



Health

Mr James Downie
Chief Executive Officer
Independent Hospital Pricing Authority
Email: james.downie@health.nsw.gov.au

Your ref D22-4093
Our ref S22/113

Dear Mr Downie *James*

Thank you for writing about the Round 25 (2020-21) National Hospital Cost Data Collection (NHCCD) Data Quality Statement (DQS) and Independent Financial Review (IFR).

I acknowledge IHPA's efforts to improve the quality and robust process of costing data under the activity based funding model.

Please find enclosed the NSW Health DQS for Round 25 of the NHCCD and signed declaration. NHCCD data has been prepared in adherence with Version 4.1 of the Australian Hospital Patient Costing Standards (AHPCS) and is complete and free of any known material errors.

Adherence to the AHPCS is qualified by the following item, with further information on adherence to the Standards found at point 3 of the DQS:

- Standard 1.2 Third Party Expenses – expenses that sit outside local health District/Specialty Health Network general ledger relating to private and compensable patient pathology and medical expenses recorded in Private Practice Trust Funds have not been included in the Round 25 NHCCD submission.

NSW Health remains concerned with the amount of time and resource required to process the NHCCD submission. NSW Health is willing to work with IHPA to identify opportunities for more efficient and effective processing of the NHCCD submission. This includes assisting IHPA with development of a new data submission portal.

Please note that NSW Health has decided not to participate in the Round 25 IFR of the NHCCD. We believe that resource requirements for the IFR outweigh benefits to NSW Health at present.

Thank you again for writing. For more information, please contact Mr Neville Onley, Executive Director, Activity Based Management at neville.onley@health.nsw.gov.au or on 0407 069 187.

Yours sincerely

Susan Pearce
Secretary, NSW Health

Encl. *6/5/22*

Data Quality Statement and Signed Declaration NSW Health

1. Overview of costing environment

1.1 *Who undertakes patient costing in your jurisdiction?*

In NSW, patient costing is processed by costing practitioners within each of the fifteen Local Health Districts and three Specialty Health Networks (Districts and Networks). Activity Based Management (ABM), NSW Health provides statewide leadership and coordination of the patient costing data preparation and submission process. The patient costing submission in NSW is referred to as the District and Network Return (DNR).

ABM is responsible for transforming DNR submissions into National Hospital Cost Data Collection (NHCDC) format and submitting patient costing data to the Independent Hospital Pricing Authority (IHPA).

1.2 *How often is costing undertaken?*

Usually, the DNR is processed twice a year, with a July to December submission period and a July to June full year submission period.

1.3 *Which costing systems are in use?*

One costing application is in use across all Districts and Networks in NSW. A commercially sourced costing application was implemented in 2012 and regular upgrades are installed. While each District/Network has their own instance of the costing application, all sites are on the same version to facilitate consistency and efficient reporting processes.

1.4 *Is there any jurisdiction-wide training/support for costing practitioners? If so, provide details*

There is significant jurisdiction-wide training and support for costing practitioners in NSW.

A Costing Standards User Group (CSUG) meets regularly throughout the year. Each year, there is a three-day workshop that typically reviews previous year costing and develops priorities for the coming calendar year. The workshop program includes topics of interest for key costing stakeholder groups. Business managers are invited to attend one day of the workshop. A total of 15 CSUG meetings were held between February and November 2021.

ABM provides technical support through the development of various spreadsheet and database tools. This assists with preparation of general ledger and activity data for loading into the costing system. Change requests for the DNR module in the costing system are managed by ABM to ensure consistency between all Districts and Networks.

In consultation with CSUG, ABM manages ongoing refinement and publication of the multi-volume NSW Cost Accounting Guidelines (CAG). The CAG was updated to reflect changes in the latest version (4.1) of the Australian Hospital Patient Costing Standards (AHPCS). The AHPCS is the foundation for CAG Volume 2: Costing Standards. The AHPCS Version 4.1 was not published until 31 August 2021, however NSW implemented planned changes, particularly Australian Accounting Standards Board 16 (AASB 16) about reporting of leases.

