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File reference
EDOC2024/274365

Professor Michael Pervan, Chief Executive Officer
Independent Health & Aged Care Pricing Authority
PO Box 483
Darlinghurst NSW 1300
Via Email: secretariatihpa@ihpa.gov.au

Dear Professor Pervan

RE: Round 27 National Hospital Cost Data Collections Data Quality Statement

I am pleased to provide the Northern Territory Data Quality Statement (see Attached) to be published as part of the Round 27 (2022-23) National Hospital Data Cost Data Collection (NHCDC) Cost Report, as requested.

I confirm that data provided by the Northern Territory to Round 27 (2022-23) of the National Hospital Cost Data Collection (NHCDC) submitted to the Independent Hospital Pricing Authority has been prepared in adherence with the Australian Hospital Patient Costing Standards (AHPCS) as described in the attached Data Quality Statement for Northern Territory.

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

I note IHACPA will not be undertaking the independent financial review on the 2022-23 NHCDC, instead assessing the quality of the NHCDC through reviewing the Data Quality Statement, and other information provided by jurisdictions. Please contact Kirsty Annesley, Director Financial Modelling and Analysis via Kirsty.Annesley@nt.gov.au, as the Northern Territory representative to provide further insight and understanding of the processes undertaken by NT Health when preparing the NHCDC.

Yours sincerely

Chris Hosking
Chief Executive
18. December 2024

Northern Territory Health Data Quality Statement

National Hopital Cost Data Collection (NHCDC)

Round 27 (2022-23)

1. Governance Processes

Northern Territory Department of Health (NT Health) is now one entity incorporating the Department of Health (system manager) and the Norther Territory Regional Health Service (NTRHS).

The NTRHS extends across five regions Top End, Big Rivers, East Arnhem, Barkly and Central Australia. Providing the full spectrum from primary care, community services, aged care, rehabilitation, mental health, emergency and acute care. The NTRHS and consist of six hospitals and 74 health care centres working together as one system in partnership with individuals, families, the community, Aboriginal heath organisations and stakeholders to provide high quality, evidence-based care.

The six hospitals are located across the regions, with Royal Darwin Hospital (RDH) and Palmerston Regional Hospital (PRH) in the Top End region, Katherine Hospital (KH) in the Big Rivers region, Gove Hospital (GH) in the East Arnhem region, Alice Springs Hospital (ASH) in the Central Australia region, and Tennant Creek Hospital (TCH) in Barkly region. The smaller regional hospitals of KH, GDH, and TCH are supported by the larger hospitals RDH, ASH and PRH for the provision of clinical governance, and specialist support.

NT Health have contractual arrangements with third parties to support health service delivery across the NTRHS, including with private sector partners, diagnostic service providers, highly specialised clinical service partners, ambulance and patient transport providers. RDH also has a contracted care arrangement with the only private hospital in the NT, Darwin Private Hospital.

NT Health activity data submissions to IHACPA are managed by the Data Submission Working Group (DSWG). The working group, comprises expert representatives from NT Health and the Department of Corporate and Digital Development (DCDD), and meets regularly to monitor and validate activity data submissions and provide assurance advice to executive sponsors as part of the approval process.

The working group maintain and refine the business rules, criteria and thresholds applied to validate activity data submissions and produce compliance exception reports in accordance with national standards and reporting requirements. Exception reports are routinely distributed to hospital and operational stakeholders to facilitate data review and correction in source clinical systems.

There is one patient costing team in NT Health, who are responsible for the NHCDC costing submission ensuring the costing methodology, and processes are compliant with the national costing standards and guidelines and consistently applied at the hospital level across the NTRHS.

The patient costing team is a member of the DSWG and provides feedback and advice to the working group on data issues and anomalies identified in the costing process for further investigation and remediation.

Power Health Solutions (PHS) are engaged by the NT Health to provide specialised clinical costing software (Power Performance Manger - PPM3), expert technical costing resources and industry best practice advice to support the patient costing team.

NT Health patient costing is an iterative process where draft results are shared and reviewed internally with stakeholders and external by PHS. Stakeholder engagement, both clinical and non-clinical, holds a crucial role in guiding the NT Health NHCDC submission. Advice from stakeholders across the NTRHS informs the development of cost models and incorporates the review of relative value units, allocation statistics, cost matching rules, data linking criteria, and the reclassification of expenses in the costing ledger.

Reconciliation and review processes are performed at hospital, product, care type, speciality, ward and unit levels and includes outlier, variation and trend analysis. Feeder level data is also reviewed with operational and source system experts to identify improvement opportunities.

Draft costing results, PPM 3 reports and IHACPA Quality Assurance reports are circulated to the reference groups and hospital executives for endorsement and verification prior to approval from the NT Health, Chief Finance Officer to submit the NHDCD cost files to IHACPA.

Awareness and understanding of patient costing continues to mature across NT Health, with cost data used to inform operational, performance and strategic decision making.

NHCDC 2022-23 Result Summary Table

		2022-23			2021-22			Change		
Hospital Name	Stream	Records	Total Cost ($)	Average Cost	Records	Total Cost ($)	Average Cost	Records	Total Cost ($)	Average Cost % Change
Royal Darwin Hospital	Acute	78,758	$477,628,483	$6,065	73,798	$442,366,267	$5,994	4,960	35,262,215	1.2%
Royal Darwin Hospital	Admitted Mental Health	1,195	$30,824,522	$25,795	1,028	$28,355,696	$27,583	167	2,468,826	-6.5%
Royal Darwin Hospital	Emergency Department	64,909	$85,281,607	$1,314	62,404	$77,611,684	$1,244	2,505	7,669,924	5.6%
Royal Darwin Hospital	Non-admitted	197,946	$104,772,776	$529	197,304	$101,097,348	$512	642	3,675,427	3.3%
Royal Darwin Hospital	Other Episodes	2	$33,089	$16,544	4	$81,390	$20,347	-2	-48,301	-18.7%
Royal Darwin Hospital	Subacute Episodes	74	$4,581,500	$61,912	68	$5,509,268	$81,019	6	-927,768	-23.6%
Royal Darwin Hospital	Subacute Phases	664	$6,869,725	$10,346	749	$7,584,416	$10,126	-85	-714,691	2.2%
Alice Springs Hospital	Acute	61,664	$204,466,013	$3,316	59,213	$191,127,087	$3,228	2,451	13,338,926	2.7%
Alice Springs Hospital	Admitted Mental Health	318	$11,869,133	$37,324	302	$11,817,792	$39,132	16	51,341	-4.6%
Alice Springs Hospital	Emergency Department	46,313	$43,164,804	$932	42,792	$35,341,523	$826	3,521	7,823,281	12.9%
Alice Springs Hospital	Non-admitted	61,698	$30,533,307	$495	60,788	$31,799,728	$523	910	-1,266,421	-5.4%
Alice Springs Hospital	Subacute Episodes	127	$6,858,454	$54,004	188	$9,982,618	$53,099	-61	-3,124,164	1.7%
Alice Springs Hospital	Subacute Phases	408	$3,503,156	$8,586	365	$3,168,225	$8,680	43	334,931	-1.1%
Tennant Creek Hospital	Acute	12,113	$19,296,027	$1,593	11,523	$17,354,676	$1,506	590	1,941,351	5.8%
Tennant Creek Hospital	Admitted Mental Health				2	$4,299	$2,150			-100.0%
Tennant Creek Hospital	Emergency Department	12,022	$7,091,598	$590	11,565	$6,054,156	$523	457	1,037,443	12.7%
Tennant Creek Hospital	Non-admitted	9,378	$4,834,670	$516	9,772	$5,422,127	$555	-394	-587,457	-7.1%
Tennant Creek Hospital	Subacute Episodes	6	$604,813	$100,802	9	$303,926	$33,770	-3	300,886	198.5%
Katherine Hospital	Acute	11,683	$41,219,758	$3,528	11,739	$39,898,431	$3,399	-56	1,321,326	3.8%
Katherine Hospital	Emergency Department	15,858	$14,618,079	$922	13,673	$12,595,196	$921	2,185	2,022,882	0.1%
Katherine Hospital	Non-admitted	12,001	$6,417,475	$535	11,675	$7,193,757	$616	326	-776,283	-13.2%
Katherine Hospital	Subacute Episodes	43	$2,122,557	$49,362	32	$1,334,744	$41,711	11	787,813	18.3%
Katherine Hospital	Subacute Phases	48	$484,818	$10,100	38	$599,763	$15,783	10	-114,945	-36.0%
Gove District Hospital	Acute	2,187	$28,428,610	$12,999	2,208	$28,936,818	$13,105	-21	-508,207	-0.8%
Gove District Hospital	Emergency Department	9,720	$13,848,422	$1,425	8,481	$13,634,820	$1,608	1,239	213,602	-11.4%
Gove District Hospital	Non-admitted	5,347	$3,311,756	$619	3,686	$3,449,828	$936	1,661	-138,072	-33.8%
Gove District Hospital	Subacute Episodes	46	$1,125,046	$24,458	35	$772,562	$22,073	11	352,484	10.8%
Palmerston Hospital	Acute	13,520	$36,529,598	$2,702	10,833	$34,604,153	$3,194	2,687	1,925,446	-15.4%
Palmerston Hospital	Emergency Department	32,964	$29,151,483	$884	32,500	$25,877,613	$796	464	3,273,870	11.1%
Palmerston Hospital	Non-admitted	25,586	$12,510,018	$489	23,404	$12,694,410	$542	2,182	-184,392	-9.9%
Palmerston Hospital	Subacute Episodes	518	$33,921,042	$65,485	568	$39,038,445	$68,730	-50	-5,117,403	-4.7%

2. Compliance to the Australian Hospital Patient Costing Standards (AHPCS) Version 4.2

Data provided by NT Health for Round 27 of the NHCDC has been prepared in adherence with Australian Hospital Patient Costing Standards version 4.2 (AHPCS) qualified by the following items:

AHPCS Stages 1 to 3 – Identify Relevant Expenses, Create the Costing Ledger and Create Final Cost Centres

Where practicable all relevant expenses have been identified and included in the NHCDC submission.

NT Health includes all costs reported in the General Ledger, however expenses in trust accounts that sit outside the hospital financial accounts have not been included. Further work is being undertaken to ensure expenses are fully recognised where practicable and material.

NT Health identify long service leave payment to hospital employees by the Northern Territory Department of Treasury and Finance and include these costs in the NHCDC submission as shown in the general ledger reconciliation below;

General Ledger Reconciliation		
Item	**Description**	**Cost ($)**
A	General Ledger (GL)	$2,057,144,048.67
B	Adjustments to the GL	
	Inclusions - 3rd Party long service leave	$14,540,140.63
	Inclusions - Opening work in progress	$ 24,634,243.76
	Exclusions - Out of scope & unlinked episodes	$688,702,234.24
	Exclusions - Closing work in progress	$35,483,455.73
C	Total NHCDC Submission	**$1,372,132,743.09**

AHPCS Stage 4 – Identify Products

All establishment activity has been identified and included in the costing process with the exception of data sourced from the Community Care Information System (CCIS) and the Primary Care Information System (PCIS) that is excluded from the costing process but is included in the submission files due to completeness of the data and data quality issues.

Additionally, NT Health did not cost Mental Health Care at the phase of care level due to data limitations in 2022/23 and costs have been reflected at the episode level.

