- NSW public hospitals find it challenging to compete with healthcare systems in other states, which offer better salaries, working conditions (ratios)<sup>3</sup> and benefits packages.

As a result, NSW appears to be falling behind as an employer of choice. This is leading to LHDs struggling to both recruit and retain nursing and midwifery roles.

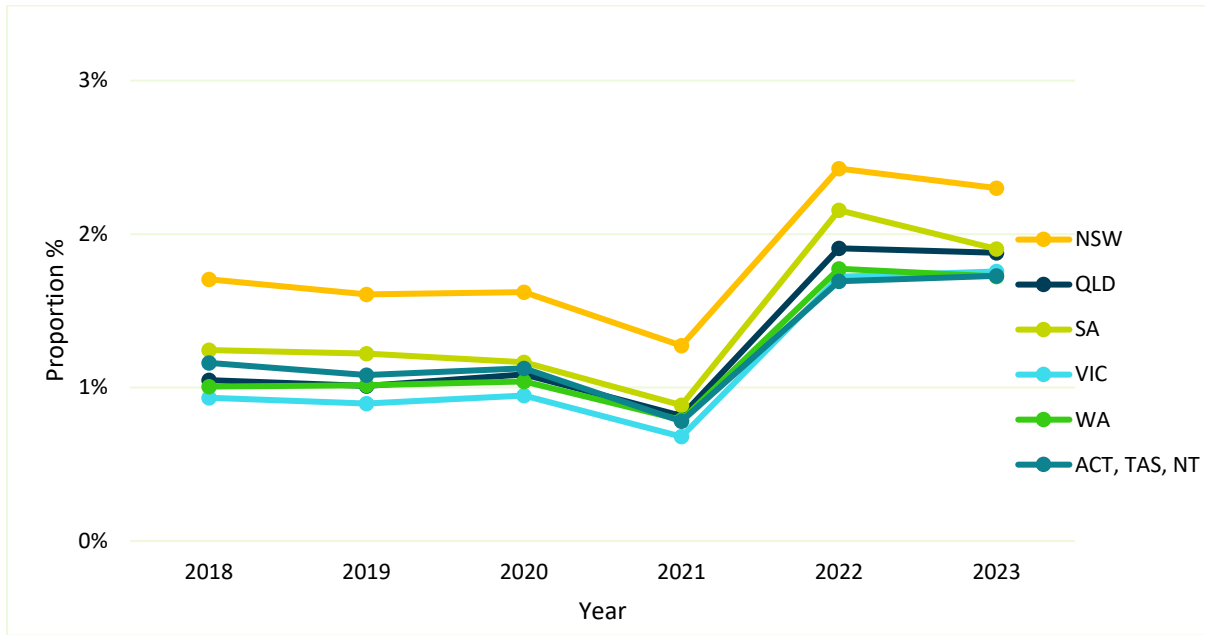
Moreover, NSW has consistently had the highest proportion of non-practising RN's and midwives<sup>4</sup>, as shown in Figure 3 and Figure 4. This indicates that there is a pool of available workers who are choosing not to participate in and/or not being utilised by NSW Health. This presents an opportunity for NSW to improve its attractiveness and reduce its proportion of non-practising nurses and midwives to align with the Queensland / Victoria average. As a result, NSW could introduce around 617<sup>5</sup> experienced nurses and midwives back into the healthcare system. It is important to note the figures in this document do not include nurses and midwives who re-registered during the COVID-19 pandemic as this information is recorded separately.

---

<sup>3</sup> A [journal](#) published in the National Library of Medicine found that "better hospital nurse staffing is associated with better patient outcomes, including fewer hospital acquired infections, shorter length of stay (LOS), fewer readmissions, higher patient satisfaction, and lower nurse burnout."

<sup>4</sup> According to the [Nursing and Midwifery Board](#) – "a non-practising registration would apply to a person who wishes to retain a protected nursing and/or midwifery title but: as retired from nursing or midwifery practice, is experiencing an illness, or is intending to take a long period of absence from practice".

Figure 3- Proportion of non-practising RN's year on year in each state / territory

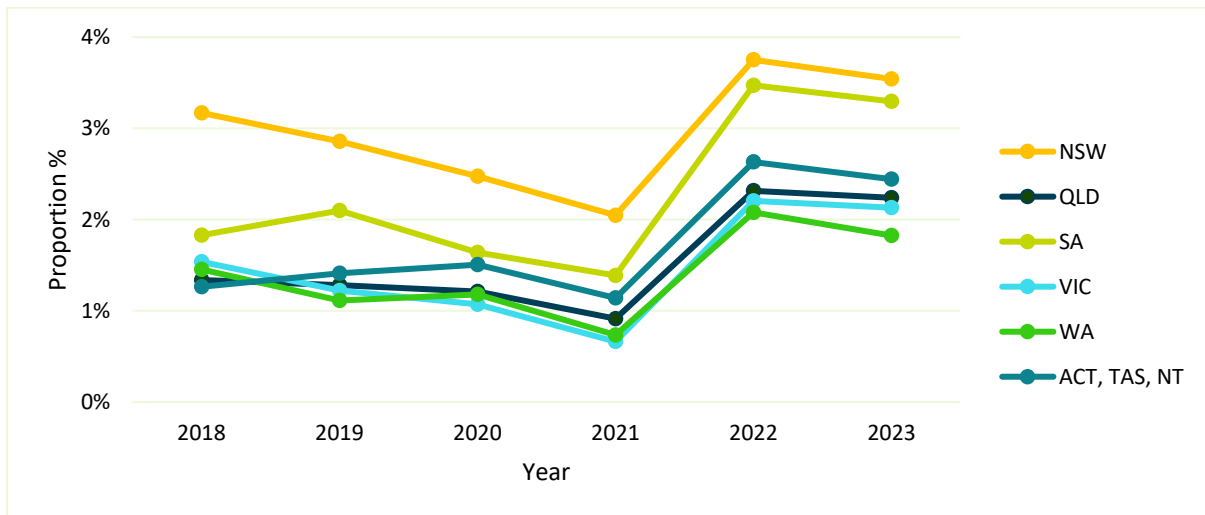


Source: Deloitte analysis based on Nursing Midwifery Board data (2024).

Note 1: For this analysis, RN's refers to both RN's (only) and RN's and EN's.

Note 2: These figures do not include individuals who re-registered during the COVID-19 pandemic.

Figure 4- Proportion of non-practising midwives year on year in each state / territory



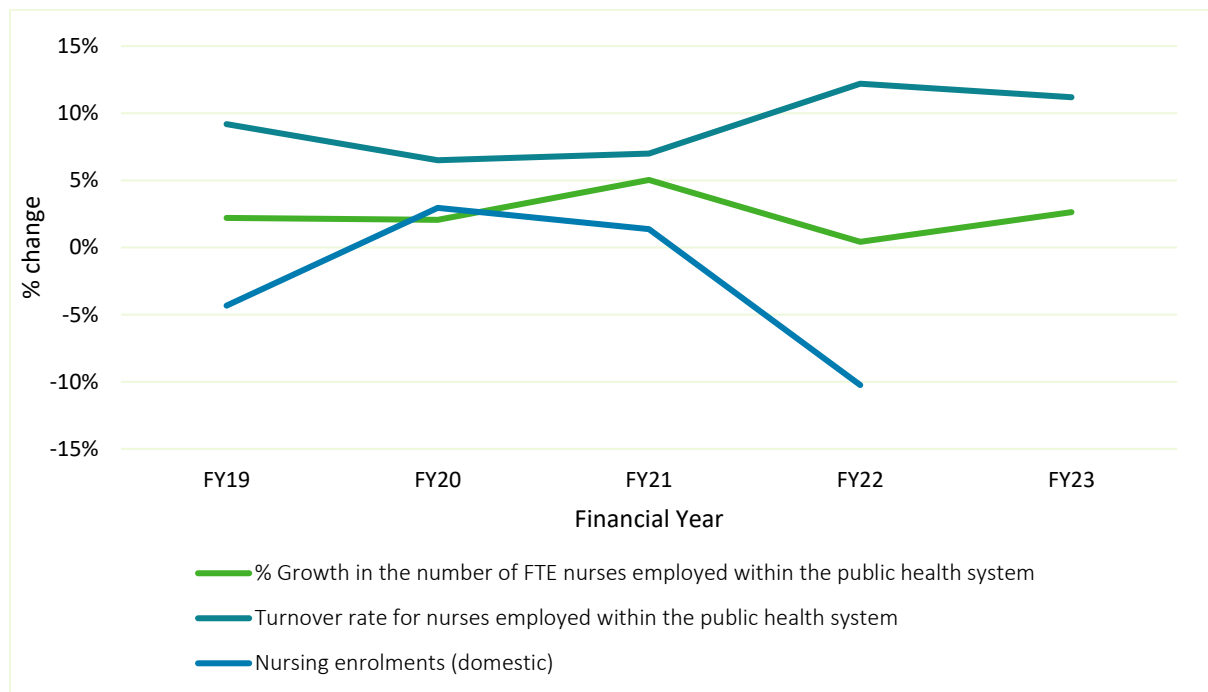
Source: Deloitte analysis based on Nursing Midwifery Board data (2024)

Note 1: For this analysis, midwives refers to both midwives (only) and midwives & RN's

Note 2: These figures do not include individuals who re-registered during the COVID-19 pandemic.