1.5 Provide details of any changes from previous year, specifically details of improvements in costing process and methodology

The most notable change in Round 25 of the NHCDC was processing of the DNR in one costing period, unlike Round 24 (2019-20) where the last three months of service provision were interrupted to free up capacity for an anticipated surge in COVID-19 cases. In 2020-21 emergency and acute services remained at full or near capacity throughout the year. This meant that the volume-based method did not distort costing results.

Costing practitioners also worked closely with finance departments at both the NSW Ministry of Health and at District/Network level to ensure expense reported under the National Partnership on COVID-19 Response (NPCR) State Public Health Payment was appropriately isolated in the costing ledgers. This ensured alignment of expense to either a National Health Reform Agreement or NPCR product.

Following discussions with key stakeholders, inclusion of the following state public health categories for new and enduring cost structures were allocated to patients where appropriate.

- PHP1c Personal protective equipment (subject to 2018-19 baseline)
- PHP1e Additional costs for public health activities, including communications, operations, responses to COVID-19 outbreak
- PHP1f Upgrades to ICT systems related to COVID-19 activity
- PHP1i Services provided in a primary care and/or community health setting to manage outbreak of COVID-19
- PHP1j Transport costs (subject to 2018-19 baseline)
- PHP1l Additional non-clinical costs

District/Networks submitted aggregate costs for COVID-19 screening and vaccination clinics for the entire District/Network. District/Network COVID-19 pathology services were first linked to emergency and inpatient events. Remaining service costs were aggregated and grouped to these non-admitted patient screening events. NSW Health then used a standard cost to allocate these costs to individual service events based on the cost structure of each District/Network.

A change was implemented for s100 pharmaceutical cost allocation. Previously, s100 pharmaceutical costs were not allocated to patients and were aggregated and excluded from the NHCDC submission. In Round 25, s100 pharmaceutical costs were allocated to non-admitted and same day episodes receiving these services. This change is consistent with Version 4.1 of the AHPCS costing guidelines.

In previous NHCDC rounds, NSW included as post adjustment restricted fund assets relating to patient care for the Sydney Children’s Hospitals Network (SCHN). In 2020-21, Districts/Networks were advised that restricted fund assets should be allocated to patients where appropriate in their local cost processing. NSW did not make this requirement mandatory but in addition to SCHN, Northern NSW Local Health District also included an additional 1.9 million relating to patient care. This was included in the NHCDC submission if a patients’ encounter was in-scope for NHCDC reporting purposes.

All residual costs from HealthShare NSW, eHealth, statewide support services for patient meals, linen, employee services (such as payroll), information technology and financial services (such as accounts payable) that was not distributed to Districts/Networks in the general ledger was attached to episodes for the NHCDC submission.

2. Submitted cost data

2.1 *How many hospitals provided cost data for the Round 25 NHCDC? Provide details about the number of submitting facilities and changes from prior year*

Submission Year	Number of Hospitals/ Entities	Submitted Activity	In-Scope Activity	Expense (\$m)
Round 25 (2020-21)	142	14,823,936	14,823,935	\$16,552.3
Round 24 (2019-20)	142	12,194,889	12,193,640	\$15,987.7
Variance	0	2,629,047	2,630,295	\$564.6

NSW reported six additional establishments in the Round 25 NHCDC submission. These were Bulli Hospital, Northern Sydney acute and post-acute care, Coastal Mental Health Service (MHS), Monaro MHS and Northern Beaches MHS.

Nepean Blue Mountains Local Health District costs were excluded as their DNR submission was not signed off until after the NHCDC processing deadline. This resulted in four establishments being excluded. Another two establishments were excluded due to no activity being available (Bega MHS and Goulburn MHS).

In Round 24 (2019-20) there was 1249 unqualified babies where costs were redistributed to the mother’s episodes. In Round 25 there was only one episode where cost was redistributed. In-scope activity excludes these unqualified episodes.

2.2 Provide explanation of costed results with explanation of significant movements from prior year

Total in-scope activity submitted in Round 25 was 14,823,935 records. This is an increase of 2,630,295 records (21.6 per cent) from the Round 24 (2019-20) submission of 12,193,640 records.

Activity counts for acute and sub-acute admitted patient episodes increased by 1.4 per cent and emergency department episodes decreased by 2 per cent. The decrease in emergency department episodes and slight increase in acute and sub-acute admitted episodes was primarily driven by exclusion of Nepean Blue Mountains Local Health District.