AHPCS stage 5 - Assign Expenses to Products

Where possible expense are allocated to intermediate products based on service feeders files. Only when data is not available are product fractions and relative value units used. Intermediate products matched to final patient products in accordance with documented linking rules consistent with AHPCS 5.2. NT Health has refined the matching rules used to link intermediate to final products over recent years and considerable data sampling and iterative processing is performed to validate the accuracy of the linking.

AHPCS Stage 6 – Review and Reconcile

The NT Health costing process involves data acquisition, processing, validation and reporting stages. The patient costing team perform each stage and implement continuous refinements in consultation with clinical and hospital stakeholders to ensure cost and activity data reconcile at each stage.

As part of the process to reconcile cost and activity data, the costing system set up and cost allocation methodologies are periodically reviewed and shared with stakeholders. A range of assurance tests and reconciliation reports are produced at each stage throughout the costing exercise, including costs validation to audited financial statements, patient activity validation to data submissions and source systems, feeder dataset comparison to source systems and previous years

PPM3 clinical costing software has reconciliation functionality and validation reports to ensure costs and activity loaded into the system are transparent and accounted for throughout the costing process. PPM 3 also has enhanced reporting and visualisation functionality utilised by NT Health to perform trend analysis by volume, time and cost to identify anomalies.

3. Other relevant information

NT does not follow the costing guideline set out for Teaching and Training, Research, Posthumous Organ Donation and Mental Health Services as these are not practicable to implement in the NT due either to system or data limitations. However, it should be noted, that AHPCS principles have been followed to allocate costs appropriately.

NT Health are progressively replacing the hospital patient administration system (PAS) and the enterprise wide data warehouse across the NTRHS. This has considerably impacted and delayed the costing process and the NHCDC submission. The phased implementation of the PAS is not yet complete and NT Health foresee challenges continuing to impact and Round 28 NHCDC submission.

4. NHCDC declaration

All data provided by NT Health to the 2022-23 NHCDC has been prepared in accordance with the Three-Year Data Plan 2021–22 to 2023–24, Data Compliance Policy June 2021, and the AHPCS version 4.2.

Best endeavours were undertaken to ensure complete and factual reporting and compliance. Data provided in the NHCDC submission has been reviewed for adherence to the AHPCS Version 4.2 and is complete and free of known material errors.

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

CHRIS HOSKING

NT HEALTLH Chief Executive Officer

2022-23 Data Quality Statement for Western Australia

1. Governance processes

WA's Round 27 NHCDC submission was based on the individual submissions from the five Health Service Providers (HSP)/ Local Health Networks (LHN). These are:

- North Metropolitan Health Service (6 hospitals)
- South Metropolitan Health Service (4 hospitals)
- East Metropolitan Health Service (4 hospitals)
- Child and Adolescent Health Service (1 hospital)
- WA Country Health Service (21 hospitals)

The number of public hospitals participating in the NHCDC remains unchanged from the previous round however the HSPs have also submitted costing data for 22 sites undertaking contracted procedures and for 23 providing care in a community mental health setting.

Patient level costing is undertaken by Costing Teams at a HSP level. This cost data was completed in compliance with the Australian Hospital Patient Costing Standards (AHPCS) version 4.2 and reconciles to each HSP's audited financial statements. Data submissions were extensively reviewed by the HSPs, prior to official sign off and submission to the Department. Reconciliation statements were supplied for each participating HSP at site level.

On submission to the Department, the HSP costs were further tested and reconciled, with HSPs making further refinements if required. The Department adjusted the data to incorporate Work in Progress (WIP) from previous rounds and transformed the data in accordance with the IHACPA specifications. Data matching and validation also occurred to ensure the costed data sets aligned with the activity data submitted to IHACPA for other patient collections.

Costing is undertaken annually for the NHCDC submission but HSPs will generally undertake quarterly costing to meet their individual requirements. These include submitting patient cost data to Children's Healthcare Australasia (CHA), Women's Healthcare Australasia (WHA), Health Roundtable and AIHW Public Health Expenditure (PHE).

Costing is undertaken in a consistent manner throughout WA Health and is all conducted using a single instance of the Power Performance Management 2 patient costing system. There is a network of Costing staff within WA Health with representation from the HSPs, the Department and Health Support Services (HSS) who administer and provide technical support for the clinical costing system. Representatives of these groups meet regularly as part of a Business User Group, and intermittently as the WA Clinical Costing Standards Committee (WACCSC). Furthermore, training and support is undertaken at, or across individual HSP costing units depending on levels of staffing. These groups also work towards developing uniform practices and a common understanding of local and national costing issues. In addition to the single state-wide instance of PPM, utilisation of a common Chart of Accounts, and single sources of data for components such as pathology all contribute towards the standardisation of WA Costing.

Each of the HSPs undertake a range of review and assurance measures in the data preparation process, which have several layers of engagement including Finance and

Business Officers, hospital based Clinical and Business managers, and HSP level Finance officers and Directors.

Inputs into the costing cycle such as patient fractions and feeder systems, and preliminary results are reviewed by the Costing Teams in conjunction with Finance and Business Officers on a regular basis.

The HSPs also undertake a rigorous quality assurance process prior to submitting their costed data. While no HSPs share identical regimens, there is a high degree of commonality in reviews undertaken and data testing. Each HSP has also developed their own applications to create visualisations and dashboards to aid analysis and benchmarking of results.

The Department continues to refine a suite of quality assurance tests that the HSP's undertake prior to delivering their data. These tests, as well as a central financial reconciliation to the Audited Financial Statements, are signed off at Chief Financial Officer/Executive Director level for each HSP and submitted to the Department as part of their NHCDC submission.

Conducting further testing at an HSP level serves to streamline the submission process. The Department continues to test the integrity of the data submitted, and reviews and measures hospital, HSP and state-wide trends and changes across rounds.

WA costing is also supported by tools such as the WA Costing Guidelines publication and the "Clinical Costing QA and Reasonability" application that demonstrates that costing methodologies work as intended. Prior round costing audits also feed into the local processes helping achieve consistency.

2. NHCDC 2022-23 results summary

WA contributed patient level data for 36 public hospital sites, from five HSPs, for Round 27 (2022-23) of the NHCDC. All hospitals that are considered in-scope for Activity Based Funding are currently part of the NHCDC submission for WA. Round 27 was the first time community mental health costings from an additional 23 sites were included in the submission.

Costs submitted to NHCDC in Round 27 were $7,587,633,932 which represents a 17.8% increase from the Round 26 submission of $6,441,467,917. There was a 5% increase in acute inpatient activity and a 4% increase in sub-acute activity between rounds with corresponding cost increases of 14% and 7% respectively. Non admitted was the only patient category exhibiting decreased activity although total non-admitted costs still rose by 8%.

WA has continued costing for mental health at the phase of care level. This process has not fully matured, and costs were submitted to IHACPA at an episode level with work ongoing with aims to submit at phase level Round 28. A significant amount of work has been undertaken around contracted care and work with IHACPA is ongoing for the inclusion of these costs and activity in the current round. The cost of blood products is not included in the WA submission. Work is ongoing with the aim of being able to include blood product costs in future rounds.

Cost for ancillary services including pharmacy, pathology and imaging that were not able to be matched or linked in the activity matching process have been excluded from the Round 27 submission.

3. Compliance to the Australian Hospital Patient Costing Standards (AHPCS) Version 4.2

The WA Round 27 NHCDC submission has been prepared in adherence with the Australian Hospital Patient Costing Standards (AHPCS) version 4.2. with the exceptions of teaching and research; and blood products.

WA is not fully compliant with the costing guidelines for Teaching and Research as they are currently calculated utilising an established local methodology. The costs are assigned at a patient level but withheld from the annual submission to IHACPA. WA does not currently include the costs of blood products.

All relevant expenses identified and included in the NHCDC submission. These reconcile back to the General Ledger and audited financial statements. Activity data is reconcilable back to the central data sources that the centralised Health Support Services provide to the Health Services.

A series of separate documents summarising the general ledger reconciliation and adjustments resulting in the final Round 27 submission will be provided to IHACPA.

4. Other relevant information

WA Costing guidelines and practices were relatively unchanged since 2021-22. There have been incremental improvements in quality assurance; adoption of the Round 27 IHACPA Data Request Specifications; and a continued expansion of non-Admitted data inclusion criteria for national submission.

Extensive work has been undertaken to refine the submission of contracted services and to submit costed data for Community Mental Health for the first time.

5. NHCDC Declaration

All data provided by Western Australia to the 2022-23 NHCDC has been prepared in accordance with the Three-Year Data Plan 2021–22 to 2023–24, Data Compliance Policy June 2021, and the Australian Hospital Patient Costing Standards (AHPCS) Version 4.2.

Best endeavours were undertaken to ensure complete and factual reporting and compliance. Data provided in this submission has been reviewed for adherence to the AHPCS Version 4.2 and is complete and free of known material errors.

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

Signed:

Dr Shirley Bowen
DIRECTOR GENERAL

11 June 2024

NSW Health

Ref: H24/150395-2

Professor Michael Pervan
Chief Executive Officer
Independent Hospital and Aged Care Pricing Authority
Via email: secretariat@ihacpa.gov.au

NSW Data Quality Statement for National Hospital Cost Data Collection (NHCDC) 2022-23 (Round 27) Updated

Dear Professor Pervan, Michael

Please find enclosed an updated NSW Data Quality Statement (DQS) for the National Hospital Cost Data Collection (NHCDC) 2022-23 (Round 27). The updated DQS addresses the subsequent submission of additional Local Health Districts and Specialty Health Networks in September 2024 by NSW. All information has been updated to reflect the additional Cost C record counts and expense.

If you require more information please contact Kylie Hawkins, Manager Clinical Cost Data Collections and Standards at kylie.hawkins2@health.nsw.gov.au

Yours sincerely

Susan Pearce AM
Secretary, NSW Health 31/10/24

Encl. Updated NSW Data Quality Statement – 2022-23 National Hospital Cost Data Collection (NHCDC)

NSW Health Data Quality Statement
2022-23 National Hospital Cost Data Collection

1. Governance processes

The Round 27 (2022-23) National Hospital Cost Data Collection (NHCDC) is based on the NSW Health District and Network Return (DNR). The DNR is prepared and submitted by the Local Health Districts/Specialty Health Networks (LHDs/SHNs) to the Activity Based Management team, NSW Health. Financial results are published and audited at LHD/SHN level and not at hospital level. NSW completed the 2022-23 NHCDC submission on 28 February 2024, in accordance with the IHACPA data submission requirements. There were no changes to the structure of districts/networks between Round 26 and Round 27.

Costing is undertaken by LHDs/SHNs in a consistent and standardised manner, with any changes to activity recording or costing practices communicated to the costing practitioners via the Costing Standards User Group. The main change to costing practices for R27 was the return to business-as-usual costing process for COVID-19 activity from 1st January 2023. The COVID-19 cost centres as prescribed by IHACPA were retired when the National Partnership on COVID-19 Response (NPCR) ended on 31 December 2022.

For contracted care in NSW, including deferred care, the amount applied was the amount negotiated with individual private hospitals and charged at the encounter level for outsourced services. This expense is reported using the goods and services line item. Splitting the goods and services line item into individual line items has not been deemed feasible given the volume of contracted care within NSW. This is consistent with our approach for line items used for Statewide shared corporate and clinical services.