As highlighted in Figure 5, the nurse turnover rate for NSW Health has been on the rise, indicating that the incentives offered by NSW may not be adequate. Furthermore, while there was a slight increase in the number of full-time equivalent (FTE) nurses working for NSW Health during the pandemic, this upward trend has since plateaued and turnover has increased. Additionally, enrolments in nursing degrees have also declined since the pandemic which has put additional pressure on the healthcare system. There is no indication that this will increase in the near future. Further, the need to fill vacancies has seen an increase in overtime penalties and utilisation of agency staff.

Figure 5- Change in NSW Health FTE, enrolments and turnover rates.



Source: Deloitte analysis based on NSW Health and Department of Education<sup>6</sup> data (2024).

The NSW demand and supply for the nursing and midwifery workforce in NSW is mismatched – the number of graduates is decreasing while the demand for nurses and midwives is increasing. This is leading to inefficiencies such as higher costs from overtime and agency staff. Given the proportion of non-practicing nurses and midwives, NSW has the greatest opportunity to attract and mobilise an already skilled workforce. Therefore, it is crucial to invest in initiatives that will attract and retain a reliable and sustain workforce, ensuring the future of the NSW public healthcare system.

<sup>6</sup> Please note that the Department of Education has not yet made available the completion rates for Award Courses for 2023.

# 3 Technical efficiency opportunities

## 3.1 Technical efficiency and Commonwealth funding

### 3.1.1 Overview of Commonwealth funding

Although public hospitals are owned and operated by states and territories, the Commonwealth Government also plays a role in funding them. In 2011, the National Health Reform Agreement (NHRA) was signed between the state, territory, and Commonwealth Governments, shifting public hospital funding to an activity-based model known as 'Activity-Based Funding' (ABF).<sup>7</sup> Widely adopted by hospitals from 2014-15, this model allocates funding based on the volume and types of patients treated in the previous year, adjusted for cost increases. Under ABF, the Commonwealth Government contributes 45% towards the increase in the cost of delivering hospital services, while the states and territories fund the remaining 55%. Smaller regional hospitals with lower patient volumes continue to receive partial block funding.<sup>8</sup> Also, a small portion of Commonwealth funding is allocated as direct 'Public Health' funding to the states and territories.

Under the NHRA, the scope of public hospital services that are funded on an ABF or block funding basis and are eligible for a Commonwealth funding contribution currently includes:

- All emergency department services provided by a recognised emergency department.
- All admitted and non-admitted services.
- Other outpatient, mental health, sub-acute services and other services that could reasonably be considered a public hospital service.

It is important to note that starting from 2017-18, the growth in Commonwealth Government expenditure has been limited to 6.5% per year collectively, shared between states and territories. As a result, even if a hospital performs more procedures compared to the previous year, the Commonwealth Government's annual expenditure growth is capped at 6.5% above the previous year. This financial risk is therefore passed back to the states and territories.

---

<sup>7</sup> Activity Based Funding is a funding model based on the number of weighted services provided to patients, and the price to be paid for delivering those services.

<sup>8</sup> Block funding supports teaching, training and research in public hospitals, and public health programs as well as smaller rural / regional hospitals. In FY21, block funding also included non-admitted mental health and home ventilation, highly specialised therapies and more.

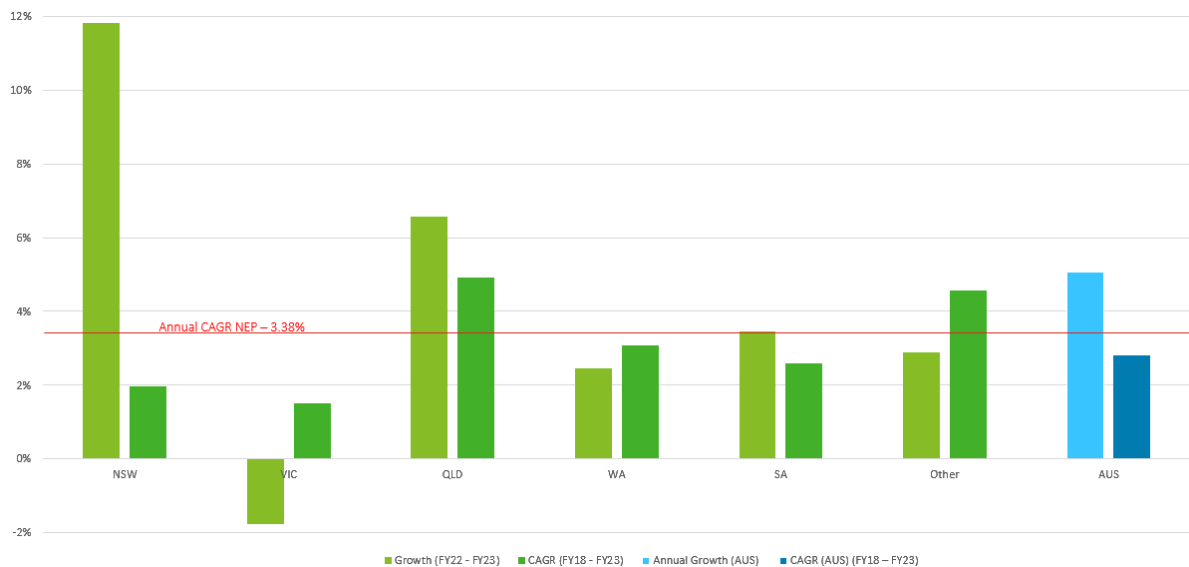
### 3.1.2 Overview of the national efficient price

The Independent Health and Aged Care Pricing Authority (IHACPA) was created in 2011 with the purpose of determining the annual national efficient price (NEP) and national efficient cost (NEC) for public hospital services in Australia. The NEP establishes the contribution that the Commonwealth Government will make towards the cost of each service provided under the ABF framework on an annual basis. It is calculated by considering the national average cost of an episode of care in a financial year, referred to as the National Weighted Activity Unit (NWAU). It is based on activity and cost data provided by all Districts and Networks across the country.

### 3.1.3 NSW's NWAU CAGR is sitting below the national average

Since 2017-18 to 2022-23, the NSW NWAU has grown at a Compounded Annual Growth Rate (CAGR) of approximately 2.0% as shown in Figure 6. This is significantly lower than the national average NEP which has grown at CAGR of 3.4%.

Figure 6- Financial Year (FY) 23 NWAU annual growth and CAGR at a state and national level.



Source: Deloitte analysis based on National Health Funding Body annual reports (2023).

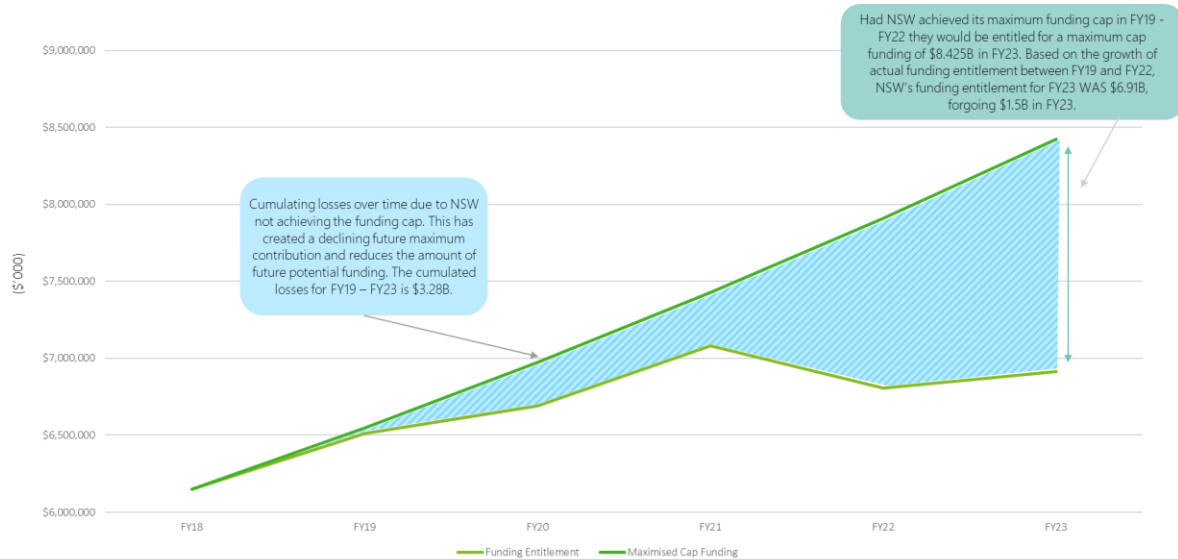
Generally, a state or territory's NEP can grow at a slower, or negative rate due to two factors, (1) a decrease in the number of patients, and (2) an inability to accurately capture all clinical activity and patient acuity.

