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| Victorian Activity Based Costing |
| Victorian Cost Data CollectionPart C: Review, Reconciliation, and communicationVersion 3.5 |
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| **Victorian Activity Based Costing**Victorian Cost Data CollectionPart C: Review, Reconciliation, and communicationVersion 3.5 |
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Contents

[Review and reconcile 8](#_Toc144373639)

[Data quality assurance checks 9](#_Toc144373640)

[The details of the files 9](#_Toc144373641)

[Action required 9](#_Toc144373642)

[Rules and tolerances 10](#_Toc144373643)

[Reconciliation 16](#_Toc144373644)

[Financial and Activity reconciliation report 16](#_Toc144373645)

[Reconciliation of VINAH and AIMS 19](#_Toc144373646)

[Data Quality Statement (DQS) 20](#_Toc144373647)

[What should be included 20](#_Toc144373648)

[Auditing and reconciliation guidance 20](#_Toc144373649)

Table of contents

[Table 1: Data quality assurance rules by setting 10](#_Toc144373711)

Introduction

The purpose of the Victorian Cost Data Collection (VCDC) data specification, business rules and guidelines are to assist costing practitioners to identify and attain all the relevant information for allocation of resources to patients.

This document assists health services in the reporting and costing of any submission year patient level cost data. This section focuses on Part C: Review, Reconciliation, and communication:

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

The Vic ABC documentation also comprises of two other parts:

**Part A: VCDC process and Data Definition Specifications:**

* References - links to files and documentation relating to various sources of information and code sets to assist health services with their cost data submissions
* Process flow – outlines the processes that the files progress through the VCDC extract, transform and load process
* Data definition Specifications – details of the requirements of the files to be submitted including the structure, values, and validation rules
* Standard Principles – includes scope of activity and expenditure,

**Part B: Business rules and Specific costing guidance:**

* 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 criteria and conditions to be applied for the reporting of patient level cost data across various services

This document has been developed by the Department of Health, (the department) in consultation with inter-departmental stakeholders and relevant external stakeholders and endorsed by the Victorian Cost Data Collection Technical Working Group (VTWG).

# Review and reconcile

The department as well as the Commonwealth expect the reporting of correct, audited and reconciled quality cost data from health services.

The department also expects health services to examine their costed data for completeness across all services and have an assurance of the quality of the cost data that provides a level of understanding of the usefulness for analysis, reporting and use in funding models.

This section outlines the expectations and tools for reviewing, auditing, and reconciling.

# Data quality assurance checks

Data quality assurance (QA) 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. The quality assuring of the data is supported nationally by AHPCS V4 – Part 1 Standards 6.1 Data Quality Framework.

##  The details of the files

* The quality assurance checks below will be applied to the VCDC data once all critical errors and linking measures for the submitted files have been finalised.
* Each of the five programs are checked and provided in separate files as Admitted, Emergency, Non-Admitted, Mental Health and Subacute.
* Records not meeting the criteria will be flagged for health services to review and provide feedback on the validity of these records to determine the usability in the development of funding models, analysis and benchmarking and/or for the next phase(s) of the review.
* Some rules are at a summarised level by classification or cost bucket and other rules are patient specific.
* Notification to health services that the files are available to review via the download section of the secure data exchange (SDE). (Please note only staff and/or vendors who are registered on the SDE for your health service will be able to download and upload files).
* The QA reports should be reviewed in conjunction with a user guide specifically outlining details relevant for each check provided with the notification.

All feedback should be provided against each record and submitted through the upload section of the SDE with a notification via the VCDCassist@dhhs.vic.gov.au email when these are uploaded.

##  Action required

The quality assurance process checks the validity of the records against a reasonable tolerance level to understand why there is variation/movement.

* It is for health services to explain those movements/variations so those using the data understand why there may be certain cohorts exceeding the expectation.
* Feedback is to be provided within the column ‘Health\_Service\_Comment.’ Where no feedback has been provided, further investigation will be conducted, and records deemed invalid maybe excluded for funding development purposes.
* Where significant issues have been identified that will impact the costed results across the whole health service, this may warrant a re-cost and re-submission. A notification via email to VCDCassist of a re-submission providing details of the issue and the level of impact is required.

The rules of the data quality assurance checks by program can be found in table below.