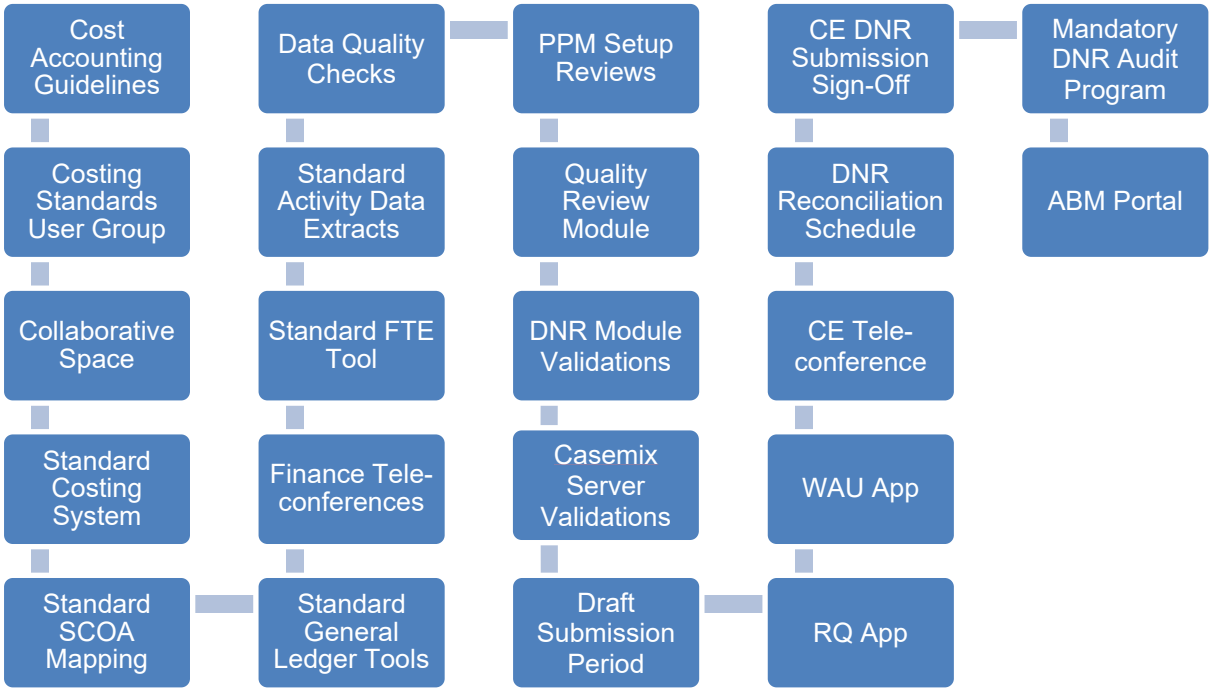
Costing Practitioners adhere to the Cost Accounting Guidelines (CAG), which is a series of documents that provide advice and guidelines on costing set-up, methodologies and quality assessments related to the DNR submission. The CAG complies with the Australian Hospital Patient Costing Standards (AHPCS) and is updated regularly to reflect any changes to costing practices within NSW. Volume 2 of the CAG reflects the AHPCS along with NSW specific business rules. Volume 3 reflects technical specifications and provides practical and technical advice on specific areas such as costing system set-ups, standardised allocation methodologies and data extracts.

The NSW DNR process contains many areas where quality checks are completed. This includes a DNR module to identify and resolve quality issues prior to the submission of final results. There is a draft DNR period where LHDs/SHNs are able to submit their DNR and have results validated and reviewed. Quality issues can be investigated and fixed, and LHDs/SHNs are then able to resubmit their DNR. LHDs/SHNs are able to submit multiple times during the DNR submission period. NSW provides a number of Applications (Apps) within Activity Based Management to assist LHDs/SHNs to review their DNR submissions. These include the WAU App, Percentile App (99th and 1st) and the Reasonableness and Quality App (RQ App). These apps are updated daily during the DNR submission period to reflect submissions received the afternoon prior. This ensures LHDs/SHNs have the most up to date data to review reflecting their most recent submission.

The final DNR submissions are approved by the LHD/SHN chief executive (CE) at the time of final submission. A reconciliation is provided by LHDs/SHNs at the time of CE sign off. In addition, the quality cycle completes with the mandatory audit program of the DNR submission. Completion of this audit program is part of a robust governance framework.

Audit reports are submitted to local Audit and Risk Committee Board Subcommittees and District/Network Chief Executives.

Figure 1 District and Network Return Quality Assurance Program



NSW is currently in the process of implementing a new costing system, which will be used to complete the R28 (2023/24) DNR and NHCDC submissions. The implementation of a new system provides NSW opportunities to review and refine current costing processes. There is a focus on increasing the opportunities for automation of source data extraction/ transformation and standardisation across LHDs/SHNs. The program will seek to identify areas of the costing process where we can add further value by either reducing manual effort of costing practitioners, increasing access by all LHDs/SHNs to additional data sources to assist in the costing process and adding further value to our existing data reconciliation and analysis processes.

2. NHCDC 2022-23 result summary

2022/23 R27

Hospitals submitted	Total Cost C records submitted	Total NHCDC costs submitted
153	15,023,077	$20,195,523,802

*includes UNQbabies

2021/22 R26

Hospitals submitted	Total Cost C records submitted	Total NHCDC costs submitted
139	14,165,321	$17,750,837,098

The NSW 2022-23 NHCDC includes all Local Health District/Specialty Health Network ABF Facilities. It also includes all Ambulatory Mental Health.

Whilst Illawarra Shoalhaven LHD (LHN 108) has been submitted to the NHCDC these records should be excluded from NEP determinations.

3. Compliance to the Australian Hospital Patient Costing Standards (AHPCS) Version 4.2

Guidelines for preparing and submitting the DNR are published in the CAG, which aligns to the AHPCS. Costing practitioners across NSW adhere to the CAG. Compliance to the AHPCS has been unchanged from R26. NSW Health is partially compliant with the following standards and explanations are noted below.

- Standard 1.2 – Identify Relevant Expenses – Third Party Expenses: There is pathology expense for private and compensable patients that are held centrally and are not included in DNR cost ledgers. This would not impact NEP determinations as the expense is excluded.
- Standard 2.2 – Create the Cost Ledger – Matching Cost Objects and Expenses: The range and extent of service data improves with each DNR submission with LHDs/SHNs adding new service files or refining linking rules . The implementation of the new costing system in NSW currently provides LHDs/SHNs an opportunity to further enhance and refine service data and linking rules.

  Unchanged from Round 26, NSW notes many critical care services in NSW hospitals have critical care and step-down beds in the one ward. An example of this is an Intensive Care Unit (ICU)/High Dependency Unit (HDU) ward. Typically, these services have one cost centre and one ward set up in the Patient Administration System, with 2 or more bed types to distinguish the ICU hours/bed days separately from the HDU hours/bed days. In these wards, the bed type is used to calculate ICU hours and to allocate ICU cost separately from HDU hour calculations and cost allocation.
  The final cost allocation reflects appropriate costs for ICU and 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.

  Costs associated with the Newborn and Paediatric Emergency Transport Service (NETS) reflect actual transport costs and exclude and pre- or post-transport clinical consultation, assessment, stabilisation or handover related costs. The cost associated with NETS consultations which do not result in patient transport are not included. NSW is working toward providing the full cost of NETS in the NHCDC.

4. Other relevant information

NSW has confirmed NHCDC submission is complete. We have reconciled at high level Stream and LHN for R27 Quality Assurance and Reconciliation Reports provided by IHACPA. The Trimming Analysis Report provided separately by IHACPA is continuing to be reviewed with some discrepancies noted in the Non-Admitted and Ambulatory Mental Health stream.

5. NHCDC Declaration

All data provided by NSW to the 2022-23 NHCDC has been prepared in accordance with the Three-Year Data Plan 2021–22 to 2023–24, Data Compliance Policy June 2021, and the AHPCS version 4.2.

Best endeavours were undertaken to ensure complete and factual reporting and compliance. Data provided in this submission has been reviewed for adherence to the AHPCS Version 4.2 and is complete and free of known material errors.

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

Susan Pearce AM
Secretary, NSW Health

NHCDC Round 27 Data Quality

Healthcare Purchasing and System Performance

National Hospital Cost Data Collection Round 27

Data Quality Statement - Queensland

1. Overview of Costing Environment

Queensland comprises sixteen Hospital and Health Services (HHS) plus the Mater Public Hospitals (Brisbane), each providing health services to the community in admitted and non-admitted settings (acute, sub-acute, non-acute, emergency, facility-based outpatient ambulatory clinics and community-based heath intervention and support services).

Each HHS and the Mater Public Hospitals (Brisbane) undertake costing of their services and provide cost data to the Department of Health (the Department) which is then submitted to the National Hospital Cost Data Collection (NHCDC). The NHCDC is the primary data collection used to develop the National Efficient Price (NEP). To ensure accurate information is submitted to the NHCDC and subsequently available for the NEP determination, there are validation and quality assurance processes conducted during the NHCDC data transformation process undertaken prior to the submission of data to the Independent Health and Aged Care Pricing Authority (IHACPA).

The following describes the costing processes and data quality issues that have been identified in the NHCDC Round 27 (2022-2023) data for Queensland.

1.1 Processing the cost data

Of the sixteen HHSs plus the Mater Public Hospitals (Brisbane), four of the HHSs are in rural and remote areas and the costing process is undertaken on behalf of these HHSs by the costing team within the Department. The remaining HHSs plus the Mater Public Hospitals (Brisbane) have their own costing teams that undertake the costing.

1.2 Costing frequency

The frequency HHSs do the costing ranges from daily to annually, with the majority running a monthly process. Once the costing process is finalised for the reference year, the data is extracted from each site costing database and submitted to the Department. The Department then undertakes the final data transformation processes, data quality, validation and reconciliation to the general ledger required prior to submission of the NHCDC.

1.3 Costing systems

For the period covered in this report (2022-2023), there were two costing systems in use across the Queensland: CostPro and Power Performance Manager.

1.4 Jurisdiction training and support

Each HHS is a statutory body governed by a Hospital and Health Board. Each has experienced costing practitioners with the necessary expertise to undertake the costing and to manage and train new costing practitioners, in costing methodology and the technical skills required to operate the costing system. There is a costing team with the Department that works closely with each HHS providing technical advice and expertise regarding clinical costing issues as required. The Department costing team makes clinical costing resource material available including costing guidelines, standards, and audit tools. A standing monthly meeting is held to discuss, as a State, any matter arising or lessons learnt as part of the processes for counting, costing and classification of hospital activity data. In addition, a series of Costing Practitioner Training sessions has been held covering the end-to-end data transformation associated with patient centric costing. Each week attendees from our Hospital and Health Services costing teams and other attendees associated with finance or clinical reporting have been attending these in-depth training sessions. The Costing Practitioner training sessions have also been attended by costing and finance representatives from Tasmania, Northern Territory and South Australia along with members of the IHACPA costing team.

1.5 Costing improvements

Queensland HHSs continually monitor the implementation of new clinical data collection systems to assess whether they can be utilised for clinical costing, and they also work collaboratively with data managers to improve existing systems to attain minimum requirements for costing.

The most significant change in feeder systems during 2022-2023 was the inclusion of enterprise Patients, Admissions, Discharges and Transfers data to feed Nursing Home and Multi-Purpose Health Service activity data into the costing system.

1.6 Contracted Care Arrangements

Contracted Care activity is incorporated in the jurisdictional corporate HOMER Queensland Interface data feed. Invoiced amounts are allocated into facility specific Costing Departments with Relative Value Units utilised to apportion the charges across specific products. Where these charges are not individually itemised they are submitted under the Goods and Services Line Item and an appropriate Final Cost Centre.

