VICTORIAN DATA QUALITY STATEMENT

ROUND 23 (2018-19) NATIONAL HOSPITAL COST DATA COLLECTION

All data provided by Victoria to Round 23 (2018-19) 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) Version 4.0 as described in Section 3 of this statement.

Data provided to this submission has been reviewed for adherence to the AHPCS Version 4.0 and is complete and free of known material errors. Section 3 provides details of any qualifications to our adherence to the AHPCS Version 4.0.

1 Overview

The individual public health services undertake patient costing and subsequently submit to the Victorian Department of Health and Human Services (the department) via the Victorian Cost Data Collection (VCDC).

Victorian public hospitals are required to report costs for all activity 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) health services do cost either quarterly or six monthly. The submission to the department is yearly.

1.1 Costing systems in use

In Victoria there are three different costing vendors used – PowerHealth Solutions (16 sites), Syris Consulting (20 sites) and Health Economics Consultant (3 sites).

1.2 Training/support provided for costing practitioners

There is no official jurisdiction-wide training conducted for costing practitioners by the department. However, the department offers a variety of support such as;

- Monthly VCDC Technical Working Group meetings
- Funding and Costing Forums
- On-site assistance by the VCDC team where required
- Access to the VCDC Team as needed
- Benchmark tool and state-wide underlying data to assist health services undertake further business intelligence analysis.

1.3 Changes/ improvements in costing process and methodology

The VCDC is reviewed yearly to ensure that the data submitted meets the local and national requirements. Health services costing practitioners also undertake reviews, in conjunction with relevant stakeholders, of their allocation methodologies, underlying data used in the costing process, general ledger reported expenses and linking/matching rules.

In 2018-19 there was a focus on enhancing the reporting and costing of Mental Health services, HealthLinks activities, Victorian Perinatal Autopsy Service and improvements in non-admitted allocation of expenses and reported activities.

This year, Victoria has submitted all cost records that have been able to link to activity reported and provided cost records for aggregate activities. In prior years some cost records would have been excluded from submissions. This resulted in 157,725 non-admitted records that were unable to be linked to activity and limiting its use for inclusion in any funding model development, analysis, reporting and benchmarking.

IHPA requested Victoria to provide the details for these records to enable IHPA to exclude them from our submission and therefore further use. Victoria agreed and approved the exclusion of the 157,725 records with a total cost of $510,439,693.

2 Governance and use of cost data

2.1 Uses of patient cost data

2.1.1 Hospital/district or network

Some health services use the data for:

- Funding analysis;
- Clinical and other research;
- Supporting evidence for business cases and decision making;
- Nationally Funded Centre works;
- Inform price setting for international patients;
- Reviews of contract arrangements;
- Inform planning of clinical services;
- Inform resource utilisation and effect clinical practice improvement;
- Supporting decisions on some inpatient clinical proposed changes to practice.

2.1.2 Jurisdiction

The department's use of the cost data includes, but not limited to:

- Refine existing Victorian funding models;
- Assist in the development of future funding models;
- Enable analysis of cost data across health services;
- Inform development of budget proposals;
- Analyse the cost of health care;
- Perform comparative benchmarking;
- Inform best practice quality improvement initiatives; and
- Meet the cost data requirements of the National Health Reform Agreement (NHRA), via the National Hospital Cost Data Collection (NHCDC).

2.2 Patient cost data submitted to other collections

Some health services may submit patient level cost data to Health Roundtable, Women's Healthcare Australasia (WHA), Children's Healthcare Australia (CHA) and PowerHealth solutions for inclusion into their benchmark tool.

2.3 Consistency and standardisation of costing practices

Victorian public health services costing practices are consistent in their methodologies. Our health services follow guidance provided by the department which takes into consideration feedback after consultation with relevant stakeholders and costing practitioners.

2.3.1 Guidelines

To ensure there is consistent, reliable and quality costed data, health services are to adhere to VCDC documentation, and any other documentation or guidance provided by the department as well as comply with the national Australian Hospital Patient Costing Standards (AHPCS) Version 4.0 or the most recent version available.

The VCDC documentation assists health services in the reporting and costing of patient level cost data providing details in relation to:

Data Request Specifications – details of the requirements of the files to be submitted including the structure, values and validation rules.

Business Rules – guidance of specific criteria and conditions of the reporting and costing requirements to the Victorian Cost Data Collection.

Specific Costing Guidance – guidance on specific conditions of areas for the reporting and costing requirements to Victorian Cost Data Collection.