In NSW, there has been a decline in volume for certain patient cohorts receiving public hospital services (i.e., admitted mental health, and sub-acute patients) and a general slowed CAGR across all patient volumes of 1.0%. Additionally, public hospitals have not been accurately claiming all the clinical interventions they have performed – which has been supported by the technical efficiency diagnostics results conducted in other jurisdictions. As a result, they are forgoing Commonwealth funding the State is entitled to.

### 3.1.4 NSW is falling short of its Commonwealth soft funding cap

This also affects NSW's potential future Commonwealth funding, as the maximum cap is determined by the previous year's funding, plus a 6.5% growth factor. Consequently, this has resulted in substantial cumulative forgone Commonwealth funding contribution, amounting to approximately \$3.28 billion between FY19 and FY23, as shown in Figure 7.

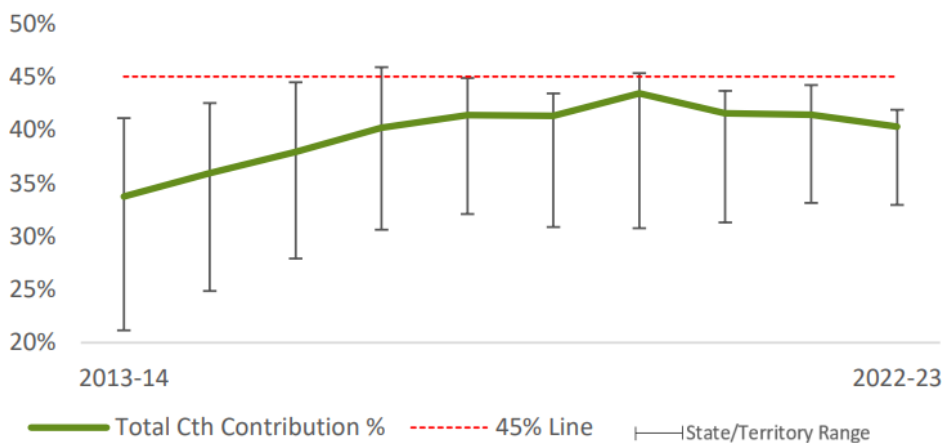
Figure 7- Foregone and unclaimed Commonwealth funding and growth cumulating losses



Source: Deloitte analysis based on National Health Funding Body annual reports and AIHW data (2023).

Figure 7 indicates that NSW public hospitals have left Commonwealth funding on the table, which is impacting the State's ability to deliver services effectively. Therefore, the NSW Government is shouldering this financial pressure. This situation is being exacerbated by the rising rates of co-morbidity and higher patient acuity, as well as an increasing demand for managing chronic diseases which has been impacted by access to primary care during the pandemic. As a result, patient outcomes across the State are at risk.

Figure 8- Commonwealth Contribution Rate from 2013-14 to 2022-23



Source: NHRA Mid-term Review Final Report (Figure 17) (2023).

Furthermore, Figure 8 indicates a decline in technical efficiency, resulting in most states and territories contributing more to ABF. However, Queensland has successfully managed to reverse this trend by implementing impactful technical efficiency programs.

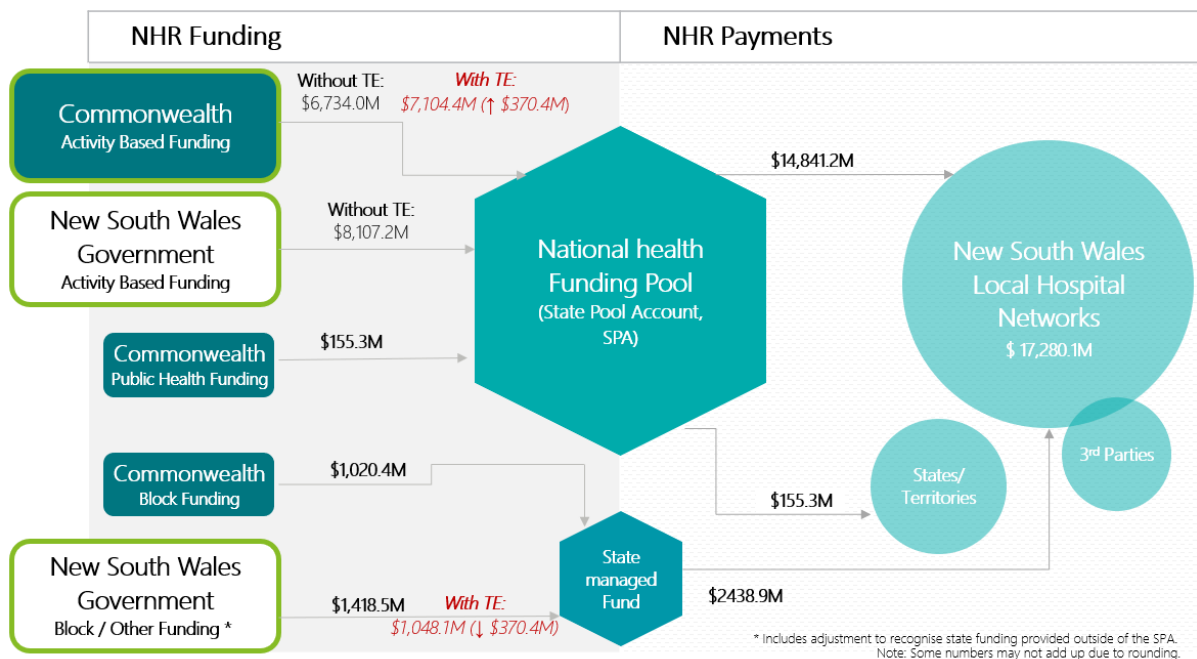
### 3.1.5 Technical efficiency opportunities

Through the optimisation of technical efficiency (TE), the historical impacts affecting hospital funding will become opportunities for additional funding. These include:

- **Capturing additional funding:** Through optimising TE in the state funding model there is the potential to capture additional Commonwealth funding without additional patient activity.
- **Creating additional funding:** Where the soft cap and hard cap is exceeded, the opportunity exists to convert ambulatory patients to private patients to capture additional funding above the cap through the Medicare Benefits Schedule.

These opportunities for TE have led to a 5 - 6% increase in reported activity across various jurisdictions. Therefore, an analysis was conducted to demonstrate the financial savings to the NSW Government by applying a 5.5% uplift in reportable NWAU for NSW, Illawarra Shoalhaven LHD (ISLHD), and South Western Sydney LHD (SWSLHD). Essentially, contributions from the Commonwealth into the National Health Funding Pool are increased, while NSW Government contributions are reduced. For the NSW Government, this means a potential reduction in its annual contribution of up to \$370.4 million (FY23), as shown in Figure 9. This potential funding can be reinvested into the healthcare system to enhance patient outcomes and promote workforce retention through the provision of competitive remuneration and improved conditions.

Figure 9- NSW funding potential impact FY23.



Source: Deloitte analysis based on National Health Funding Body 2022-23 Annual Report

Note 1: NSW Government Block / Other funding only includes funding administered via the NHFB state pool accounts.