2. Submitted Cost Data

The jurisdiction received data from 795 facilities costed at patient or service level in the 2022-2023 fiscal year. This included 17,166,552 episodes at a total cost of $20.8 billion. The jurisdictional costing dataset includes many facilities that are out of scope of the NHCDC, and additional costs for out-of-scope services, or services for which patient centric data was not available. These cost activity records are excluded from the activity submission. These exclusions accounted for 20.78 per cent of costs ($4.3 billion) and 23.66 per cent of episodes (4,061,933). 360 facilities were submitted as part of the NHCDC in Round 27.

2.1 Submitted Facilities

There were 360 facilities reported in Round 27, a net increase of 11 facilities from Round 26. Table 1 shows the changes between Rounds by funding type. The decrease in ABF facilities is due to [a] no cost data for

activity based funded (ABF) services and [b] ABF Contracted services in the reference year. The increase in block funded facilities is due to reporting of costs for 12 Darling Downs HHS Hospitals and the increase in NonABF facilities is due to additional residential Mental Health facilities having reported costs during the reference year.

Table 1: Count of facilities by funding type and facility type submitted

Funding Type	Round 26	Round 27	Variance	Percent Change
BLOCK	71	83	12	16.9%
NONABF	163	172	9	5.52%
ABF	81	75	-6	-7.41%
ABF CONTRACTED	34	30	-4	-11.76%
State Total	***349***	***360***	***11***	***3.15%***

Table 2 shows the change in episodes and cost submitted to the NHCDC between Rounds. It shows an increase of approximately 2 per cent in episodes and 17.85 per cent in costs across the submitted hospitals.

Table 2: Episodes and costs submitted to NHCDC

NHCDC Round	Episodes	Total Cost ($M)
26	12,847,959	$13,986
27	13,104,619	$16,483
Variance	***256,660***	***$2,497***
Percentage Change	***2%***	***17.85%***

2.2 Factors influencing submission

Unlinked Activity

Pathology, imaging, and pharmacy records that are not able to be matched or linked to an Episode through the data matching process are currently out-of-scope for the NHCDC. These records occur for several reasons including: external referrals, legacy clinical systems with no date of order fields (but date of test is collected), planned pre-admission and pre- return presentation tests that occur prior to the episode matching window and multiple Patient Master Index (PMI) accounts.

Table 4: Unlinked Activity

LHN Code	HHS	Unlinked Records	Percent Unlinked Records
312	Cairns and Hinterland	107,887	10.25%
313	Townsville	81,158	8.79%
314	Mackay	35,960	6.12%
315	North West	33,360	10.44%
316	Central QLD	93,304	14.53%
317	Central West	10,081	10.1%
318	Wide Bay	30,323	4.77%
319	Sunshine Coast	125,826	9.92%
320	Metro North	272,617	10.95%
321	Children's Health Queensland	18,592	4.24%

322	Metro South	100,694	3.81%
323	Gold Coast	50,019	3.85%
324	West Moreton	17,571	2.58%
325	Darling Downs	116,764	12.27%
326	South West	21,656	7.4%
327	Torres and Cape	30,684	7.08%
State Total		***1,146,496***	***7.48%***

Virtual Patients

There are many situations where expenditure is attributed to a virtual patient record, these include:

- Business services and defined accounts that are considered out of scope for the NHCDC, these are mapped to direct departments and are costed at service level using a virtual patient.
- Cost centres for Clinical Education and Research are mapped to direct departments and are costed at service level using virtual patients.

All virtual patient data is excluded from the NHCDC as no activity has been reported for these cost records.

It is recommended that future consideration is given to a supplementary NHCDC activity file for virtual activity is provided to enable full ledger reconciliation.

Patient Travel

Patient travel costs in Queensland are significant but are not fully reflected in the NHCDC submission. This is due to the absence of some patient level feeder data available for costing. Where patient level feeder data is not available, these services are costed against a virtual patient and are excluded from the NHCDC.

Table 5 shows a comparison between patient travel costs included and excluded in the NHCDC, by facility type.

Table 5: Included and excluded patient travel costs by facility type

	Included ($M)		Excluded ($M)		
Facility Type	**PatTran**	**PatTran-Other**	**PatTran**	**PatTran-Other**	**Total ($M)**
ABF	$7.68	$21.56	$50.71	$31.59	$111.55
ABF CONTRACTED	$0.01	$0.03	$0.07	$0.13	$0.25
BLOCK	$4.75	$6.47	$6.31	$3.37	$20.90
NONABF	$12.15	$1.15	$6.75	$1.68	$21.73
State Total	**$24.59**	**$29.20**	**$63.85**	**$36.78**	**$154.42**

2.3 Challenges costing specific products

Mental Health

Mental Health (MH) cost data is initially matched to activity records in the Mental Health Care Episode dataset and subsequently to a phase of care in the Mental Health Care Phase level dataset. Matched episodes with one or more phase record/s have been submitted at phase level and matched episodes without a phase record are submitted at episode level.

Not all clinical activity undertaken by the MH teams meets the Mental Health National Best Endeavours Data Set submission requirements, however all activity is costed. The episodes not submitted as part of the activity submission cannot be matched and therefore excluded from the NHCDC. Though most HHSs are costing ambulatory MH activity, some costing teams did not cost some or all ambulatory MH services during the reference year. This has impacted the number of episodes and costs submitted for ambulatory mental health services. These costing teams will improve this in subsequent collections.

Palliative care costing

Palliative care patients are costed in the costing system at intermediate product level. This allows for the costing of all services at multiple levels based on the date of service for each intermediate product. Costing episodes with one or more phases of care have the costs apportioned via pro-rata length of stay during the jurisdictional data transformation process after episode matching and these records are reported at Phase level. Where there has not been a specific phase reported these patient costs have been submitted at episode level.

Non-Admitted activity reporting and encounter costing

The counting rules for ABF purposes involving multiple health care providers stipulates that irrespective of whether the patient was seen jointly or separately by multiple providers, only one non-admitted patient service event may be counted for a patient at a clinic on a given calendar day (noting that for counting purposes multidisciplinary group sessions with three or more practitioners are identified as such).

Sites using the state-wide costing system, have incorporated business rules as part of the episode matching process to align outputs with the counting rules. These sites do not require any rollup of outpatient data. For the remaining sites the data is specific to the service and reports for each separate service event. To be consistent with the ABF counting rules the costs of patients with multiple clinic records on the same day are rolled up into a single clinic visit.

2.4 Quality Assurance

Initial quality control is carried out at the HHS level, each HHS has its own quality assurance processes in place to assess the suitability of the data for inclusion in NHCDC. Once the HHS has finalised the costing for the period and data quality issues addressed, they advise the Department that the data is ready to be extracted, in the case of the state-wide system, or formally submit the data to the Department for collation into the NHCDC.

Further checks are then carried out to ensure consistency of the data and mapping of the data to the NHCDC costing framework which include:

- Orphaned cost and encounter records
- Unmapped departments
- Unmapped items
- Invalid / missing product codes
- Low-cost encounters
- Negative costs
- Linking to activity data sets
- Date / time validations
- Validations on demographic information
- Validations on morbidity information

A financial reconciliation is undertaken, and the data transformed into the NHCDC data specification format. This information is provided to each HHS for confirmation of results prior to submission to the IHACPA.

A five-year cost summary report is compiled which allows HHSs to compare their data with the consolidated Queensland results and with other HHSs, at various levels of aggregation, e.g. HHS, facility, product, cost bucket.

Cost C Exclusions

Most exclusions prior to the final jurisdiction submission are associated with matching cost records to the activity records submitted to IHACPA. This can be at phase level or episode level.

3. Adherence to National Costing Standards

Guidance for preparing cost data is published in the Queensland Clinical Costing Guidelines (QCCG). It is a supplementary document to the Australian Hospital Patient Costing Standards (AHPCS) and is a guide to the HHS costing teams in the application of the AHPCS within the technical environment of the feeder data and costing systems used within Queensland Health. These guidelines are applied by each HHS in the preparation of their costing data and therefore are compliant with AHPCS Version 4.2.

Table 6 summarises the NHCDC reconciliation for Round 27.

Table 6: 2022/23 NHCDC submission LHN reconciliation

LHN Code	Facility Name	General Ledger (GL) Total	Adjustments to the GL – Inclusions	Adjustments to the GL – Exclusions	Post allocation adjustments – Inclusions	Post allocation adjustments – Exclusions	Jurisdictional Adjustment	Total Submitted Cost
312	Cairns And Hinterland	$1,293,682,640	$0	$0	$26,336,618	$26,615,678	-$210,520,199	$1,082,883,381
313	Townsville	$1,320,575,185	$0	$0	$23,608,335	$25,565,436	-$173,734,249	$1,144,883,835
314	Mackay	$633,131,722	$0	$0	$7,634,672	$15,144,646	-$95,026,772	$530,594,976
315	North West	$239,067,878	$0	$0	$1,645,060	$7,347,578	-$75,549,268	$157,816,092
316	Central Queensland	$824,339,559	$0	$0	$17,137,848	$20,686,424	-$239,487,877	$581,303,106
317	Central West	$105,520,539	$0	$0	$1,419,264	$8,455,170	-$44,447,497	$54,037,136
318	Wide Bay	$858,431,429	$0	$0	$17,768,661	$0	-$235,779,421	$640,420,669
319	Sunshine Coast	$1,627,066,575	$0	$0	$16,826,161	$20,537,506	-$306,316,696	$1,317,038,534
320	Metro North	$3,965,233,863	$0	$0	$50,717,006	$52,823,818	-$721,933,054	$3,241,193,997
321	Children'S Health Queensland	$991,396,307	$0	$0	$19,902,004	$0	-$269,722,256	$741,576,055
322	Metro South	$3,235,267,165	$0	$0	$49,161,390	$49,092,947	-$461,160,767	$2,774,174,841
323	Gold Coast	$2,188,020,659	$0	$0	$0	$0	-$414,765,457	$1,773,255,202
324	West Moreton	$922,677,060	$0	$0	$38,967,400	$57,816,689	-$208,984,076	$694,843,695
325	Darling Downs	$1,130,468,863	$0	$0	$20,320,200	$39,244,362	-$197,946,521	$913,598,180
326	South West	$196,315,834	$0	$0	$5,624,014	$25,833,200	-$78,284,475	$97,822,173
327	Torres And Cape	$300,039,041	$0	$0	$1,260,570	$8,313,408	-$178,427,389	$114,558,814
328	Mater Public Hospitals (Brisbane)	$641,320,182	$0	$0	$4,457,567	$456,486	-$22,440,864	$622,880,399
State Total		**$20,472,554,501**	**$0**	**$0**	**$302,786,770**	**$357,933,348**	**-$3,934,526,838**	**$16,482,881,085**

All relevant expenses and establishments have been identified and included in the Round 27 2022/23 NHCDC submission except for the aforementioned exclusions. Costs are allocated to patients utilising patient-level feeder system activity with general ledger expenditure allocated via actual cost or through the use of Relative Value Units.

4. Governance and use of cost data

4.1 Use of Cost Data

Within the Department, the consolidated patient costed data are used for a variety of purposes including:

- Health service planning
- Queensland funding models and localisations
- Research
- Benchmarking
- Informing the determination of appropriate funding levels for specified services, for example in business cases for change.