In addition, emergency encounters at Broken Hill Hospital were excluded that were only triaged in the emergency department and the patient's treatment outsourced and funded under the Medical Benefits Scheme. In Western NSW Local Health District, emergency encounters that were only screened for COVID-19 were also excluded. There was also a decrease in presentations from 2019-20 because at the start of the pandemic, patients were initially going to emergency departments to be screened for COVID-19 prior to non-admitted clinics being set up in early March 2020.

There was a significant 34.5 per cent increase in non-admitted patient activity. This increase was primarily driven by COVID-19 screening/treatment and vaccination requirements. In Round 24 (2019-20) there were 319,758 service events in COVID-19 Tier 2 clinics. In Round 25 (2020-21) there were 3,069,415 service events. This equated to an additional 2,749,657 service events. In Round 25 most service events related to screening or treatment clinics (2,749,657) while 799,803 were vaccination service events.

Total in-scope cost submitted in Round 25 was \$16,552.3m. This is an increase of \$564.6m (3.5 per cent) on the Round 24 submission of \$15,987.7m. The average raw cost for acute and sub-acute admitted patient episodes decreased by 3 per cent and for emergency department episodes increased by 2 per cent.

There are three key factors to consider in benchmarking the total cost:

- a lower-than-average pay rise as of 1 July 2020 of 1.03 per cent compared to a 2.5 per cent increase on 1 July 2019
- the total actuarial adjustment for NSW Health for leave liability in NSW Health equated to a negative expense amount of \$386 million. In 2019-20 the total amount for NSW was an expense of \$256 million. The total long service leave expense for 2020-21 was \$30 million (2019-20 - \$634 million) with a variance of \$604 million. NSW Health maps this cost to exclude items in the current and previous rounds due to volatility of these costs
- following discussions with key stakeholders, inclusion of the following state public health categories for new and recurrent cost structures were allocated to patients where appropriate:

PHP1c	Personal protective equipment (subject to 2018-19 baseline)
PHP1e	Additional costs for public health activities, including communications, operations, responses to COVID-19 outbreak
PHP1f	Upgrades to ICT systems related to COVID-19 activity
PHP1i	Services provided in a primary care and/or community health setting to manage outbreak of COVID-19
PHP1j	Transport costs (subject to 2018-19 baseline)
PHP1l	Additional non-clinical costs.

2.3 Are there any significant factors which influence the jurisdiction's Round 25 cost data (for example jurisdiction-wide admission policies). If so, what is the impact on costed output?

The contracting of elective surgery to private hospitals due to backlog in waitlists has resulted in changes to line item and cost bucket profiles as the expense was reflected as goods and services accounts. There were no jurisdiction-wide policy changes that impacted the costed output.

2.4 At a jurisdiction level, did you experience any challenges with costing of specific products in Round 25 (for example mental health phase of care/other)? Please describe these challenges and the impact of this

Two challenges relating to the reporting of product costs as opposed to the allocation of costs to products are noted by NSW for Round 25:

- ongoing discussions late into December 2021 with the National Health Funding Body, IHPA and jurisdictions about approved NPCR State Public Health Payment items and whether COVID-19 testing was a 30 series Tier 2 or a 20 or 40 series Tier 2. This was problematic as a final decision was not made until after standard costing was undertaken
- application of non-admitted mental health phase of care grouping rules for the Australian Mental Health Care Classification resulted in some patients with costed services from more than one District/Network that link to a single phase. Strict application of the rule that a patient can only have one phase of care at a time means that organisational boundaries (District/Network identifiers) are excluded from the phase grouping process. NSW therefore excluded these encounters from their natural District/Network and submitted them in the virtual 'LHN 199'.