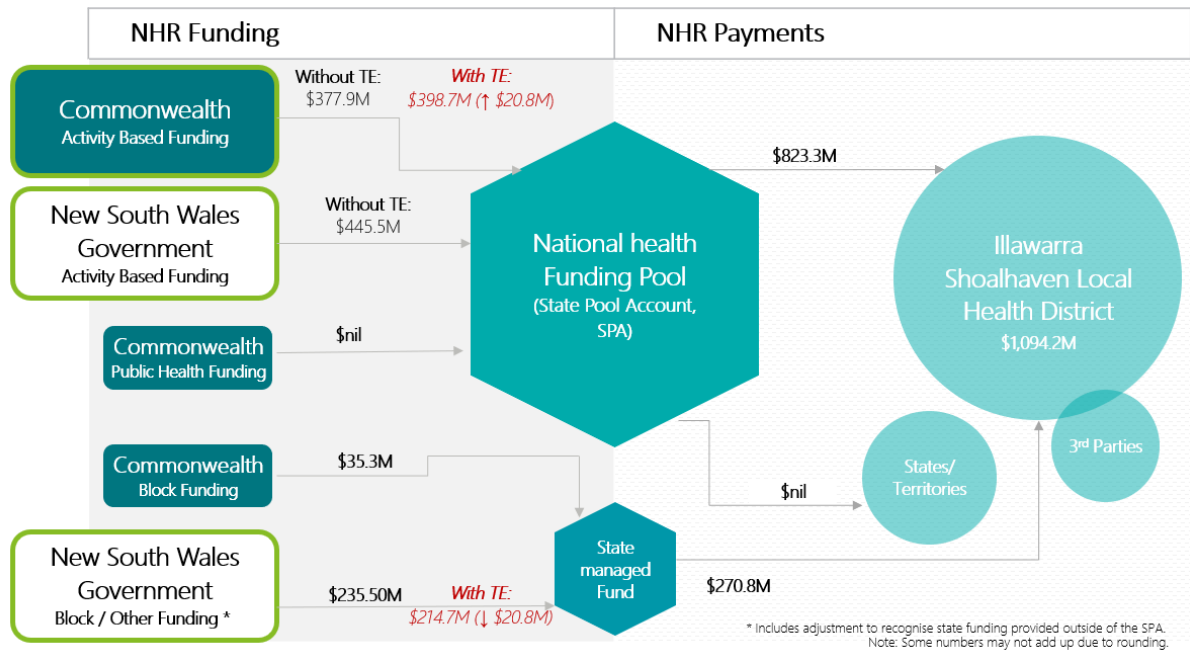
Although TE does not directly affect the funding for the ISLHD and SWSLHD, it does generate a reduction to the State's contribution of \$20.8 million and \$42.4 million, respectively as illustrated in Figure 10 and Figure 11. This represents ~2% decrease in NSW state funding as shown in Table 3. These savings can then be reinvested into the LHDs.

Table 3 – State / Commonwealth allocations before and after TE

	Pre TE Allocations		Post TE Allocations	
	State	Commonwealth	State	Commonwealth
NSW	54.6%	45.4%	52.5%	46.5%
ISLHD	62.2%	37.8%	60.3%	39.7%
SWSLHD	64.2%	35.8%	62.3%	37.7%

Source: Deloitte analysis based on National Health Funding Body 2022-23 Annual Report

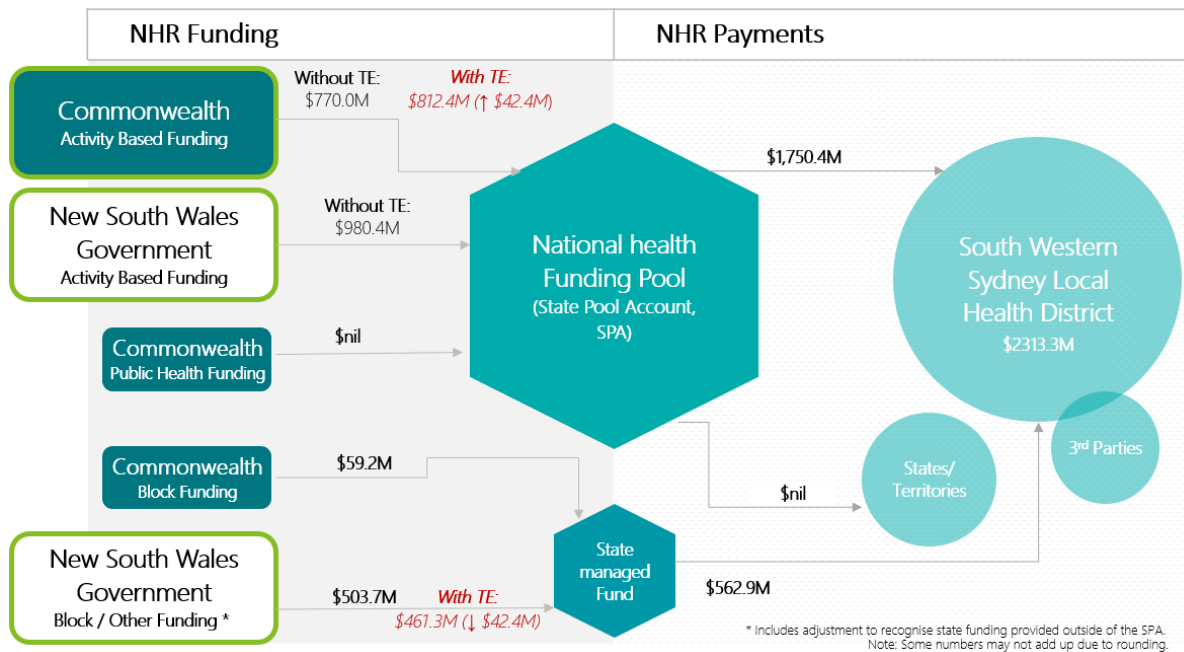
Figure 10- Illawarra Shoalhaven LHD funding potential impact FY23.



Source: Deloitte analysis based on National Health Funding Body 2022-23 Annual Report



Figure 11- South Western Sydney LHD funding potential impact FY23.



Source: Deloitte analysis based on National Health Funding Body 2022-23 Annual Report

By improving TE, the NSW Government can redirect approximately \$370.4 million in funding towards enhancing patient outcomes and promoting workforce retention through the provision of competitive remuneration and the implementation of safe staffing levels across agreed clinical areas.

# 4 Allocative efficiency opportunities

## 4.1 Allocative efficiency through sub-acute and aged care

As the healthcare system is struggling to keep pace with demand and cost of service delivery, there is a need to provide more efficient and sustainable service delivery. This can be achieved through the reallocation of patients through the healthcare system to more appropriate modalities for care. Currently this is not undertaken for three key reasons:

- 1) Current funding models do not adequately incentivise or enable step-down care – in some cases step-down care can even reduce funding for hospitals further exacerbating financial sustainability pressures.
- 2) Legislative uncertainty. Administrators may be uncertain about whether step-down strategies that involve transfer of care to components of the healthcare system primarily funded by the Commonwealth breach cost-shifting prohibitions, and clinicians on the ground may be uncertain about whether encouraging step down is limiting patient choice.
- 3) Clinician confidence in the transfer of care to an alternative provider. This creates the paradigm of acute clinicians holding on to the patients for a longer length of stay.

### 4.1.1 Allocative Efficiency

Allocative efficiency looks to provide strategies that allocate care to the right location within the healthcare system and supports sustainability enabled by the funding model. This could include:

- **Step down to less resource intensive care:** Identify patients that currently occupy services that utilise excessive resources relative to the patients' clinical needs – develop and implement pathways to the right care in the right place.
- **Utilise existing capacity within the system:** When developing step-down pathways the system can better utilise existing service capacity and infrastructure investments already made across the entire health and human services system.
- **Release acute capacity for growing demands:** Effective step-down not only benefits the patients, but the release of acute care resources enables their utilisation to meet the growing demand pressure for acute services.

The reallocation of patients presents a number of overarching benefits, including:

- **Reduced per patient day costs of care for stepped-down patients:** Resulting from the movement of patients to locations where resource use matches their clinical needs.
- **Reallocation of critical workforce and resources** to meet acute care demands. Alternative workforce can be used to tend to lower acuity patients in step-down care modalities.
- **Increased overall funding from the Commonwealth Government** as a result of patient care being step-down from acute to sub-acute.
- **Reduced infrastructure capital spend & cost of funding** as step-down care utilises less capital-intensive infrastructure and can utilise existing less specialised care infrastructure across the system.
- **Care closer to home** as a greater range of infrastructure is utilised to provide care there are greater options to provide care that is closer to patient's home.
- **Improved access to hospital services:** reallocating patients to a more appropriate model of care, out of acute beds, will improve access to services for patients with more urgent healthcare needs, reducing wait times and overcrowding in emergency departments and surgical services.
- **Improved health outcomes:** Providing the right care in the right place and minimising patient deterioration.

The demand for hospital beds is exacerbated by Residential Aged Care (RAC) patients awaiting placement in RAC facilities and a high proportion of Sub acute and Non-Admitted Patients (SNAP) waiting in acute beds. Two opportunities have been quantified in this chapters (1) Reallocation of RAC patients to RAC facilities and (2) SNAP waiting in acute beds.

#### 4.1.2 Allocative Efficiency through RAC

The Commonwealth Government has made major investments into the aged care and disabilities sectors which in part is aimed at reducing pressures on the healthcare system however this is yet to be realised.

Currently in NSW, RAC facilities appear to be underutilised, there are three key drivers:

- There is missing built capacity within RAC facilities, with licencing being held where no physical capacity exists.
- Given current cost pressures, private providers are unwilling to take on complex aged care patients into their RAC facilities due to financial losses they may incur which amplify workforce issues.
- Workforce constraints limiting the ability to support new clinical care ratios.