4.2 Contributions to jurisdictional and other national collections

As well as extensive use with the Department and HHSs, the data is provided to other national collections including subscription based external benchmarking organisations including Health Roundtable and Women's and Children's Healthcare Australasia.

4.3 Costing practice consistency

A governance process has been adopted to ensure decisions associated with costing are undertaken in a collaborative manner between the HHS and corporate units. This allows for ongoing benchmarking and variance analysis to occur, whilst maintaining a robust costing system with outputs that meet HHS, State and National reporting requirements. Central to this is the HHS Funding and Costing Network and Clinical Costing Working Group which meet monthly to discuss costing issues as they arise.

4.4 Review and approval

Queensland Health is required under the National Health Reform Agreement to provide an attestation as to the completeness and quality of the costing and activity data provided to the Commonwealth for the NHCDC. Specifically, a Statement of Assurance from jurisdictions (under Clause I40) and the Commonwealth (under Clause I41) will include commentary on:

- steps taken to promote completeness and accuracy of activity data (for example, audit tools or programs, third-party reviews, stakeholder engagement strategies).
- efforts applied to ensure the classification of activity was in accordance with the current year's standards, data plans and determinations.
- variations in activity volumes and movements between activity-based funding and block funding; and
- other information that may be relevant to users of the data, as determined by the signing officer.

To meet the requirement, a Statement of Assurance for NHCDC Round 27 (2022-2023), a Costing Survey spreadsheet which describes current clinical costing processes, feeder systems used by the HHS for

costing and any changes to costing methodologies since the previous collection is sent to HHSs. The Statement of Assurance has three components:

- HHS Reconciliation Summary
- Costing Methodology Questions
- Standards Compliance Questions

The survey is completed by the HHS Clinical Costing Manager, endorsed by the Chief Finance Officer. Then a financial reconciliation is undertaken. All data is validated by the Department and the HHS prior to submission to the IHACPA.

Declaration

All data provided by Queensland Health to Round 27 (2022-2023) of the NHCDC submitted to the Independent Health and Aged Care Pricing Authority has been prepared in adherence with the Three-Year Data Plan 2021-22 to 2023-24, Data Compliance Policy June 2021, and the Australian Hospital Patient Costing Standards (AHPCS) Version 4.2.

Best endeavours were undertaken to ensure complete and factual reporting and compliance. Data provided in this submission has been reviewed for adherence to the APHCS Version 4.2 and is complete and free of known material errors.

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

Signed:

Melissa Carter
Deputy Director-General
Healthcare Purchasing and System Performance

Data Quality Statement for South Australia

1. Governance processes and results

1.1. Governance arrangement

- There is a dedicated team within the Department of Health and Wellbeing (DHW) which coordinates, processes, and supports the costing on behalf of the Local health Networks (LHNs).
- The DHW costing team is responsible for the major activity inputs of inpatient outpatient and emergency activity, which are reviewed by each LHN for accuracy. The DHW team develops the costing ledger with input from LHNs on any changes from previous years.
- The inputs for community mental health and other feeder files, together with the results are the responsibility of the LHNs. The DHW works with the LHNs to ensure all costs and activities are accounted for and processed in accordance with AHPCS Version 4.2.
- Costing data from the LHNs is all processed by the central Patient Costing Team in DHW. This team to applies standardised methodology and processes. The LHNs use the same guidelines for costing patient level data. While LHNs may choose different cost drivers in particular instances, the methodology is consistent. DHW and the LHNs hold a monthly working group to collaborate, resolve issues and keep informed.
- Each year, the DHW Patient Costing Team meets with the LHNs for a thorough review of all costings at patient level; internally this is referred to as an activity review. Any discrepancies are addressed, costing runs are continued until the LHNs are satisfied that their data is fit for purpose. Once the LHN has signed off on their costings, the DHW Patient Costing Team builds the necessary data for submission to the NHCDC.
- A review of data was held in December 2023 highlighted movements in total costs compared to the previous year and average cost comparisons between local health networks.
- Costing is undertaken for the 6 months YTD December, 9 months YTD March, and the full year to June.
- SA Health uses Power Performance Manager from PowerHealth Solutions as its costing system.
- Support for costing practitioners is provided at a local level.
- Processes and methodology are consistent with the prior year. For the 2022-23 submission, the costing system PPM was used to run data reports for use in the NHCDC submission.
- Public Hospital data is used for benchmarking against the NEP, other hospitals in South Australia, monitoring improvement initiatives and forecasting the costs/funding required for future programs. It is used by the LHNs to provide detailed information on performance and as a guide to determining where there are potential cost efficiencies.

- LHNs submit data annually to the Health Round Table. This submission is compiled from data within the SA Health costing system, Power Performance Manager.

1.2. Summary of 2022-23 results

- Data was submitted for 25 Hospitals: 11 Metropolitan, 1 Virtual Hospital used for Contracted Activity managed by the Department of Health and Wellbeing and 13 Major Country. This was a change of 1 Country Hospital from the 2021-22 submission. Ceduna was added to the 2022-23 costing datasets.
- Table below shows the movement excluding Outpatient Activity, noting that 2021-22 data included Covid Vaccinations, and this was a major cause of variance in overall activity.

	Activity			Costs		
	21-22	22-23	Change	21-22	22-23	Change
Acute Incl MH Admitted Episodes	409,870	426,485	4%	2,686,466,061	3,186,157,729	19%
Subacute Episodes	13,363	16,261	22%	293,821,088	349,440,776	19%
Subacute Phases	2,918	3,397	16%	21,728,768	25,461,223	17%
Emergency Department	597,497	597,643	0%	533,842,407	602,003,596	13%
Admitted Mental Health Phases	6,518	9,139	40%	189,654,163	247,915,124	31%
Unlinked Mental Health Phases	549	0	-100%	30,484,021	0	-100%
Other Episodes	2,182	40	-98%	31,848,582	440,696	-99%
Total Excluding Outpatients	**1,032,897**	**1,052,965**	**2%**	**3,787,845,090**	**4,411,419,143**	**16%**
Non-Admitted	3,608,829	1,878,609	-48%	1,035,338,334	1,018,436,690	-2%
Total	**4,641,726**	**2,931,574**	**-37%**	**4,823,183,424**	**5,429,855,833**	**13%**

- Each costing run is subject to several reconciliations to ensure completeness and reasonableness of the costed data. Each year, SA Health hold a State-wide review of costed results at site, DRG and outpatient level. All results are reviewed, any significant variances investigated and resolved before submission.

1.3. Compliance to the Australian Hospital Patient Costing Standards

- SA Health adheres to the patient costing standards and costs in accordance with its guidelines and principles. SA Health does not cost private patient pathology at patient level as data matching is not accurate enough to provide adequate costing allocations.
- There are no other specific areas of deviation from the AHPCS. -

2 Other relevant information

- Linking of pathology data to patient activity data continues to be an area for improvement for 2023-24.
- Interhospital transfers for aeromedical transport has not been included in the 2022-23 costing data. This continues to be an area of improvement for 2023-24.

Declaration

All data provided by South Australia to the 2022-23 (Round 27) NHCDC has been prepared in accordance with the Three-Year Data Plan 2021-22 to 2023-24, Data Compliance Policy June 2021, and the Australian Hospital Patient Costing Standards (AHPCS) Version 4.2.

Best endeavours were undertaken to ensure complete and factual reporting and compliance. Data provided in this submission has been reviewed for adherence to the AHPCS Version 4.2 and is complete and free of known material errors.

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

Dr Robyn Lawrence
Chief Executive
Department for Health and Wellbeing
SA Health

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Department of Health

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Tasmanian Government

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File: SEC24/1183

Professor Michael Pervan
Chief Executive Officer
Independent Health and Aged Care Pricing Authority
secretariatihacpa@ihacpa.gov.au

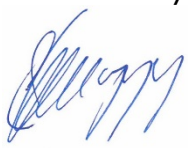
Dear Professor Pervan

Thank you for your email on 4 April 2024, regarding the National Hospital Cost Data Collection 2022-23 Data Quality Statement Request.

Please find attached the Tasmanian Government's Department of Health Data Quality Statement.

Should you require any further information, please contact Vicki Sherburd, Acting Director, Monitoring Reporting and Analysis, on (03) 6166 1025.

Yours sincerely



Shane Gregory
Associate Secretary

4 July 2024

Attached: Department of Health Tasmania - Data Quality Statement 2022-23

Department of Tasmania Data Quality Statement 2022-23

1. Governance

Structure

The Local Health Network (LHN) that encompasses Tasmania currently has four major hospitals, 18 rural sites and two state-wide facilities, with 1.12 million records and a cost of $2.74 billion.

Guidelines applied to Inform Costing Process

Expenditure in the Department's costing ledger incorporates:

- Expenditure portion of the LHN audited financial statement.
- Salary and wages workers compensation recoveries, which is offset against salaries.
- Corporate cost centres that provide a service to the LHN.
- Corporate salary and wages workers compensation recoveries, which are offset against corporate salaries.
- Work in Progress (WIP) carried forward.

Each year the Department's Clinical Costing Unit meets with relevant business managers to:

- Review the previous rounds results
- Review the current rounds' cost centre expenditure
- Implement adjustments that are needed to better align the financial ledger to service delivery
- Review current allocation statistics to ensure service delivery is accurate and updated as required

Overhead cost centres are allocated based on discussions with relevant stakeholders on how best to allocate the cost to production cost centres. This could be across the whole LHN, a specific hospital, hospital unit or based on a percentage of a cost centre, salary and wages or goods and services.

Production centres are distributed on an appropriate relative value unit (RVU), a summary of main distribution methods is described in Table 1.

Table 1: Main distribution methods

Area	Description
Utilisation (intermediate) Data	Item cost in feeder system is matched to patient unique identifier with closest date to service delivery. If no match found, it is allocated to unmatched and excluded
Outpatients	Appointment time or estimated appointment time
Contracted	Contract DRG price
Ward Costs	Nurse roster cost per minute by ward time and HMV data
Specialist	Specialist time distributed based on carer data for inpatient, outpatient or theatre
Theatre	Minutes of each type of theatre staff in the OR, allocated to patient encounter
Emergency	Time in ED, with reduced weighting for triage and wait room time
Counts	Count of defined patient groups to distribute cost as needed

Contracted Care Arrangements

The total cost for contracted care is determined by summing up a range of contracted natural accounts. This figure serves as the overall expenditure for further cost disaggregation to contracted episodes. The Clinical Costing Unit ensure that all contracted natural accounts are included in the cost calculation to ensure accurate and comprehensive costing.

To determine the cost of a contracted service, the Department use a mapping table of contracted DRGs and value, which is provided by the Tasmanian Health Service. This table contains information on the agreed value by DRG and region. The agreed value is used as a Relative Value Unit (RVU) to calculate the episode cost from the total amount allocated for the contracted episodes in the General Ledger (GL). Currently, the cost falls inside the Goods and Services line item and flows through to the appropriate bucket based on this.

In some cases, the agreed cost is a combination of pre/post outpatient appointment and admitted procedure. Where this occurs, the Department manually splits the expenditure to cover the outpatient appointment/s. This can cause issues if the split is not correctly calculated or are not advised by stakeholders.

Each year the Department compares the contract value to the RVU GL value to ensure it is as close to a 1:1 ratio as possible. Some variations can occur due to episodes being discharged in one year and invoices received months after the end of the financial year.