##  Rules and tolerances

Table 1 describes the checks and tolerances for each setting. The total costs include costs that have been transitioned from Radiotherapy and Mental Health consultation liaison where they form part of an admission. Total costs do not include those mapped to "exclude"

Table 1: Data quality assurance rules by setting

| Setting | Sub-stream | Rule Title | Rule Code | Rule Name | Program filter | Report Level | Compares | Rule Description | Tolerance |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Admitted | **Acute, Subacute and Mental Health Admitted** | **Resource category comparison** | **AD01** | Direct cost variation | Program AC + AU + RH + GM + PC + MA + RP + MH(Care type 4, U, 6, 8, 9, MC & 5xx) | Campus XResource category X direct cost | Current year v Prior year | Compare the average direct cost by resource category between current year and prior year | 1 - the percentage (%) difference is greater than 20% or less than -20% and2 - the dollar ($) difference is greater than $20 or less than $-20 |
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| **AD02** | Overhead cost variation | Program AC + AU + RH + GM + PC + MA + RP + MH(Care type 4, U, 6, 8, 9, MC & 5xx) | Campus XResource category X indirect cost | Current year v Prior year | Compare the average indirect cost by resource category between current year and prior year | 1 - the percentage (%) difference is greater than 10% or less than -10% and2 - the dollar ($) difference is greater than $10 or less than $-10 |
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| **High costs** | **AD03** | Acute admitted high total costs | Program AC + AU(Care type 4 + U) | Campus X Episode X DRG | Current year | Identifies all episodes where the total cost is high | Total cost (sum of dcost+icost) is greater than $500,000 |
|
| **High costs** | **AD04** | Subacute & Mental Health admitted high total costs | Program RH + GM + PC + MA + RP + MH(Care type 6, 8, 9, MC & 5xx) | Campus X Episode X DRG | Current year | Identifies all episodes where the total cost is high | Total cost (sum of dcost+icost) is greater than $15,000 |
|
| **Acute & Subacute Admitted** | **Low costs by LOS type** | **AD05** | Acute & Subacute admitted low cost for Sameday patients | Program AC + AU(Care type 4, U, 6, 8, 9 & MC) | Campus X LOS type X DRG X Episode | Current year | Identifies all episodes where the total cost is low for sameday patients | Total record cost is less than or equal to $100 |
|
| **AD06** | Acute & Subacute admitted low cost for oneday or multiday patients | Program AC + AU(Care type 4, U, 6, 8, 9 & MC) | Campus X LOS type X DRG X Episode | Current year | Identifies all episodes where the total cost is low for oneday or multiday patients | Total record cost is less than or equal to $500 |
|
| **Acute, Subacute and Mental Health Admitted** | **DRG changes** | **AD07** | Acute, Subacute and Mental Health admitted percentage change for DRG | Program AC + AU + RH + GM + PC + MA + RP + MH(Care type 4, U, 6, 8, 9, MC & 5xx) | Campus X DRG  | Current year v prior year | Compare the DRG changes between current year and prior year | 1 - the percentage (%) difference is greater than 25% and2 - the number of episodes is greater or equal to 20 |
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| **Acute admitted** | **Intervention DRG with low theatre cost** | **AD08** | DRG types with low theatre costs | Program AC + AU(Care type 4 + U) | Campus x DRG x Episode | Current year | Identifies those episodes that have a intervention (surgical or procedural) DRG total theatre cost less than $50 | Total theatre resource category is less than $50 |
|
| **DRG with low medical costs** | **AD09** | DRG types with low medical costs | Program AC + AU(Care type 4 + U) | Campus x DRG x Episode | Current year | Identifies those episodes that have total medical cost that is less than $50 | Total medical resource category is less than $50 |
|
| **DRG with low nursing costs** | **AD10** | DRG with low nursing costs | Program AC + AU(Care type 4 + U) | Campus x DRG x Episode | Current year | Identifies those episodes that have total nursing cost that is less than $50 | Total theatre resource category is less than $50 |
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| Emergency |  | **Resource category comparison** | **ED01** | Direct cost variation | Program E | Campus XResource category X direct cost | Current year v Prior year | Compare the average direct cost by resource category between current year and prior year | 1 - the percentage (%) difference is greater than 10% or less than -10% and2 - the dollar ($) difference is greater than $20 or less than $-20 |