Review and Reconcile – details of the data quality assurance checks and reconciliation reporting requirements

Communication – notifications at each stage of the submission process.

2.3.2 Forums

The department also conducts yearly Funding and Costing Forums. The forum is designed to assist in understanding service trends, explore variation in average costs, share information about costing practices, models of care and consider opportunities for improvements. It also enables valuable communication between health services and broaden knowledge about the quality and use of cost data.

These forums have led to improvements in the quality of cost and activity data reported leading to more, consistent, reliable and higher quality comparable data as well as informing the continual development of Victorian patient level cost standards.

2.4 Process for review and approval before submission to NHCDC

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 resubmit.
- Phase 3 - linking/matching VCDC to activity. The VCDC follows a single submission multiple use format where the collections include a few 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 health services for confirmation.
- Phase 4 - data quality assurance checks. A suite of reports is provided to health services where records have been flagged as not meeting the criteria. The checks provide a level of understanding of the usefulness of the patient level data for development of funding models and interpretation for analysis and reporting. They compare the data submitted for the current year to prior years and to a state 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 (DQS).
    - The reconciliation report provides details of how the expenditure has transitioned from the annual report through to the submitted costed data. It also includes reconciliation of the source data used in the allocation process.
    - Data quality statement outlines any details impacting on health services VCDC submission.

3 Compliance to standards

The Victorian submission to the Round 23 (2018-19) National Hospital Cost Data Collection (NHCDC) is based on the 2018-19 VCDC submissions.

The business rules for the VCDC collection are published annually by the department and provides guidance to health services in the costing and reporting of patient level cost data to the VCDC (http://www.health.vic.gov.au/hdss/vcdc/index.htm).

Victorian health services are required to adhere, where possible, to the Australian Hospital Patient Costing Standards (AHPCS) – version 4.0 (or the most recent version in the instance that a successor becomes available), the VCDC business rules and specifications and any other guidance provided by the department in the submission year. All expenses related to the treatment of patients have been allocated in accordance with the AHPCS v4.0.

3.1 Exceptions

3.1.1 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 of this standard is being considered within the Victorian cost group however extensive updates to the development of the specific guidance in V4.0 of the AHPCS is required to ensure full costing of Posthumous organ donations.

3.1.2 Transitioning to AHPCS standards for:

- **Allocation of Medical costs for private and public patients** - Victorian health services 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.
  - The department is currently working with health services to determine their capability to comply with this standard as outlined in V4.0. However, Victoria will be reliant on further development of the V4 to the AHPCS to provide clarification and specific guidance on this standards application.

3.1.3 Specific areas

- All prior year 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 PBS and NPBS drugs.
- Medical costs associated with private patients have been included in the submission however Eastern Health is the only health service to exclude private patient medical costs for their non-admitted services only.

3.1.3.1 Ancillary costs for private patients

The majority of Victorian Health Services include ancillary costs for private patients in their NHCDC submission with the exception of:

- Northern Health (Private patient pathology and radiology costs are excluded from the VCDC)
- Barwon Health (Private patient pathology costs are excluded from the VCDC)

- Ballarat Health (Private patient pathology and radiology costs are excluded from the VCDC)
- Peninsula Health (Private patient pathology costs are excluded from the VCDC)
- Western Health (Private patient pathology costs are excluded from the VCDC)
- Alfred Health Caulfield Campus (Private patient radiology costs are excluded from the VCDC)

4 Scope

4.1 Activity

There were no significant changes to admission policies from Round 22 to 23. For further details please refer to the Victorian Hospital Admission Policy 2018-19 at https://www2.health.vic.gov.au/about/publications/policiesandguidelines/victorian-hospital-admission-policy-2015-16.

The patient demographics that are linked to the cost data collection are collected based on the specifications outlined in the following manuals:

- Victorian Admitted Episodes Dataset (VAED) 28th Edition (Admitted)
- Victorian Emergency Minimum Dataset (VEMD) 23rd Edition (Emergency)
- Victorian Integrated Non-Admitted Health Minimum Dataset (VINAH) 14th version

These patient demographics are then converted to the relevant national minimum dataset or IHPA data set specification based on the Victorian department's interpretation of the specifications.

For further details please refer to Victoria's health data standards and systems link at https://www2.health.vic.gov.au/hospitals-and-health-services/data-reporting/health-data-standards-systems

4.2 Reporting hospitals

The number of health services submitting to the NHCDC can vary from year to year due to the timing of the submission date required by the IHPA. In 2018-19 38 health services and 78 campuses submitted cost data to the NHCDC.