The Tasmanian Health Service has increased the use of purchased beds from private providers. This arrangement is different from a contracted ward, as patients that utilise one of these beds are not flagged as contracted because they only occupy a bed for a period of the patient journey. Expenditure for this service comes through using one of the natural accounts related to contracted services and flows through as Goods and Services and relevant cost bucket based on the matrix.

Costing and Activity Reporting

Throughout the year data quality checks are run regularly, or as issues are identified. These issues are then addressed with relevant business manager.

An internal quality assurance check list is carried out throughout the year to ensure costing is accurate and key areas are checked. Some of these include:

- Reconciliation from audited financial statement through to submission file.
- Checks for negative cost centres, line items and episodes.
- Comparison of ledger changes at the line item and cost centre level between years.
- Overhead to final ratios are as expected.
- Casemix is compared across sites against previous submission and national averages.
- Low and high patient costs are reviewed.
- Low and high end-class costs are reviewed.
- Patient level data quality is reviewed.
- Utilisation data between years is reasonable and as expected.
- Bucket matrix results are reasonable.

The Clinical Costing Unit within the Department has also developed a suite of SQL audit reports that are run regularly to ensure that feeder data is as accurate as possible.

Costing data is available to key internal stakeholders through digital reports, allowing users to view data from a jurisdictional level down to episodic data for the current and previous years.

Each year an internal costing report is written and distributed to seek comments and feedback from key stakeholders. This report covers:

- Scope of reporting
- Costs included in the costing ledger and how this differs to the financial statement
- Admitted acute – Broken down by changes to each major hospital, same day to overnight, medical vs surgical, elective surgery and bucket analysis
- Emergency department – Average cost, changes in length of stay, admitted vs non admitted grouped by major hospitals
- Non-Admitted – Average cost, Tier 2 class comparison by major hospitals
- Sub-Acute – Expenditure, changes in average cost and length of stay by major hospitals
- As well as rural sites, work in progress and non ABF activity

Consistency

Patient costing is undertaken by the Department of Health's Clinical Costing Unit, on behalf of the Tasmanian Health Service (THS) annually. Due to Tasmania's size the Clinical Costing Unit acts as both the LHN and jurisdiction, building and submitting the costing data to IHACPA. This results in costing being done in a consistent manner across the jurisdiction, with minor regional differences.

Each year the Clinical Costing Unit meets with relevant business managers to:

- Review the previous rounds results
- Review the current rounds cost centre expenditure
- Implement adjustments that are needed to better align the financial ledger to service delivery
- Review current allocation statistics to ensure service delivery is accurate and update as required

With regular input from the business managers, into costing reports and reporting tools, the costing reported each year in Tasmania is consistent, allowing for service delivery and ledger changes from year to year.

Changes

Patient Travel/Transport

The alteration to the costing standards and the change to the cost bucket from patient travel to patient transport was a significant one. This required reworking of the travel costs across the general ledger so they were more visible and ensuring alignment with the costing standards. The function of non-emergency transport is carried out by the Tasmanian Ambulance Service and private ambulance. Ambulance Tasmania do not charge the LHN for non-emergency patient transport. If Ambulance Tasmania cannot provide the service and they have to use an external provider then the LHN is liable for the cost. If the expenditure for private ambulance travel was contained in an overhead cost centre and centralised for a major hospital it was distributed over all patients, if the expenditure occurred in a final cost centre it was distributed based on distribution of that final cost centre. This expenditure formed part of the NHCDC submission.

In Tasmania there is no separate natural account (and as a result ERItem) for patient transport other. This is allocated based on cost centres using the Final Cost Centre Code of “PatTransport-Other”. All expenditure in that cost centre is allocated to a non patient product and excluded from the costing study as there is not accurate patient level data and expenditure could be related to a patient, carer/guardian covering either transport and/or accommodation.

Community Mental Health

Community mental health continues to be an area that is evolving each year. There have been several changes in data capture and several new services starting within the THS. In 2022-23 the Clinical Costing Unit has worked with stakeholders to improve separating expenditure to align with service delivery and better aligning with the NMDS data.

There were some duplicate phase data identified during QA of the Cost C file which was manually resolved this year.

Home Delivered Services

Tasmania’s home delivered outpatient services have been incompletely captured in the past, some of these services fell under pharmacy, allied health or ICU in the case of TPN. The Clinical Costing Unit have consulted, where possible, and tried to align cost with service delivery but more work is needed to track and cost these services better.

Blood/Pathology data

In 2022-23 one of the hospital’s pathology units could not supply blood and pathology data, primarily due to system changes w. To resolve this the Clinical Costing Unit used a service weight by DRG based on the same DRGs in another hospital that had blood and pathology data.

Emergency Data – Triage 8

The Clinical Costing Unit identified that a number of ED presentations needed to be excluded as they are only there for recording purposes and are passing straight through the ED to EMU/SSU as an inpatient admission.

The number of triage 8 presentations was minimal and only made a minor difference to the Cost C file.

Palliative Care / Admitted Mental Health

Admitted palliative care episodes and additional admitted mental health care episodes have been shifted to Acute ABF submission to better align costing data with NMDS submission.

2. Summary of 2022-23 Results

For costing purposes, the THS currently has four major hospitals, 18 rural sites and two state-wide facilities.
Total expenditure for the 2022-23 costing ledger totalled $2.72 billion, incorporating:

- The expenditure portion of the THS audited financial statement, $2.5 billion
- THS salary and wages workers compensation recoveries, $7 million which is offset against THS salaries
- Corporate cost centres that provide a service to the THS totalling $34 million
- The Australian Government contributed addition funds to assist states in paying for COVID-related expenses through the National Partnership COVID Response (NPCR). Tasmania brings in all expenditure related to NPCR regardless of whether it occurs in the LHN or outside. This allows for easier reconciliation between expenditure submitted to the National Funding Body and costs excluded as part of the NHCDC. This expenditure needed to be excluded from the Cost Study and expenditure excluded relating to NPCR was $21 million
- Work in Progress carried forward into 2022-23 totalling $85 million

In 2022-23 the total expenditure was $2.72 billion, including $85 million of work in progress expenditure, which is spread throughout the following streams.

- Admitted acute accounts for 47 per cent with a total expenditure of $1273 million
- Emergency Departments account for 10 per cent with a total expenditure of $255 million
- Non-admitted accounts for nine per cent with a total expenditure of $275 million
- Admitted sub-acute accounts for four per cent with a total expenditure of $107 million
- Other admitted accounts for two per cent with a total expenditure of $63 million
- Mental health accounts for seven per cent with a total expenditure of $197 million
- Other non-submitted cost accounts for 20 per cent with a total expenditure of $553 million
- End of year work in progress (WIP) accounts for four per cent, across a range of streams, with a total expenditure of $103 million

A comparison between 2022-23 and 2021-22 is as follows:

- The audited THS general ledger for 2022-23 was $2.6 billion, an increase of 17 per cent on the previous year.
- Total expenditure in the costing ledger totalled $2.72 billion an increase of seven per cent from 2021-22
- Expenditure submitted as part of the NHCDC totalled $2 billion compared to $1.67 billion the year before, resulting in a 19 per cent increase.
- Expenditure not submitted as part of the NHCDC totalled $718 million, a decrease of $158 million on the previous year. This is a result of a decrease in total expenditure related to NPCR. Tasmania brings in all expenditure related to NPCR regardless of whether it occurs in the LHN or outside. This allows for easier reconciliation between expenditure submitted to the national funding body and costs excluded as part of the NHCDC.
- Episodes submitted as part of the NHCDC decreased by 15 per cent from the previous year from 1.21 million episodes down to 1.03 million episodes. The decrease in total number of episodes is due to a reduction in outpatient appointments including a number of COVID vaccinations and COVID diagnosis appointments, used for reporting purposes.

Activity Cost Comparisons

Comparison of the number of episodes with full cost by ABF description between 2021-22 and 2022-23 are shown in Table 2.

Table 2 – Comparison of the number of episodes with full cost by ABF Name forming part of the Cost C between FY 2021-22 and FY 2022-23

ABF Name	Type	2021-22	2022-23	Change
Admitted Patient Care	Episodes	161,594	170,553	6%
	Full Cost	$1,180,478,238	$1,457,307,464	23%
Emergency Department	Episodes	173,894	174,112	0%
	Full Cost	$198,562,469	$239,030,313	20%
Mental Health	Episodes	11,463	10,403	-9%
	Full Cost	$30,457,864	$32,914,849	8%
Non-admitted Patient Care	Episodes	866,647	680,439	-21%
	Full Cost	$241,282,832	$270,527,481	12%
Palliative Care (PCC)	Episodes	1,381	725	-48%
	Full Cost	$17,421,293	$5,502,630	-68%

Overall, the increase in total cost can be seen in all streams, apart from Palliative Care, with the highest increase in Admitted Patient Care. The number of episodes for Admitted Patient Care, Emergency Department, Mental Health, remain reasonably stable with minor variations, Outpatient and Palliative Care experienced a decrease in episodes.

- Admitted patients increased by six per cent in 2022-23 with the expenditure increasing by 23 per cent. The expenditure variation aligns with the large increase in general ledger expenditure jumping by 17 per cent overall. The increase in admitted cost was caused by the average length of stay increasing and an improvement in reporting shifting some admitted palliative care and admitted mental health to the admitted setting.
- Emergency Department episodes remain stable compared to the previous year while the total cost rose by 20 per cent. This increase aligns with the increase in total expenditure of 17 per cent and an increase in average length of stay of nine per cent. The increase was caused by cost centres which directly contribute to ED increasing by $49 million.
- Mental health episodes decreased by nine per cent while the total cost increased by eight per cent. The decrease in Metal Health episodes is due to several episodes being shifted into admitted which were allocated DRGs and to better aligning with the NMDS.
- Outpatient services saw a significant reduction of 24 per cent in presentations, while the total cost increased, rising by 12 per cent in total expenditure. The decline in outpatient figures was attributed to fewer COVID vaccination and diagnosis-related appointments. The rise in total cost aligns with the overall expenditure and salary and wage increase of 17 per cent.
- Palliative Care decreased by 48 per cent, along with full cost decreasing by 68 per cent. This was due the costing unit shifting several episodes classified as palliative care but were being assigned a DRG to the Acute stream.

3. Compliance to the Australian Hospital Patient Costing Standards (AHPCS) Version 4.2

The Tasmanian Department of Health has followed the current AHPCS costing standards, apart from areas raised below.

Expenditure data is reported for the whole of the LHN regardless of if it to be submitted to IHACPA or not, this allows for easier reconciliation from the financial statement. Any expenditure that does not form part of the Costing standards is allocated to a non-patient product and can be reported on internally.

Cost centres that are brought into the costing software are allocated to the appropriate group based on the service they provide, being either overhead or final, and appropriate NHCDC function. Distribution of the overhead cost centre to other overhead cost centres as well as production cost centres is based on an appropriate distribution method in consultation with key stakeholders.

Final cost centres are distributed to patients in several ways but fall in to three broad categories:

- Utilisation data is distributed using an RVU of the source data item cost.
- Hospital Services is generally distributed based on time, be it time on ward, time in theatre, time in ED or anaesthetics time.
- Other Services covers items like outsourced contracted procedures (distributed by DRG contract cost), manually loaded data for example interpreter services or community carers.

The following are areas that Tasmania does not fully comply with the costing standards.

1.2 Identify Relevant Expenses – Third Party

Where possible third-party costs and included according to the standards. There may be areas within the LHN where the Costing Unit have not been informed or been able to identify other third-party expenses.