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|  | **ED02** | Overhead cost variation | Program E | Campus XResource category X indirect cost | Current year v Prior year | Compare the average indirect cost by resource category between current year and prior year | 1 - the percentage (%) difference is greater than 10% or less than -10% and2 - the dollar ($) difference is greater than $10 or less than $-10 |
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|  | **High and Low costs** | **ED03** | High-cost records | Program E | Campus x Presentation | Current year | Identifies the presentations where total cost is high | Total cost of presentation is greater than or equal to $20,000 |
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|  | **ED04** | Low-cost records | Program E | Campus x Presentation | Current year | Identifies the presentations where total cost is low | Total cost of presentation is less than or equal to $20 |
|  |
|  | **AECC changes** | **ED05** | Percentage change for DRG | Program E | Campus X AECC | Current year v prior year | Compare the AECC changes between current year and prior year | 1 - the percentage (%) difference is greater than 25% and2 - the number of episodes is greater or equal to 20 |
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| Non-Admitted |  | **Resource category comparison** | **NA01** | Direct cost variation | Program NV or N1 or N0 | Campus XResource category X direct cost | Current year v Prior year | Compare the average direct cost by resource category between current year and prior year | 1 - the percentage (%) difference is greater than 20% or less than -20% and2 - the dollar ($) difference is greater than $20 or less than $-20 |
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|  | **NA02** | Overhead cost variation | Program NV or N1 or N1 | Campus XResource category X indirect cost | Current year v Prior year | Compare the average indirect cost by resource category between current year and prior year | 1 - the percentage (%) difference is greater than 10% or less than -10% and2 - the dollar ($) difference is greater than $10 or less than $-10 |
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|  | **High/Low costs** | **NA03** | High-cost records | Program NV or N1 or N1 | Campus x Contact | Current year | Identifies contacts where total cost is high | Total cost of presentation is greater than or equal to $10,000 |
|  |
|  | **NA04** | Low-cost records | Program NV or N1 or N1 | Campus x Contact | Current year | Identifies contacts where total cost is low | Total cost of presentation is less than or equal to $20 |
|  |
|  | **Tier2 changes** | **NA05** | Percentage change for Tier2 | Program NV or N1 or N1 | Campus X Tier2 | Current year v prior year | Compare the Tier2 changes between current year and prior year | 1 - the percentage (%) difference is greater than 25% and2 - the number of episodes is greater or equal to 20 |
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|  | **No salary costs** | **NA06** | Low or no Direct Staff costs | Program NV or N1 or N1 | Campus x contact | Current Year | Identifies contacts with low total direct labour costs | Total cost (sum dcost+icost) is less than or equal to $50 |
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| Mental Health service | **Community Mental Health** | **Resource category comparison** | **MH01** | Direct cost variation | M (community Mental Health) | Campus XResource category X direct cost | Current year v Prior year | Compare the average direct cost by resource category between current year and prior year | 1 - the percentage (%) difference is greater than 20% or less than -20% and2 - the dollar ($) difference is greater than $20 or less than $-20 |
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| **MH02** | Overhead cost variation | M (community Mental Health) | Campus XResource category X indirect cost | Current year v Prior year | Compare the average indirect cost by resource category between current year and prior year | 1 - the percentage (%) difference is greater than 10% or less than -10% and2 - the dollar ($) difference is greater than $10 or less than $-10 |
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| **High costs** | **MH03** | Community Mental Health high total costs | M (community Mental Health) | Campus X Episode  | Current year | Identifies all episodes where the total cost is high | Total cost (sum of dcost+icost) is greater than $15,000 |
|
| **Admitted & Community Mental Health** | **Low costs**  | **MH04** | Low total cost  | Program MH (admitted MH) or M (community MH) | Campus X Episode  | Current year | Identifies all episodes where the total cost is low for sameday patients | Total record cost is less than or equal to $25 |
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# Reconciliation