For 2018-19 establishment ID: 210102460 Portland District Health

4.3 Activities reported costs

All costs in Victoria's NHCDC submission have accompanying activity that is recognised. Specific areas to note are outlined below.

4.3.1 Phase of Care

For the 2018-19 NHCDC collection, Victoria has submitted phase of care cost data for Palliative Care records and for the first time submitted phase of care for Mental Health for the following health services:

Barwon Health 210102050 - Geelong Hospital

Eastern Health 210801050 - Box Hill Hospital
210801210 - Maroondah Hospital [East Ringwood]
210802120 - Peter James Centre, The [East Burwood]

Monash Health 210801170 - Monash Medical Centre [Clayton]
210902030 - Kingston Centre [Cheltenham]
210902111 - Dandenong Campus
210903660 - Casey Hospital

Royal Children's Hospital 210A01192 - Royal Children's Hospital - Travancore Campus

St. Vincent's Health 210801700 - St Georges Health - Aged Care

Victoria is transitioning to report the cost data at a phase of care for Mental Health at both a bed based and community level for all health services who have a mental health service.

4.3.2 Emergency

All emergency department costs been allocated to emergency activity only.

4.4 Reporting of ICU and mechanical ventilation hours

ICU hours – Where ICU and CCU coexist, Victoria is unable to distinguish the time spent in a CCU or ICU.

PICU hours and NICU hours – PICUs are located at Monash Medical Centre and the Royal Children's Hospital only. NICUs located within four Victorian hospitals - Mercy Hospital for Women, Monash Medical Centre, Royal Women's Hospital and the Royal Children's Hospital.

However, where a patient spends time in a PICU and NICU, Victoria is unable to distinguish PICU from NICU hours.

PsyICU hours – Victoria does not collect the amount of time measured in hours that a patient spends in a state of psychosis while in an ICU.

Mechanical ventilation hours – Victoria only collects the total duration of Mechanical Ventilation (MV) in hours provided in an approved ICU or NICU only. MV hours provided in a non-approved ICU are not collected.

Mental health legal status – Only patients in Approved Mental Health Service or Psychogeriatric Program in public hospitals whose care is funded by Mental Health Services can report the status. Patients in all other care types, report the 'not applicable' code.

5 Variation and challenges

5.1 Costed results

Victoria allocates a cost to all non-admitted activity whether at a patient level or aggregate level. We have submitted all cost records that have been able to link to a non-admitted activity record as well as provided cost records for aggregate activities not previously provided.

Our health services review allocations and methodologies yearly to ensure that the resources are costed reasonably and accurately as possible. These reviews will result in variations of results from year to year indicating improvement in the costed data. This is more prevalent in the non-admitted results for 2018-19.

For the first time this year, Victoria has submitted mental health phase of care data at the admitted level and some community-based services.

5.2 Challenges with costing of specific products in Round 23

In addition to those that have been outlined in section 3.1 exceptions to the standards, such as Teaching and Training, Research and posthumous organ donation, there are some challenges faced with costing mental health services and their phase of care.

Health services access to the underlying data used to inform the resource allocation of expenses has been varied. This will impact on the consistency of allocation of costs. The department has developed guidance in relation to costing mental health however further enhancements to the guidelines are underway to ensure all aspects of patients and source data used in costing are addressed and adhered to.

6 Quality assurance undertaken

6.1.1 Reconciliation

Victoria's reconciliation report is designed to assist the department to understand the completeness of a health service's final submission including the source data by which the VCDC is created and its reconciliation. The data entered into this report is to represent the data used for the final VCDC and NHCDC submissions for FY2018-19.

In accordance with local and national financial reviews it is recommended that a director's attestation will need to be signed when submitting the reconciliation report. This will acknowledge the validity and completeness of the data to be submitted and used through the local and national cost collections.

6.1.2 Data quality assurance

Victoria ensures the cost data is relevant, reliable and fit for purpose based on a set of validations and quality assurance checks performed. These enhance communication with health services by gaining knowledge of the reasons for some of the quality and completeness inconsistencies of the cost data across all service streams.

The continuous use of the quality assurance checks has led to improvements in the cost data. This in turn has increased the use of the cost data within health services by assisting in their decision making and understanding the implications that changes in practices/procedures/policies have on the resource consumptions of patients and/or services

7 Assurance

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 and National Efficient Cost.

Signed:

Director
Funding & Budget

30/10/2020