As mentioned previously non-emergency patient transport provided by Tasmanian Ambulance is not charged to the LHN, this area needs further work and investigation to understand it better.

6.1 Review and Reconcile – Data Quality Framework

Tasmania is partially compliant with this standard. The jurisdiction has a robust quality framework in place, using a QA checklist, QA reports and regular correspondence with and feedback from stakeholders, as well as annual reviews of cost centres with relevant business managers. The Clinical Costing Unit also produce a yearly costing report and Qlikview reports that can be accessed by THS staff as needed.

The financial data is audited both internally and externally as part of the financial statements process and the costing data is derived from this. From a costing perspective QA testing has been done outside of the Clinical Costing Unit but not by an internal or external audit unit. Further work is being done to improve usage of Clinical Costing data as well as investigating if internal or external audit services can review costing data. Tasmania does not comply with 6.1.3.4 relating to Australian Auditing Standards for costing but as mentioned above the financial statement of the THS is audited by both internal and external audit units for accuracy.

4 Teacher Training

Teacher Training is only partially recorded at a cost centre level where it has been identified by the relevant stakeholders. This expenditure is then allocated to a non-patient product and excluded from the NHCDC submission. There is no dedicated software available, or staff to record Teacher Training. There are several projects underway to improve the capture of Teacher Training, one of these is a new payroll system, to be rolled out in the coming year, which may assist in Teacher Training capture depending on functionality implemented. The Clinical Costing Unit has a working group which includes representatives from the Finance, HR and Funding Unit to review and where possible capture dedicated Teacher Training activities.

Research is only identified based on a specified general ledger criterion, expenditure contained in research cost centres are not reviewed regularly and may not include salary and wages for staff paid from cost centres outside of these research cost centres.

Standard 5.2 Intermediate Products

Blood and pathology data from one of the four major hospitals could not be sourced. Service weights based on the same DRG at another hospital was used, ensuring the consistency of services allocation across the state.

4. Other Relevant Information

Issues or major changes between costing submissions have been addressed under the Changes section.

5. NHCDC Declaration

All data provided by Tasmania to the 2022-23 NHCDC has been prepared in accordance with the Three-Year Data Plan 2021–22 to 2023–24, Data Compliance Policy June 2021, and the AHPCS version 4.2.

Best endeavours were undertaken to ensure complete and factual reporting and compliance. Data provided in this submission has been reviewed for adherence to the AHPCS Version 4.2 and is complete and free of known material errors.

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

(SIGNATURE of Director General/Chief Executive/ Secretary)

Shane Gregory, Associate Secretary

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BAC-DM-15235

Michael Pervan
Chief Executive Officer
Independent Health and Aged Care Pricing Authority
PO Box 483
DARLINGHURST NSW 1300

Dear Professor Pervan

Victoria's submission to the 2022-23 Round 27 National Hospital Cost Data Collection (NHCDC) has been finalised in accordance with the Independent Health and Aged Care Pricing Authority's (IHACPA's) three-year data plan. Please find Victoria's completed Data Quality Statement (DQS) attached.

Victoria appreciates the opportunity to work collaboratively with IHACPA to improve the quality of cost data and identify areas requiring further development and we remain committed to abiding by the costing standards as outlined in the most recent Australian Hospital Patient Costing Standards (AHPCS) wherever possible.

If you have any queries regarding this advice, please contact Mrs Lucy Solier on (03) 9821 6006 or lucy.solier@health.vic.gov.au.

Yours sincerely

Andrew Haywood
Executive Director
Funding, Costing and Costing
Health Funding, Finance and Investment Division

20 / 05 / 2024

VICTORIA State Government

VICTORIAN DATA QUALITY STATEMENT

ROUND 27 (2022-23) NATIONAL HOSPITAL COST DATA COLLECTION

OFFICIAL

All data provided by Victoria to the 2022-23 NHCDC has been prepared in accordance with the Independent Health and Aged Care Authority's Three-Year Data Plan 2021–22 to 2023–24, Data Compliance Policy June 2021, and the Australian Hospital Patient Costing Standards (AHPCS) Version 4.2.

Best endeavours were undertaken to ensure complete and factual reporting and compliance. Data provided in this submission has been reviewed for adherence to the AHPCS Version 4.2 and is complete and free of known material errors.

Section 3 provides details of any qualifications for Victoria's adherence to the AHPCS Version 4.2.

1 Governance processes

1.1 Governance arrangement

The individual public Local Health Networks (LHN) undertake patient costing and subsequently submit to the Victorian Department of Health (the department) via the Victorian Cost Data Collection (VCDC) for their respective hospitals/campuses.

Victorian public hospitals are required to report costs for all activity, regardless of funding source, and are expected to maintain patient level costing systems that monitor service provision to patients and determine accurate patient-level costs.

Generally costing is undertaken once a year however some (few) LHNs do cost either quarterly or six monthly. The VCDC submission to the department is annual.

1.1.1 Changes to costing or activity recording practices

The VCDC submission process is reviewed annually to ensure that the data submitted meets local and national requirements. Health service costing practitioners also undertake reviews, in conjunction with relevant stakeholders, to ensure the underlying details are reflective of the services and the costs of those services are reasonable.

Improvements in Round 27 continued in the areas of costing General Ledger (GL) structures, activity extraction methodologies, data quality and refinement, implementing new feeder systems not easily accessible, linking methodologies, implementation of Electronic Medical Record systems and further refinement on allocated costs at staff level.

LHNs individually review allocations and methodologies yearly to ensure that the resources are costed reasonably and accurately as possible. These reviews will vary results from year to year indicating improvement in the costed data. Considerable work has been undertaken to ensure non-admitted activities are captured and aligned with expenses. A number of the regionals LHNs this year have embarked on projects that improved streamlining their data extraction process.

1.1.2 Costing and activity reporting process and methodology

The VCDC submission involves a five-phase process to ensure the data submitted meets the reporting requirements and adherence to any guidance provided. The five phases include:

Phase 1 - receipt of submission

Acknowledgment of receipt of files and a summary report of the details submitted for verification.

Phase 2 - file validations

The submissions must follow the Data Request Specifications and where validations of each field have identified critical errors, these must be rectified by the health service and resubmitted.

Phase 3 - linking/matching VCDC to activity

The VCDC follows a single submission multiple use format where the collections include a number of fields that will enable the cost data to be linked and matched to activity records already submitted. Reports on the level of linking/matching are provided to LHN for confirmation.

Phase 4 - data quality assurance checks

A suite of reports is provided to the LHN where records have been flagged as not meeting specific criteria around various cohorts. These checks provide a level of understanding of the usefulness of the patient level data for development of funding models and interpretation for analysis, benchmarking and reporting. They compare the data submitted for the current year to prior years and to a state/national average where specified. It takes into consideration the total costs as well as specific cost bucket costs.

Phase 5 - reconciliation report and Data Quality Statement:

Reconciliation report - designed to assist the department (and users) to understand the completeness of a final submission including the source data by which the VCDC is created and its reconciliation.

Data Quality Statement (DQS) - LHNs complete a DQS including a signed declaration confirming adherence to the national and local requirements including the standards and acknowledging the validity and completeness of the data submitted.

NHCDC

Once the final VCDC has been consolidated, the submission to the NHCDC is developed by the department to ensure that the reporting requirements are met in terms of the final cost centres, line items and activity reported. The NHCDC submission is reconciled to the VCDC, and a brief prepared for sign off by the Secretary or their delegate for the NHCDC data quality statement.

The NHCDC submission through the portal is also reconciled and any file validations are rectified. The quality assurance reports are reviewed and checked for inconsistencies not already known.

1.1.3 Consistency and standardisation of costing practices

Victorian public LHN costing practices are consistent in their methodologies. Victoria’s LHNs follow guidance provided by the department which takes into consideration feedback after consultation with relevant stakeholders and costing practitioners.

1.1.3.1 Guidelines

To ensure there is consistent, reliable, and quality costed data, LHNs are to adhere to VCDC documentation, and any other documentation or guidance provided by the department as well as comply with the most recent version available of the Australian Hospital Patient Costing Standards (AHPCS) .

The VCDC documentation and most current Australian Hospital Patient Costing Standards (AHPCS) assist LHNs in the reporting and costing of patient level cost data providing details in relation to:

- **1.1.3.1.1 Data Request Specifications** – details of the requirements of the files to be submitted including the structure, values, and validation rules.
- **1.1.3.1.2 Business Rules** – guidance of specific criteria and conditions of the reporting and costing requirements to the Victorian Cost Data Collection and most current AHPCS.

  For example:

  - Relative Value Unit (RVU)
    - Allocation of costs at intermediate product levels involves the RVUs being updated by LHN at regular intervals in accordance with AHPCS v4.2 Part 2, Business rules and AHPCS v4.2 Part 3, Costing Guidelines. However, Victoria's preference is to avoid the:
      - use of nationally derived service weights (eg. the Diagnostic Related Group service weights) as RVUs at an intermediate product level (where DRGs are defined as intermediate products) since this will bias the integrity of the cost weights recalibration and
      - single value as RVUs for intermediate products within a service area (final cost centre).
    - The development of RVUs is the responsibility of the health services' costing team and/or costing consultants in conjunction with their stake holders, and is to be aligned to the Business rules 5.2A.3 outlined in AHPCS v4.2 Part 2.

- **1.1.3.1.3 Specific Costing Guidance** – guidance on specific conditions of areas for the reporting and costing requirements to Victorian Cost Data Collection and most current AHPCS.

  For example:

  - Contracted care arrangements
    - Victorian LHNs have been advised to refer to the new AHPCS v4.2 Part 3, Costing Guideline 12 on Contracted Care, CG12.
    - Contracted care in Victoria occurs in acute, subacute, non-admitted and mental health patient settings, for diagnostic and clinical services, treatment or support services.
    - Under the arrangement where a LHN has a contract role as the service provider, the LHN allocates the cost of these patients accordingly but does not submit them to VCDC. Rather the costs for these patients are submitted to the VCDC by the LHN receiving the service (purchaser of service) with respective completed episodes' full costs.
    - When a LHN purchases service at another hospital (e.g. for ICU or theatre) these patients receive the costs for all their services incurred at the LHN (purchasing LHN) based on its activity extracts including the overhead cost components. In addition, the expenses of these contracted care patients (incurred at the service provider) are identified separately

in the GL[1] and are allocated to the contracted care patients in order to achieve the full cost of their completed episodes.

- Examples of determining contracted care cost include:
  - TCP patients treated at private facilities, have their expenses calculated at agreed rate by DRG or calculated at agreed bed day rate.
  - Mental health patients' cost allocation is based on daily rate or average daily rate for the length of stay (provided by the Victorian Department of Health).
- Issues that may impact on costing contracted care for 2022-23 cohorts reported by LHNs are related to:
  - Receipts of invoices where late data entry contributed to some of the contracted cares not being costed. This may also impact the matching between accrual amounts in GL and activity.
  - Where the invoices were charged based on DRG weightings, there may be occasions where records are not coded with a DRG weightings for various reasons such as ineligible account class.
  - Availability of electronic contracted patients' data at smaller hospitals where this work commenced during 2022-23.

- **1.1.3.1.4 Review and reconcile** – details of the data quality assurance checks and reconciliation reporting requirements.
- **1.1.3.1.5 Communication** – notifications at each stage of the submission process.

2 NHCDC results summary

2.1 Summary of NHCDC 2022-23 results

Number of hospitals

In Victoria there are two different costing vendors – PowerHealth Solutions and CBS Australia – Business Intelligence Specialist.