2.5 Describe quality assurance tests undertaken on patient costing data.

Multiple quality assurance tests are undertaken at various phases of the patient costing data preparation process, including:

- numerous checks performed when activity data is extracted from various source systems. These tests primarily examine variables critical to the cost allocation process, such as duration of care or treatment. Many of these tests are included in statewide tools used to ensure consistent patient cost data is produced
- numerous tests are performed in the costing application DNR module that examine both compliance with key costing business rules and the plausibility of cost results. A number of these tests are fatal and must be addressed before a valid patient DNR cost file is produced

- NSW DNR submission process includes a draft submission period to enable Districts and Networks to compare their cost results with peers, as sometimes issues with cost results are not obvious until they are benchmarked with other facilities
- all draft DNR submissions are subjected to a series of cost result tests applied by ABM. The outcome of these tests is made available to all costing practitioners via a reasonableness and quality application (RQ App).

3. Adherence to the Australian Hospital Patient Costing Standards

3.1 Describe the level of compliance against the Australian Hospital Patient Costing Standards at the hospital and jurisdiction level (for example version of AHPCS used and local costing rules applied)

Compliance with the AHPCS for the Round 25 (2020-21) NHCDC submission remains unchanged since the Round 24 (2019-20) NHCDC submission.

NSW Health is fully compliant with the following standards under the AHPCS Version 4.1:

- Standard 1.1 - Identify Relevant Expenses – General
- Standard 1.3 – Identify Relevant Expenses – Offsets and Recoveries
- Standard 2.1 - Create the Cost Ledger - Cost Ledger Framework
- Standard 3.1 - Create Final Cost Centres - Allocation of Expenses in Production Cost Centres
- Standard 4.1 - Identify Products - Product Types
- Standard 4.2 - Identify Products - Information Requirements
- Standard 5.1 - Assign Expenses to Products - Final Products
- Standard 5.2 - Assign Expenses to Products - Intermediate Products
- Standard 5.3 - Assign Expenses to Products- Work in Progress

3.2 State any exceptions to the AHPCS and explanations

NSW Health is partially compliant with the following standards under the AHPCS Version 4.1. Explanations include:

- Standard 1.2 - Identify Relevant Expenses -Third Party Expenses - most third-party expenses are included in the cost ledger for the NHCDC. However, expenses such as pathology costs for private and compensable patients that are held centrally are not distributed to Districts/Networks for inclusion in the DNR cost ledgers. Medical expenses for private patients recorded in trust accounts or non-operation accounts are also not included in the cost ledger
- Standard 2.2 - Create the Cost Ledger - Matching Cost Objects and Expenses – while the range and extent of service data expands with each DNR submission, not all Districts/Networks have the same levels of service data to match expense with the relevant cost objects
- Standard 3.2 - Create Final Cost Centres - Allocation of Expenses in Overhead Cost Centres - in some cases the preferred overhead allocation statistic detailed in the CAG is not used for the allocation of overhead expense as the allocation statistic data is not readily available
- Standard 6.1 - Review and Reconcile - Data Quality Framework – while NSW has a comprehensive data quality framework in place, a systematic review of product areas that do not have service data has not been undertaken. This review will be undertaken during 2022

- Standard 6.2- Review and Reconcile - Reconciliation to Source Data – while an extensive expense and activity reconciliation process is embedded in the DNR submission process, further reconciliation of patient activity to the source systems is required.

3.3 Provide details of any specific areas of deviation from the AHPCS and describe the alternative treatment used (for example areas of common challenge which may warrant explanation of treatment - may include capital and depreciation; teaching and training; research; posthumous organ donation; allocation of medical costs for private and public patients; mental health; intensive care unit (ICU); blood products; patient transport services; work in progress)

NSW notes some deviation from Costing Guideline 1 – Critical Care. Many critical care services in NSW hospitals have critical care and step-down beds in the one ward. Examples of this include ICU/High Dependency Unit (HDU) or CICU/CCU wards. Typically, these services have one cost centre and one ward set up in the Patient Administration System, with two or more bed types to distinguish the ICU (CICU) hours/bed days separately to the HDU (CCU) hours/bed days. The bed type is used to calculate ICU hours.

The final cost allocation reflects appropriate nursing levels for ICU/HDU patients. In some instances where a patient only has HDU hours, the cost will be reported under a critical care cost centre, as the cost centre maps to critical care even though there are no reported ICU hours. Additionally, only facilities with Level 3 ICUs map their cost centre to critical care, even though locally they may use the ICU bed type.