While the RAC facilities in NSW appear to be underutilised based on a comparison of available licenses, these facilities are at capacity, which has led to an increasing number of RAC patients being admitted into public hospitals. In some locations we have seen the closing of RAC

facilities due to financial pressures and this is creating a cascading impact into the acute hospitals. Table 4 demonstrates the estimated recurrent cost saving for NSW, based on a FY23 daily average of 550 RAC patients<sup>9</sup> in acute and sub-acute hospital beds awaiting transfer to RAC. For the purpose of the analysis, a conservative acute/sub-acute split of 25%/75% acute/ sub-acute was considered.

Three scenarios have been demonstrated:

- 1) Acute patients deemed waiting for a RAC bed are stepped down to sub-acute beds.
- 2) Acute and sub-acute patients deemed waiting for a RAC bed are stepped down to state RAC facilities.
- 3) Acute and sub-acute patients deemed waiting for a RAC bed are stepped down to private facilities.

There is a significant potential cost saving under all three scenarios, the cost saving for NSW where patients are transitioned into State RAC facilities, could include:

- Recurrent savings to the state of \$233.4 million per annum (p.a.)
- Avoided capital costs to the state \$1,727.7 million.
- The potential to redirect 302 in demand nursing FTE – equivalent to a reduction in nurse agency costs of \$37.7 million.

---

<sup>9</sup> SMH, *On any given day, 550 people are in our hospital beds with no clinical reason to be there, November 2023*

Table 4 – Potential Cost savings for NSW Health from transitioning admitted care patients to RAC

Patients awaiting RAC Placement	Acute to Subacute	Acute & Subacute to State RAC	Acute & Subacute to Private RAC
Number of patients (#)	137	550	550
<i>Acute</i>	137	137	137
<i>Subacute</i>		413	413
Number of bed days (#)	50,005	200,750	200,750
<i>Acute</i>	50,005	50,005	50,005
<i>Subacute</i>		150,745	150,745
Recurrent savings to the state (\$ per annum)	12,872,607	233,356,797	258,414,259
<i>Reduction in state contribution to funding under ABF model</i>	2,309,413	58,514,792	72,190,004
<i>Reduction in state funding of operating deficit</i>	6,354,644	113,090,455	116,503,205
<i>Reduced funding costs requirement due to avoided capital costs</i>	3,308,550	61,751,550	69,721,050
Avoided capital costs to the state (\$ once off)	92,565,562	1,727,665,268	360,802,993
<i>Avoided capital development costs</i>	68,500,000	1,278,500,00	1,443,500,000
<i>Avoided lifecycle Capital maintenance costs (NPV)</i>	24,065,562	449,165,268	507,133,410
Redirected Direct Nursing (FTE Total)	41	302	302
<i>Equivalent reduction in nurse agency costs</i>	5,140,317	37,699,824	13,250,594

Source: Deloitte (2024).

In addition, reallocating RAC patients out of hospital can improve health outcomes for these patients. Geriatric patients hospitalised for longer than 7 days leads to deterioration of their health status and increased frailty. Thus, is it important to transition these patients as quickly as possible back into their homes to ensure they maintain their current health status and minimise any further deterioration.

Based on available information ISLHD has been selected as a worked example shown in Table 5. In FY22, it was estimated that ISLHD had a daily average of 92 RAC patients<sup>10</sup> in hospital bed awaiting transfer to RAC. For the purpose of the analysis, the acute/sub-acute split was based off of funding allocation (81%/19% respectively) for FY22.

There is a significant potential cost saving for the LHD under all three scenarios, the cost saving when transitioned into state RAC facilities, could include:

- Recurrent savings to the state of \$43.4 million p.a.
- Avoided capital costs to the state \$323.5 million one off.
- The potential to redirect 66 in demand nursing FTE – equivalent to a reduction in nurse agency costs of \$8.2 million.

---

<sup>10</sup> NSW Health, *Aged Care relief package to free up hospital beds in Illawarra and Shoalhaven*, July 2023

Table 5 – Potential Cost savings for ISLHD from transitioning admitted care patients to RAC

Patients awaiting RAC Placement	Acute to Subacute	Acute & Subacute to State RAC	Acute & Subacute to Private RAC
Number of patients (#)	74	92	92
<i>Acute</i>	74	74	74
<i>Subacute</i>		18	18
Number of bed days (#)	27,010	33,580	33,580
<i>Acute</i>	27,010	27,010	27,010
<i>Subacute</i>		6,570	6,570
Recurrent savings to the state (\$m per annum)	6,953,087	43,355,397	48,025,509
<i>Reduction in state contribution to funding under funding model</i>	1,733,552	10,505,951	13,272,123
<i>Reduction in state funding of operating deficit</i>	3,432,436	21,286,426	21,857,286
<i>Reduced funding costs requirement due to avoided capital costs</i>	1,787,100	11,563,020	12,896,100
Avoided capital costs to the state (\$m once off)	49,998,917	323,506,504	360,802,993
<i>Avoided capital development costs</i>	37,000,000	239,400,000	267,000,000
<i>Avoided lifecycle Capital maintenance costs (NPV)</i>	12,998,917	84,106,504	93,802,993
Redirected Direct Nursing (FTE Total)	22	66	66
<i>Equivalent reduction in Nurse Agency costs</i>	2,776,521	8,222,839	7,157,255

Source: Deloitte (2024).

Overall, at a state and LHD level, the reallocation of patients to RAC facilities presents a significant cost savings to the NSW Government and an opportunity to fund critical issues identified by NSWNMA including implementing safe staffing levels, wage growth for nurses and midwives and improvement in standards to attract a greater workforce. Additionally, it presents an opportunity to redirect in demand nursing staff to deliver other services.

### 4.1.3 Allocative efficiency through SNAP funding

Under the service level agreements through the NSW Ministry of Health, ABF is provided at an individual LHD level across the NSW. ABF is a funding method for public hospital services based on the number of weighted services provided to patients, and the price to be paid for delivering these services.

Inpatients who have a longer length of stay can be stepped down from an acute bed to a sub-acute bed, which presents an opportunity to generate more Commonwealth ABF per patient as the LHD can claim funding for the change in status at an additional daily rate. The transition to sub and non-acute care models also provides a reduction in the daily cost of the patient's admission.

Currently in NSW both regional and metropolitan LHDs have poor acute to SNAP ratios. This is due to inpatients not being optimally transitioned from acute to sub-acute models of care in line with past performances and the right clinical care / treatment model.

Historical activity data has demonstrated that in NSW LHD's have reached an acute to SNAP ratio of 10.7% achieved by South Eastern Sydney LHD in FY18.<sup>11</sup> This ratio is similar to the Queensland exemplar in 2021-22. Table 6 illustrates two modelled scenarios where the SNAP ratio of each LHD was benchmarked against two exemplar ratios: 6.4% (Southern NSW LHD) and 10.7% (South Eastern Sydney LHD).

For the purposes of this analysis, the additional revenue calculated is based on the number of additional patients stepped down into sub-acute care beds based on the exemplar benchmark, leading to a proportionate increase in SNAP funding. It should also be noted that the figures calculated in Table 6 only considers the Commonwealth funding uplift of 45 cents on the dollar.

---

<sup>11</sup> Australian Institute of Health and Welfare, *Patient admission data*, January 2024



Table 6 – Potential increases in SNAP Funding in NSW

LHDs	2017-18 SNAP Ratios	2021-22 SNAP Ratios	Scenario 1		Scenario 2	
			Uplift Required (Benchmark 6.4%)	Additional funding to be received (6.4%)	Uplift Required (Benchmark 10.7%)	Additional funding to be received (10.7%)
Group 1						
South Eastern	10.7%	5.8%	0.5%	\$3,755,103	4.8%	\$33,212,192
ISLHD	6.1%	5.0%	1.4%	\$8,763,611	5.7%	\$36,677,378
Northern Sydney	2.8%	4.0%	2.4%	\$18,165,498	6.7%	\$51,335,442
Nepean	4.1%	3.6%	2.8%	\$16,226,546	7.1%	\$41,205,409
Sydney LHD	3.0%	2.9%	3.5%	\$30,732,218	7.8%	\$68,981,829
Western Sydney	2.8%	2.7%	3.7%	\$34,629,806	8.0%	\$75,038,436
South Western	2.3%	2.4%	4.0%	\$60,967,448	8.3%	\$127,074,628
Hunter New England	2.4%	2.4%	4.0%	\$38,892,578	8.3%	\$80,712,995
<b>Total</b>				<b>\$212,132,807</b>		<b>\$514,238,310</b>

Group 2				
Central Coast	3.4%	5.5%	0.9%	\$3,376,281
Southern NSW	6.4%	5.2%	1.2%	\$2,297,873
Far West	3.1%	3.8%	2.6%	\$870,357
Murrumbidgee	3.9%	3.8%	2.6%	\$8,127,866
Northern NSW	3.7%	3.8%	2.6%	\$15,794,481
Mid North Coast	4.0%	3.0%	3.4%	\$9,864,579
Western NSW	1.7%	1.9%	4.5%	\$25,089,388
<b>Total</b>				<b>\$65,420,825</b>

Source: Deloitte (2024).