Amalgamation of some regional health services resulted in a total of 38 LHNs and 91 campuses submitted to the NHCDC for Round 27.

The new Grampians Health is an amalgamation of:

- Ballarat Health (Ballarat Base campus 2010 and Ballarat QE campus 2070)
- Horsham (previous known as Wimmera Health with campus code 2170)
- Dimboola campus 3180
- Edenhope campus 3240

[1] As per CG12.3

- Stawell Regional Health Service with campus 2260.

However, due to resource constraints at Grampians Health, Edenhope and Stawell campuses have not been included in the Round 27 submission and Victoria will look to have these campuses submitted as part of the NHCDC Round 28 process.

The two new campuses included in Round 27 are:

- Sandringham Monash under Monash Health
- The Victorian Heart Hospital under Monash Health.

Further increases in data submitted to the NHCDC include:

- three regional LHNs for non-admitted service events,
- two health service for acute admitted.

Table 1.0

		2022-23 Total (in scope for NHCDC)			2021-22 Total (in scope for NHCDC)			% Change	
Stream		**Records**	**Cost**	**Average**	**Records**	**Cost**	**Average**	**Records**	**Cost**
Acute		*1,790,034*	*$10,817,369,007*	*$6,043*	*1,682,454*	*$9,377,982,680*	*$5,574*	*6%*	*15%*
Subacute	*Episodes*	*32,482*	*$968,159,772*	*$29,806*	*30,347*	*$798,255,327*	*$26,304*	*7%*	*21%*
	Phases	*15,824*	*$140,104,001*	*$8,854*	*15,741*	*$120,004,220*	*$7,624*	*1%*	*17%*
Emergency Department		*1,870,367*	*$1,912,109,699*	*$1,022*	*1,817,818*	*$1,671,395,531*	*$919*	*3%*	*14%*
Non-Admitted		*5,717,066*	*$2,287,498,906*	*$400*	*5,423,425*	*$2,052,194,931*	*$378*	*-17%*	*-11%*
Admitted Mental Health	*Episodes*	*645*	*$45,038,782*	*$69,828*	*476*	*$64,799,859*	*$136,134*	*41%*	*-12%*
	Phases	*24,310*	*$726,692,942*	*$29,893*	*25,512*	*$600,145,269*	*$23,524*	*-5%*	*20%*
Community Mental Hea	*Episodes*	*740*	*$283,462*	*$383*	*205,348*	*$48,962,901*	*$238*	*-100%*	*-99%*
	Phases	*478,974*	*$667,639,147*	*$1,394*	*223,996*	*$532,995,090*	*$2,379*	*114%*	*25%*
Unlinked Mental Health	*Episodes*	*-*	*$0*	*$0*	*-*	*$0*	*$0*		
	Phases	*-*	*$0*	*$0*	*-*	*$0*	*$0*		
Other	*Episodes*	*14,372*	*$23,028,774*	*$1,602*	*111*	*$1,873,966*	*$16,883*	*11%*	*64%*
	Phases	*-*	*$0*	*$0*	*-*	*$0*	*$0*		
Total		***9,944,814***	***$17,587,924,491***	***$1,769***	***9,425,228***	***$15,268,609,774***	***$1,620***	***-7%***	***13%***

Overall, there was a reduction in total in-scope records in 2022-23, however this is largely due to linking issues with the non-admitted data. Victoria is aware of the issues in this space and will work towards improving linking rates for 2024-25.

General ledger costs included/excluded

All expenses within the general ledgers of LHN have been used in the allocation to patient treatments. Expenses excluded mainly consist of specific purpose accounts not relating to the provision of treatment, capital and depreciation expenses as well as other expenses not used in providing treatment to patients. Included expenses are for the National Blood Allocation and Health Service Victoria costs not in the GL.

Costs excluded to the NHCDC are those that have been allocated to patients not yet discharged, out of scope programs not related to Activity Based Funding and any unlinked costs reported to VCDC.

There is a minor reconciliation variance identified to the value of $110,405.22 between the total submitted to the NHCDC submission and the amount picked up in the NHCDC Quality Assurance Reports. Given it's size relative to the size of the submission this is not expected to impact the overall costs for Victoria.

Table 2.0

Total General Ledger (GL)	**$23,780.56**
Adjustments to the GL – exclusions	$ 707.13
Adjustments to the GL – inclusions	$ 271.65
Post allocation adjustments – exclusions	$ 1,151.15
Post allocation adjustments – inclusions	$ 570.55
Adjustments made at the jurisdiction level	$ 5,176.29
TOTAL Submitted to NHCDC	**$17,588.03**
Total as per IHACPA Provided QA report	**$17,587.92**

3 Compliance to the Australian Hospital Patient Costing Standards (AHPCS)

3.1 Compliance to AHPCS v 4.2

The Victorian submission to the Round 27 (2022-23) National Hospital Cost Data Collection (NHCDC) is based on the 2022-23 VCDC submissions. The business rules for the VCDC collection released to costing practitioners provide guidance to LHNs in the costing and reporting of patient level cost data to the VCDC.

Victorian LHNs are also required to adhere, wherever possible, to the Australian Hospital Patient Costing Standards (AHPCS) – version 4.2, the VCDC business rules and specifications and any other guidance provided by the department in the submission year.

All relevant expenses are identified and included in the NHCDC submission (AHPCS Stage 1: identify relevant expenses, Stage 2: create cost ledger, Stage 3: create final cost centres).

All hospital activity been identified and included in the costing process (AHPCS Stage 4: identify products).

Costs have been allocated to patients in accordance with allocation methodologies outlined in the AHPCS (Stage 5: assign expenses to products) and VCDC documentation.

The process for reconciling cost and activity data (AHPCS Stage 6: review and reconcile) is outlined in section 1.1.3.

3.1.1 Exceptions

3.1.1.1 Exceptions to the AHPCS standards include the following:

Capital and Depreciation - Victoria does not include non-cash expenditures such as depreciation as it does not impact upon operational costs and comparisons should not be driven by an asset's estimated life.

Teaching and Training costs - where the sole purpose of the activity is teaching, and training Victoria includes these costs as an overhead. Where teaching and training cannot be separated from routine work undertaken, it has been included as a salary and wages expense.

Research costs - these activities and costs are excluded from Victoria's submission pending further developments in the Activity Based Funding work stream.

Posthumous organ donation – the application on the latest standard has been considered by Victorian and further detailed updates on future version(s) of the AHPCS will be welcomed to ensure full costing on posthumous organ donations.

3.1.1.2 Transitioning to AHPCS standards for:

Allocation of medical costs for private and public patients - Victorian LHNs will allocate medical expenses only relating to private patients where these can be distinguished between medical expenses relating to public. Otherwise, all medical expenses are allocated to patients regardless of funding source.

3.1.1.3 Specific areas

All prior years' costs relating to patients discharged within the submission year but admitted in prior years have been included and no escalation of costs have been applied.

Blood product costs have been included as a line item in the submission as has the separation of Pharmaceutical Benefits Scheme (PBS) and Non-Pharmaceutical Benefits Scheme (PBS) drugs.

3.1.1.4 Ancillary costs for private patients

Most of the Victorian LHNs include ancillary costs for private patients in their NHCDC submission except for:

- Northern Health (Private patient pathology and radiology costs are excluded from the VCDC);
- Barwon Health (Private patient pathology costs are excluded from the VCDC);
- Grampians Health (Private patients' pathology costs at the Ballarat campus are excluded from the VCDC);
- Peninsula Health (Private patient pathology costs are excluded from the VCDC).

3.1.1.5 PatTran-Other

Victoria is still working with health services on a process to accommodate the new 2022-23 NHCDC line item, PatTran-Other.

The responses from a survey conducted by Victorian costing practitioners, prior to implementing this new line item for VCDC (and consequently mapping it at the NHCDC level), showed that majority of the LHNs used PatTran and PatTran-Other interchangeably in their General Ledger (regardless of their NFC status) and as such were unable to easily distinguish between the two items.

Victoria is therefore considering a workaround that would see an update to the VCDC process to include an exception to the NHCDC mapping that would take into consideration the NFC cost centres and account types and re-map to the PatTran-Other. This was not implemented for the 2022-23 collection.

With only three LHNs in 2022-23 reported having NFC[2], a workaround to identify PatTran-Other from the following cost centres was unfortunately not implemented on time for 2022-23 VCDC processing. The impacted providers are as follows:

- Alfred Health's NFC cost centre for Paediatrics Lung Transplant is **A1602**
- Children's Hospital's NFC cost centre is **A7161** - Heart Transplant
- Monash Health's NFC cost centre for Pancreas Transplants is **A5804.**

However, Victoria's patient transport for NFCs in 2022-23 can easily be identified from the above three Areas/Cost Centres.

[2] St.Vincent's Health reported that there were no Islet cell transplants (A0902) in 2022-23

4 Other relevant information

4.1 Impact of COVID-19 on the 2022-23 submission

The impact of COVID-19 continues to provide some challenges with data collection, accounting for expenses and costing. To the best of our knowledge, all Victorian LHN's have adhered to the guidance and advice provided by the department and the Commonwealth in respect to the treatment of activities and costs related to the impact of COVID-19.

Data collection for COVID-19 on activity and expenses was simpler in FY2022-23 compare to prior years as most of the staff salaries and wages and other relevant expenses stayed in their original "business as usual" cost centres.

Other significant factors and challenges that may impact the 2022-23 NHCDC submission

- Amalgamation of Ballarat Health, Wimmera Health, Stawell Regional Health and smaller regional hospitals and resulting resource constraints, prevented mental health care at Grampians Health from being costed in 2022-23.
- In 2022-23, North West Mental Health (NWMH) that previously encompassed mental health across Melbourne Health, Northern Health and Western Health was disaggregated. However, all of Melbourne Health and NWMH campuses except for Orygen Youth PARC[3] continued to be included in VCDC/NHCDC reporting.

  A small portion of Northern Health (NH) campuses remained with Melbourne Health for a short period in FY2022-23 and those disaggregated from NWMH on 01/07/2022 were statistically discharged from Melbourne Health and reported by Melbourne Health to VCDC.
- Victoria allocates a cost to all non-admitted activity whether it is submitted at a patient-or aggregate-level. All cost records that have been linked to a non-admitted activity record have been submitted. In addition, cost records unable to be linked to activity due to under- and aggregate reporting have been submitted.

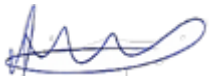
  The records submitted to the VCDC at a patient level (or contact) may have been aggregated to a service event for submission to the NHCDC. Victoria's reconciliations are at a patient level.
- Some issues with the underlying patient activities for specific programs or state-wide services meant that the costs were allocated to virtual patients rather than at patient level.
- A number of systems' changes occurred at both metropolitan and regional LHNs in 2022-23. At the majority of the effected LHNs, the improvements gravitated towards efficiency and quality but at smaller regional LHNs, the changes may contribute to some non-admitted data being incomplete.
- Staff turnover at some smaller regional LHNs, across the organisation may also impacted the quality of costing data submitted. All efforts have been taken by Victoria to mitigate this.

[3] Orygen Youth PARC is not part of Health Service Agreement (HSA)

5 NHCDC declaration

Assurance is given that to the best of my knowledge the data provided is suitable to be used for the primary purpose of the National Hospital Cost Data Collection, which includes development of the National Efficient Price and National Efficient Cost.

Signed:



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20 / 05 / 2024