4. Governance and use of cost data

4.1 How is public hospital patient cost data used at the hospital/district/network and jurisdiction level?

Patient cost data is used extensively across all levels of NSW Health for a range of purposes. These include:

- development of the NSW State Efficient Price/State Price for the annual budget, activity based funding (ABF), ABF block, State only block components
- informing the distribution of local budgets to hospitals within a District/Network
- development of the NSW funding model for small rural hospitals
- development of NSW funding model adjustors for high-cost procedures such as peritonectomies
- informing service contract negotiations with external providers
- NSW Treasury budget reporting
- reporting to external bodies such as the Australian Institute of Health and Welfare and the Productivity Commission
- monthly financial performance reporting.

Patient cost data is loaded into the ABM Portal to enable:

- development of statewide and local clinical service plans and business cases
- clinical variation analysis and benchmarking activities at a hospital, specialty, product, diagnosis or procedure code level
- development of roadmap or clinical redesign strategies to address length of stay and average cost performance and to improve models of care service delivery.

4.2 Do Districts/Networks or the jurisdiction submit patient cost data to any other jurisdictional or national collections? If so, provide details

Some Districts/Networks participate in independent and specialty/service-based benchmarking groups.

4.3 In terms of costing practices, what is the level of consistency and standardisation across the jurisdiction (for example local forums and guidelines)?

Multiple strategies are in place to support consistent and standardised costing practices across NSW. These include:

- ongoing refinement of Volumes 2 and 3 of the NSW CAG which details NSW business rules and technical specifications for the DNR respectively. These documents include prescribed costing system setup and cost allocation methods. This publication was first published in 2012-13
- distribution of costing resources and tools through a web-based portal to ensure convenient access by all costing practitioners
- ongoing maintenance and refinement of standard data extract and transformation tools for episode data from statewide and local data warehouses and statewide clinical information systems
- ongoing maintenance and refinement of standard data extract and transformation tools for operating theatre, pharmacy, medical imaging, pathology, blood products, emergency and non-emergency patient transport services
- a draft DNR submission period that enables identification, investigation and where necessary correction of cost results prior to finalisation of the DNR submission
- teleconferences conducted between ABM and each District/Network chief executive to review cost results prior to finalisation of the DNR submission
- mandatory DNR Audit Program implemented by District/Network internal audit teams. DNR Audit Program tests are refined each year by ABM in consultation with CSUG and internal auditors. All Districts/Networks are required to submit an attestation certificate and audit report detailing audit findings.

4.4 What is the process for review and approval of costing data before submission to the NHCDC?

The process for review and approval of the NHCDC submission includes:

- review by ABM of the NHCDC Data Request Specification and update of any mapping requirements to transform DNR data to NHCDC submission data
- District and Network DNR Audit Program attestation certificates and audit reports reviewed by ABM
- review of results of costing data and ABF activity data linkage
- data validation and quality assurance reports provided by IHPA are reviewed and actioned as required
- activity and cost reconciliation summary prepared for review and approval by the Executive Director, ABM.

5. COVID-19

***5.1 Provide details of compliance to the COVID-19 Response – costing and pricing guidelines. Have you followed the COVID-19 costing guidelines in the R25 data submission? If yes, provide details. If no, provide explanation
Have you followed the COVID-19 costing guidelines in the R25 data submission to IHPA? If yes, provide details. If no, provide explanation***

COVID-19 Response - costing and pricing guidelines were not updated from August 2020, including the latest line items and cost centres from the IHPA Data Request Specifications for 2020-21. Costing over two periods for un-utilised capacity was not needed in Round 25 (2020-21), unlike Round 24 (2019-20).

Declaration

All data provided by NSW Health to Round 25 (2020-21) of the National Hospital Cost Data Collection (NHCDC) and submitted to the Independent Hospital Pricing Authority has been prepared in adherence with the Australian Hospital Patient Costing Standards (AHPCS) Version 4.1, as described in Section 3 of this Data Quality Statement and is complete and free of known material errors. Section 3 includes details of any qualifications to NSW Health's adherence to Version 4.1 of the AHPCS.

Assurance is given that to the best of my knowledge, data provided are suitable to be used for the primary purpose of the NHCDC, which includes development of the National Efficient Price.

Signed:



Susan Pearce
Secretary, NSW Health