Note 1: As part of this analysis, the LHDs across this state have been grouped based on funding amounts. Group 1 consists of LHDs with larger funding amounts and Group 2 consists of LHDs with lower funding amounts.

Based on the analysis in Table 6, there is significant opportunity for the State to generate additional Commonwealth funding through improved SNAP ratios. Inpatients that are optimally transitioned to a sub-acute and non-acute model of care in line with past exemplar performance could generate additional Commonwealth revenue of **\$277.5 million** for NSW under Scenario 1. It is noted that this analysis is based on conservative measures, should the Group 1 LHDs return to a higher SNAP benchmark achieved by South Eastern Sydney LHD in FY18 it would result in an additional Commonwealth revenue of \$579.6 million under Scenario 2. Note scenario 1 and 2 are not additive. Additionally, if these patients are transferred to SNAP beds, this can result in a reduction in the daily cost for patient admission by approximately **12.4%**.<sup>12</sup> This equates to **\$142.8 million** in cost savings to the State Government.

In addition, improved SNAP ratios can provide an **additional 370 nursing FTEs**, which can help support the roles required to implement safe staffing levels. Refer to Appendix A1 for further detail.

Overall, inpatients that are optimally transitioned to a sub-acute and non-acute model of care presents:

- An opportunity for additional Commonwealth funding for NSW Government.
- A reduction in the daily cost for patient admission.
- Improved health outcomes for patients.
- Release of acute care resources enables their utilisation to meet the growing demand pressure for acute services and in particular supporting elective surgery/planned care.

This additional funding can be utilised to fund critical issues identified by NSWNMA including implementation of safe staffing levels, wage growth for nurses and midwives and improvement in standards to attract a greater workforce.

---

<sup>12</sup> Based on the cost differential of providing care to patient in an acute setting vs non acute setting.

# 5 Cost of Proposed Policy Position

The NSWNMA is committed to advancing the entitlements and welfare of nurses and midwives across NSW. The NSWNMA has identified three key initiatives to help improve working conditions under the *Public Health System Nurses and Midwives (State) Award 2024* and improved outcomes for patients.

These three key initiatives include:

- Completion of safe staffing levels across agreed clinical areas to ensure safe and optimal patient care.
- Increased wages for nurses and midwives.
- Conversion of AiN positions to supernumerary.

As previously outlined, NSW is one of the lowest performing states with respect to recruiting and retaining its nursing and midwifery workforce. These three initiatives will help NSW reach parity with other exemplar states and ensure that the NSW nursing and midwifery workforce has improved working and wages standards in line with the rest of the nation.

## 5.1 Completion of Safe Staffing Levels Across Agreed Clinical Areas

Nurse/midwife-to-patient ratios refer to the number of patients assigned to each nurse or midwife in a healthcare setting. It is a measure used to determine the workload and level of care that nurses can provide. This initiative looks to complete safe staffing levels across agreed clinical areas in NSW to better align with other states and improve the delivery of public health in our hospitals. Victoria, Queensland, South Australia and the Australian Capital Territory have regulated nurse-to-patient ratios. Western Australia is progressing the implementation of ratios.

Under the Safe Staffing Levels policy, a 1:3 ratio will be phased into Emergency Departments (EDs) on all shifts, and 1:1 in resuscitation bays. For critical care, ratios will be 1:1 in Intensive Care Units and 1:2 in High Dependency Units. For the first time, the role of ACCESS nurses in ICUs will be protected, and in Nursing Hours Per Patient Day wards a ratio of 1:4 will apply.

The Ministry of Health has noted the first ratios rollout will begin during June 2024, starting in ED at Liverpool and Royal North Shore Hospital's, with other EDs and wards to follow. This means we will start to see improved workloads for nurses and midwives, and greater assurances around safe emergency care for patients. However, current funding to complete the rollout across the five agreed areas (ED, ICU, NHPPD Wards, Maternity and MPSS) falls

short. The funded 2480 FTEs will not cover all wards and units in all hospitals across these five areas.

The NSWNMA has identified, based on figures provided to the Safe Staffing Levels Taskforce meeting in December 2023, that an estimated 1800 FTEs of registered nurse/midwives is required to complete the rollout across the five agreed areas. The total cost of this initiative has been calculated by multiplying the staffing gap by the average cost for an RN5 in FY25 terms. A cost summary is shown in Table 7.

**It is estimated that the total cost to implement this initiative is approximately \$204.4 million.** Noting this reflects initial year 1 costs only, it does not include recurrent costs as it is assumed this will become business as usual activity and offset by the additional recurrent revenue and cost savings.

*Table 7 – Initiative 1 Cost (FY25 terms)*

Improved Ratios	Cost of Initiative
Cost to provide 1 FTE nurses/midwives at RN5 in FY25 terms (p.a.)	\$113,554.00
Number of RN FTEs required to complete the safe staffing levels across the five agreed areas	1,800
<b>Total Cost</b>	<b>\$204,397,200</b>

*Source: Deloitte, NSWNMA (2024).*

Refer to Table 14 in Appendix A2 for a further breakdown of cost calculations.

## 5.2 Increased wages for Nurses and Midwives

In the past decade, wages for NSW nurses and midwives have stagnated significantly. As a result, nurses and midwives wages across NSW have declined in real terms, when comparing wages for nurses and midwives in 2012 to 2023, a first-year nurse / midwife is \$2,825.33 worse off today when adjusting for inflation.<sup>13</sup> The stagnated wage growth is a direct result of the previous State Government imposed annual cap on wage growth for public sector workers. The new *Industrial Relations Act* removes any such cap, however, given the current cost of living and previous stagnation, significant improvements will be needed to achieve a competitive workforce.

Given the stagnated wage growth, the NSWNMA is seeking a wage increase for nurses and midwives across the NSW. This initiative looks to increase all nurses and midwives wages by 15% on current (FY24) wages, this includes both registered nurses / midwives and enrolled nurses. A breakdown of total cost of this initiative is shown in Table 8.

---

<sup>13</sup> [Nurses and midwives' real wages almost \\$3000 less than a decade ago - Lamp Online \(thelamp.com.au\)](https://thelamp.com.au)

It is estimated that the total cost for this initiative is approximately \$862.8 million, this includes a weighted salary calculation based on the gross incomes for both RNs and ENs. The calculation reflects initial in year 1 costs uplift only, it does not include recurrent costs as it is assumed this will become business as usual activity and offset by the additional recurrent revenue and cost savings.

Table 8 – Initiative 2 - Improved wages for Nurses and Midwives (FY25 terms)

Improved Wages	Cost of Initiative
Percentage wage increase	15%
Gross income for EN5 (before wage growth) – based on 4 afternoon and 1 Sunday shift.	\$79,215
Gross income for RN5 (before wage growth)	\$108,395
Proportion of nursing workforce that are EN	10%
Proportion of nursing workforce that are RN	90%
Weighted salary for all nurses / midwives	\$105,477
Total nurses in NSW	54,531
<b>Total Cost</b>	<b>\$862,763,143</b>

Source: NSW Health Award Rates (2023), NSW Health (2023), Deloitte (2024).

Refer to Table 16 in Appendix A2 for a further breakdown of cost calculations.

## 5.3 Conversion of Assistant in Nursing (AiN) positions to Supernumerary

This initiative aims to convert existing AiN positions to supernumerary to align with other states. AiNs are a dedicated role in the healthcare industry designed to provide support and assistance to RNs.

The NSWNMA has identified that 1596 FTE EN's are required to replace the current AiN cohort to allow AiNs to become supernumerary. This will enable AiNs to be more appropriately utilised to deliver safe and effective care in hospitals, rather than to simply fill staffing shortages.<sup>14</sup> **It is estimated that the total cost for this initiative is approximately \$129.6 million.** Noting this reflects initial year 1 costs only, it does not include recurrent costs as it is assumed this will become business as usual activity and offset by the additional recurrent revenue and cost savings.

<sup>14</sup> [NSWNMA - Ratios Rollout: Phase 1 - FAQ](#)

The breakdown of total cost of this initiative is shown in Table 9.

Table 9 – Initiative 3 – Conversion of AiN positions to supernumerary (FY25 terms)

Conversion of AiNs	Cost of Initiative
Numbers of FTE EN's that need to be recruited	1596
Gross Salary of EN Y5 (based on 4 afternoon and 1 night shift) in FY24 terms	\$79,215
Current annual wage increase	2.5%
Gross Salary of EN Y5 in FY25 terms	\$81,195
<b>Total cost</b>	<b>\$129,588,294</b>

Source: NSW Health Award Rates (2023), NSW Health (2023), Deloitte (2024).

Refer to Table 15 in Appendix A2 for a further breakdown of cost calculations.

All three identified initiatives are aimed at improving working conditions for nurses and midwives across NSW. These initiatives will bring about comprehensive benefits, including improve patient outcomes with greater specialised care. In addition to this, the initiatives are aimed at supporting NSW Health transition to a more sustainable approach to service delivery.

# 6 Benefit Overview

## 6.1 Overview

Implementing the three initiatives will provide a range of economic and financial benefits for patients, nurses and midwives, LHD's and the state. These benefits:

- **Avoided cost of turnover:** The avoided cost of onboarding new staff as a result of reducing the nursing and midwifery turnover rate in NSW and retaining existing staff.
- **Improved revenue due to reduced HAC:** Improving patient care and reducing the number of hospital acquired complications will improve revenue for NSW, as the penalties associated with HACs are reduced.
- **Increased spending in the economy** as a result of wage growth and additional job creation.
- **Reduced cost of overtime and agency costs:** Increasing the current FTE nursing and midwifery pool and better utilisation of staff to decrease the reliance on overtime and agency expenses.
- **Enhanced patient outcomes:** Improvement in patient outcomes as a result of improved ratios, wages and job matching.

Table 10 presents a benefits matrix of the benefits outlined above. This benefits matrix showcases each specific benefit, its intended recipients, whether it is qualitative or quantitative in nature, and whether it holds economic or financial value.



Table 10 – Benefits Matrix

Benefit	Beneficiaries	Qualitative / Quantitative	Economic / Financial
<b>Benefit 1</b> – Avoided cost of turnover	LHD	Quantitative	Economic & Financial
<b>Benefit 2</b> – Improved revenue due to reduce HAC	LHD	Quantitative	Economic & Financial
<b>Benefit 3.1</b> – Increased spending in the economy as a result of wage growth			
<b>Benefit 3.2</b> – Increased spending in the economy from additional roles created to implement safe staffing levels	State Government Workforce	Quantitative	Economic
<b>Benefit 3.3</b> – Increased spending in the economy from addition roles created through converting AiN positions to supernumerary			
<b>Benefit 4</b> – Reduced cost of overtime and agency costs	LHD	Quantitative	Economic
<b>Benefit 5</b> – Enhanced patient outcomes	Patients	Qualitative	n/a

Source: Deloitte (2024).



A quantitative analysis of the benefits identified in Table 10 has been undertaken to allocate a value to the quantifiable benefits. Should NSW Government choose to implement all three initiatives proposed in chapter 5, it could generate the following benefits:

- A 1% reduction in nursing and midwifery turnover can result in an **avoided cost of \$28.6 million**. A reduction in the nursing and midwifery turnover of 3% can result in an avoided cost of **\$86.0 million**.
- A 1% change in the occurrence of HACs can result in **improved Commonwealth revenue of \$0.9 million**. Similarly, a one-third reduction of HACs can result in an improved Commonwealth revenue of **\$30.3 million**.
- Increased spending in the economy as a result of wage growth: a 15% wage increase for NSWNMA workforce leads to an **economic benefit of \$539.2 million**.
- Increased spending in the economy from an additional 1800 FTE RN roles created to address safe staffing levels of **\$73.8 million**.

- Increased spending in the economy from additional roles from an additional 1596 FTE EN roles created through the conversion of AiN positions to supernumerary of **\$56.1 million**.
- Reduced cost of overtime and agency costs: 1800 FTE leads to an **avoided cost of \$54.0 million dollars**.

Table 11 demonstrates how each initiative aligns with the five identified benefits. It should be noted that the quantitative analysis is based on conservative assumptions, particularly given the compounding effect of implementing all three initiatives simultaneously, which is expected to enhance the outcomes at a quicker and more substantial pace.

Table 11- Benefits and Initiatives Alignment

	Initiative 1 – Implementing Safe Staffing Levels	Initiative 2 – Improved Wages	Initiative 3 – Converting AiN Positions to Supernumerary
<b>Benefit 1</b> – Avoided cost of turnover (1% change)			
<b>Benefit 2</b> – Avoided cost of a HAC (1% change)			
<b>Benefit 3.1</b> – Increased spending in the economy as a result of wage growth			
<b>Benefit 3.2</b> – Increased spending in the economy from additional roles <b>created</b> to implement safe staffing levels			
<b>Benefit 3.3</b> – Increased spending in the economy from additional roles through converting AiN positions to supernumerary			
<b>Benefit 4</b> – Reduced cost of overtime and agency costs			
<b>Benefit 5</b> – Enhanced patient outcomes			
<b>Total Initiative Benefit (\$) (non-cumulative)</b>	158,165,108	622,704,705	140,441,917

*Source: Deloitte (2024).*

It is important to note that the benefits in Table 11 are attributed to an individual initiative and are not cumulative in nature.

Refer to Appendix A3 for additional detail.

# Appendix A1: Allocative efficiency approach

A high-level approach has been provided in Table 12 outlining the logic that underpins the allocatively efficiency outputs in Table 4.<sup>15</sup>

Table 12 – Allocative Efficiency Model Methodology

#	Description	Method
A1.A	Recurrent savings to the State	<p>The per day cost differential between delivering services to a patient in an acute bed vs sub-acute bed.</p> <p>This calculation includes:</p> <ul style="list-style-type: none"> <li>• Reduction in the State Government Funding contributions under NHRA due to reduced step-down in funded patient acuity</li> <li>• Reduction in current operating deficit for public hospitals currently being funded by the State Government</li> <li>• Reduction in recurrent costs due to reduction in State Government interest payments due to avoided capital costs</li> </ul>
A1.B	Avoided capital costs to the State	The potential avoided costs on a one-off basis from the transfer of acute patients to state run RAC beds - Reduction in capital development costs and lifecycle capital maintenance costs for released bed capacity
A1.C	Redirected Direct Nursing (FTE Total)	The reduction in direct nursing costs (agency costs at the margin) due to more appropriate staffing aligned with patient acuity

Source: Deloitte (2024).

<sup>15</sup> Please note that the figures and specific details cannot be disclosed due to the confidential nature of the Allocative efficiency model, which is protected under intellectual property rights.

Additionally, the following methodology in Table 13 was used to calculate the number of additional FTEs that could be made available by improving SNAP ratios.

Table 13 – Additional FTEs achieved through an improved SNAP ratio

#	Figure	Description	Source
A1.D	16.0	Average length of stay in FY22	BHI
A4.E	45,669	Additional sub-acute admissions	BHI
A4.F	1	Nursing Hours per Patient Day (NHPPD) saved <i>Note: This is based on changing the minimum care hours to 5 NHPPD from 6.</i>	BHI
A4.G	1,976	Number of nursing hours per week	BHI
<b>Calculation method:</b> Additional FTEs = $(A4.D * A4.E * A4.F) / A4.G$ $= 370 \text{ FTEs}$			

Source: Deloitte (2024).

# Appendix A2: Initiative methodology

## Completion of safe staffing levels

Table 14 – Initiative 1 methodology

#	Figure	Description	Source
A2.A	1,800	Number of FTE's required to complete the safe staffing levels across the five agreed areas	NSWNMA Assumption
A2.B	\$113,554.00	Cost to provide 1 FTE nurses / midwives at RN5 in FY25 terms	<a href="#">Parliamentary Budget Office</a>
<b>Calculation method and total:</b> Total cost = A2.A*A2.B = \$204,397,200.00			

Source: Deloitte (2024).

## Conversion of AiN positions to supernumerary

Table 15 – Initiative 3 methodology

#	Figure	Description	Source
A2.J	1,596	Number of FTE EN's that need to be recruited	NSWNMA Assumption
A2.K	\$79,215.29	Gross salary of EN Y5 (based on 4 afternoon and 1 night shift) in FY24 terms	<a href="#">NSW Health</a>
A2.L	2.5%	Current annual wage increase	<a href="#">NSW Health</a>
<b>Calculation method and total:</b> Total cost = A2.J*A2.K*A2.L = \$ 129,588,294.81			

Source: Deloitte (2024).

## Increased wages for nurses and midwives

Table 16 – Initiative 2 methodology

#	Figure	Description	Source
A2.C	15%	Wage increase for nurses / midwives	NSWNMA Assumption
A2.D	\$ 105,476.78	Weighted Salary for EN & RN	<a href="#">NSW Health Award Rates</a>
A2.E	\$79,215.29	Gross income for EN5 (before wage growth in FY24 terms) – based on 4 afternoon and 1 Sunday shift.	<a href="#">NSW Health Award Rates</a>
A2.F	\$108,394.72	Gross income for RN5 (before wage growth in FY24 terms) – based on 4 afternoon and 1 Sunday shift.	<a href="#">NSW Health Award Rates</a>
A2.G	90%	Proportion of nursing workforce that are RN	NSWNMA Assumption
A2.H	10%	Proportion of nursing workforce that are EN	NSWNMA Assumption
A2.I	54,531	Number of nurses employed by NSW Health in FY23	<a href="#">NSW Health</a>
<p><b>Calculation method and total:</b></p> $A2.D = (A2.G * A2.F) + (A2.H * A2.E)$ $\text{Total cost} = A2.C * A2.D * A2.I$ $= \$862,763,143.30$			

Source: Deloitte (2024).

# Appendix A3: Benefits methodology

## Cost savings achieved by reducing turnover

This benefit refers to the cost savings achieved by reducing the turnover rate among nurses and midwives in the NSW public healthcare system. As shown in Figure 5, the current nursing turnover rate in NSW stands at approximately 11%. By implementing measures such as staff staffing levels, more competitive remuneration packages, and converting AiN positions to supernumerary, staff turnover can be reduced. These initiatives will make nursing and midwifery positions more appealing, attracting more students to pursue nursing and midwifery careers, and encouraging existing nurses and midwives to remain in the profession.

A desktop analysis determined the cost of turnover to be between \$39,533 and \$62,058 through varying sources, for conservative purposes the middle scenario was adopted. The sources are highlighted in Table 17.

Table 17 – Cost of Turnover

Cost of turnover (FY25 \$)	Source
39,533	<a href="#">UTS</a>
51,279	<a href="#">Oracle</a>
62,058	<a href="#">AONL</a>

Source: Deloitte (2024).

The following methodology was therefore used to calculate the value of this benefit.

Table 18 – Benefit 1 methodology

#	Figure	Description	Source
A3.A	\$52,561	Cost of turnover in FY25 terms	<a href="#">Oracle</a>
A3.B	54,531	Number of nurses employed by NSW Health in FY23	<a href="#">NSW Health</a>
A3.C	1.0%	Assumed reduction in turnover rate	General Assumption
<b>Calculation method and total:</b>			
Total value = A3.A*A3.B*A3.C			
= \$28,662,259.13			



Source: Deloitte (2024).

For the purposes of this analysis, a 1% reduction in the turnover rate has been assumed. A 1% reduction in staff turnover can lead to a cost savings of \$28.6 million dollars.

## Improved revenue due to reduced HAC

This benefit refers to the revenue uplift should HACs<sup>16</sup> be reduced through the increase in staff.

In 2018, IHACPA introduced a funding adjustment for HACs that involved penalties for any instance of admitted acute care where a HAC occurs. The penalty reflects the additional cost of providing hospital care related to the HAC, acknowledging that the presence of a HAC increases the complexity of the care episode.

For the purposes of this analysis, a 1% reduction in HACs has been assumed. The following methodology was therefore used to calculate the value of this benefit.

Table 19 – Benefit 2 methodology

#	Figure	Description	Source
A3.D	14082	Total NWAU20 adjustments in NSW	<a href="#">IHACPA</a>
A3.E	\$6,465	National Efficient Price FY24	<a href="#">IHACPA</a>
A3.F	1.0%	Assumed reduction in HACs	General Assumption
<b>Calculation method and total:</b>			
Total cost = A3.D*A3.E*A3.F			
= \$910,401.30			

Source: Deloitte (2024).

## Increased spending in the economy as a result of wage growth

This benefit refers to increased spending in the economy as a result of the 15% wage growth for RN's and midwives. Wage growth has a number of cascading benefits for the economy including:

- Boosting consumer demand.
- Increasing tax revenue.
- Reducing income inequality.

---

<sup>16</sup> [The IHACPA](#) defines a HAC as “a complication that occurs during a hospital stay and for which clinical risk mitigation strategies may reduce (but not necessarily eliminate) the risk of that complication occurring”.

- Improving worker morale and productivity.

The following methodology was therefore used to calculate the value of this benefit.

Table 20 – Benefit 3 methodology

#	Figure	Description	Source
A3.G	\$ 105476.78	Weighted salary of RNs and ENs	<a href="#">NSW Health Award Rates</a>
A3.H	15.0%	Assumed wage growth	NSWNMA Assumption
A3.I	3.2%	Household savings ratio as at December 2023	<a href="#">ABS</a>
A3.J	\$5,092 (plus 32c for each \$1 over \$45,000).	FY24 Australian tax rates (\$45,001 to \$120,000 income threshold)	<a href="#">ATO</a>
A3.K	\$121,298.30	Gross income for all nurses and midwives based on the 15% wage increase	A3.A + (A3.A*15%)
A3.L	\$77,705.99	Net income before wage increase	A3.E*A3.D
A3.M	\$87,594.44	Net income after wage increase	A3.G*A3.D
A3.N	\$9,888.45	Increase in discretionary income expenditure after wage growth	A3.F – A3.G
A3.O	54,531	Number of nurses in NSW	<a href="#">NSW Health</a>
<b>Calculation method and total:</b> Total value = A3.N*A3.O = \$539,226,964.56			
<b>A3.1 Increased spending in the economy as a result of job creation for RNs to implement safe staffing levels</b>			
A3.P	\$73,465	Gross income for RN 1 in FY25 terms	<a href="#">NSW Health Award Rates</a>
A3.Q	1800	Number of FTE RNs required	NSWNMA Assumption
A3.R	3.2%	Household savings ratio as at December 2023	<a href="#">ABS</a>
A3.S	5,000	Number of graduating nurses in NSW	<a href="#">Sydney Morning Herald</a>

A3.T	\$21,573.57	Full time graduate student income in FY25 terms	<a href="#">Treasury</a>
A3.U	19c for each \$1 over \$18,200	FY24 Australian tax rates (\$45,001 to \$120,000 income threshold)	<a href="#">ATO</a>
A3.V	\$20,932.59	Net Income for University graduates	A3.1F * A3.1E
A3.W	78%	Student saving %	<a href="#">Treasury</a>
A3.X	\$16,242.77	Spending of a domestic student before job	A3.1H * A3.1G
A3.Y	\$57,229.98	Net Income for RN 1 minus savings	A3.1 C*A3.1 A
A3.Z	\$40,987.20	Total increase in spend	A3.1 J – A3.1 I
Total value = A3.Y * A3.Z = 73,776,966.34			
A3.2 Increased spending in the economy as a result of job creation for ENs to improve supernumerary			
A3.AA	\$64,487.67	Gross income for EN 1 in FY25 terms	<a href="#">NSW Health Award Rates</a>
A3.AB	1596	Number of FTE ENs required	NSWNMA Assumption
A3.AC	3.2%	Household savings ratio as at December 2023	<a href="#">ABS</a>
A3.AD	5,000	Number of graduating nurses in NSW	<a href="#">Sydney Morning Herald</a>
A3.AE	\$21,573.57	Full time graduate student income IN FY25 terms	<a href="#">Treasury</a>
A3.AF	19c for each \$1 over \$18,200	FY24 Australian tax rates (\$45,001 to \$120,000 income threshold)	<a href="#">ATO</a>
A3.AG	\$20,932.59	Net Income for University graduates	A3.1F * A3.1E
A3.AH	78%	Student saving %	<a href="#">Treasury</a>
A3.AI	\$16,242.77	Spending of a domestic student before job	A3.1H * A3.1G
A3.AJ	\$51,364.19	Net Income for EN 1 minus savings	A3.1 C*A3.1 A
A3.AK	\$35,121.41	Total increase in spend	A3.1 J – A3.1 I

Total value = A3.AJ\*A3.AK  
 = \$56,053,775.38

Source: Deloitte (2024).

## Reduced cost of overtime and agency costs

This benefit refers to the reduced cost achieved by recruiting additional nurses and midwives to complete the implementation of safe staffing levels and convert AiN positions to supernumerary. Consequently, this would decrease the reliance on overtime and agency expenses.

[NSW Health](#) has advised that a cost saving of \$30,000 can be achieved by reducing overtime and decreasing the use of contract staff through the hiring of an additional nurse or midwife.

For the purposes of this analysis, 1,800 FTEs are assumed to be recruited to complete the safe staffing levels across the five agreed areas. The following methodology was therefore used to calculate the value of this benefit.

Table 21 – Benefit 4 methodology

#	Figure	Description	Source
A3.AL	1,800	Number of additional FTE's required to complete the safe staffing levels across the five agreed areas.	NSWNMA Assumption
A3.AM	\$30,000	Savings per nurse / midwife as a result of reduced overtime and the decreased use of contract staff	<a href="#">Parliamentary Budget Office</a>
<b>Calculation method and total:</b>			
Total cost = A3.AL*A3.AM			
= \$54,000,000.00			

Source: Deloitte (2024).