To ensure the integrity and assurance of quality data, this section covers the following:

1. Financial and Activity reconciliations template
	1. Reconciliation of VINAH and AIMS (S10 and S11)
2. Data Quality Statement (DQS)

The templates for the above can be found on the department’s website at [Victorian Cost Data Collection.](https://www.health.vic.gov.au/data-reporting/victorian-cost-data-collection-vcdc) A copy can also be requested via an email to VCDCassist@dhhs.vic.gov.au.

< *https://www.health.vic.gov.au/data-reporting/victorian-cost-data-collection-vcdc>*

## Financial and Activity reconciliation report

The reconciliation report in Victoria is supported by *AHPCS V4 Part 1 - Standards 6.2 Reconciliation to Source Data* and 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 is to represent the data used for the final VCDC submission for each financial year.

Health services are required to submit a completed VCDC Reconciliation report once their VCDC submission has been finalised. The reconciliation report template can be found within the data collections list of reports for the VCDC as Reconciliation report for the relevant submission year.

It is requested that health services use the following naming convention:

[CampusCode]\_ [Submissiondate]\_[Submissionversion]\_RecReport.xlsx where:

* Campuscode = the campus code as found in the submitting files to be processed
* Submissiondate = the date as found in the submitting files to be processed
* Submissionversion = the version of the submitting files

This report is to be submitted through the SDE with a notification via email to VCDCassist@dhhs.vic.gov.au when these are uploaded

Should a re-submission occur an updated reconciliation report is also to be submitted.

The following sections provide a guideline on completing the template. Costing practitioners are encouraged to audit their activities with relevant stakeholders within their organisations as part of their periodical or monthly routines. It is also recommended results are reviewed for data entered to the activity reconciliations to ensure the data is accurately reflected and possibly highlight processes for improvement.

###  Signed attestation

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 submitted and used through the VCDC process.

A director may be either the:

* Chief Executive Officer; or
* Chief Finance Officer

### Expenditure

This sheet steps through the expenditures from the audited statements (or F1) through the costing process and subsequent VCDC submission. There are nine steps to be completed.

#### Expenses in general ledgers

These steps detail the expenses that are included and excluded from the audited statements to the financial general ledger to what is to be used for allocating expenses in the costing system.

**Step 1:** Obtain the final total expenditure submitted to the department for the current FY on AIMS F1.

**Step 2:** The general ledger data provided by the Finance system for costing purposes should reconcile to the F1.

*If there are any variance between Steps 1 and 2 above, health services are to detail the difference on the template.*

**Step 3:** All adjustments (exclusions/inclusions) made to the Finance GL that will create a costing GL are to be outlined in this step.

*For example, expenditures deemed out-of-scope as per AHPCS v4 and/or VCDC documentation: Capital related expenditure items, depreciation, private hospital operations, special purpose funds not related to patients, goods and services provided to external contractors.*

*For example, expenditures deemed in-scope as per AHPCS v4 and/or VCDC documentations: National Blood Allocation and Health Purchasing Victoria costs.*

**Step 4:** Total operating expenditures for costing GL (post all adjustments) forms the costing base in this step.

This total should equal the total in step 5 and 6.

Health services are to detail any variances between the Finance GL and the costing GL in this step.

#### Costing system configuration

These steps detail the processes of the expenses within the costing system that are used to allocate to the resources consumed by patients, including:

* areas classified as patient care areas and overhead areas and
* any expenses excluded or included during the costing process including those allocations classified as work in progress.

**Step 5:** Requires a listing and amounts within the costing system of all the Overhead Areas and Patient-related Direct Areas.

Health services are to provide full listings of overhead areas (as required in step 5.1) and direct areas (as required in step 5.2).

Step 5.3 consists of sample of direct areas to confirm that the sum of intermediate products or service code direct costs equal those of the pre allocation and post allocation (after all reclassing has been completed).

**Step 6:** This step requires no action as it automatically summaries the data in the prior steps to ensure that the final costs have been allocated to patients. This total should equal the total in step 4.

**Step 7:** Outlines the exclusions and inclusions (includes work-in-progress) that impact the VCDC submission. As a rule of thumb, if health services are populating the template correctly, the only exclusion and inclusion amounts in this step are relation to the work-in-progress.

**Step 8:** Represents the final costs that will be submitted to the VCDC collection. The amount in this step should be the value in health services’ Final VCDC submission file.

#### Costed results submitted to VCDC

Populate the total costs and activity submitted to the VCDC by program. Where there is more than one campus per health service these are to be separately identified.

Please note that as a rule of thumb if health services are populating the template correctly:

* Total patient episode $ reported to VCDC would automatically equate to the amount in step 8.
* Total patient episode WIP $ excluded reported to VCDC would automatically equate to the amount in step 8’s excluded costs.
* Total patient episode WIP $ included reported to VCDC would automatically equate to the amount in step 8’s included costs.

Furthermore, if health services are populating the template correctly, there will not be any need for populating reconciling items (Not reported to VCDC).

#### Conversion of costed results to the NHCDC products

An automatic conversion of the VCDC programs to the NHCDC products for reference if the health service does not change or add or overwrite the formulae. No action required with this step.

###  Activity

The intent of this report is to document what patient data is loaded in the costing system at the hospitals department / service level and matched and linked to patients' demographics or activities.

This also follows the requirement as per the AHPCS V4 Part 1 Standards 4.1 Product Types and Part 2 Business rules 4.2C feeder data and matching.

There are two sections to this template:

#### Part A Activity data - Patients' Demographics

This section requests details for activity data extracted to identify the individual patients and their demographic information that will be used to link the resources to. These will include (but not limited to):

o Patient Admission System

o Emergency System

o Outpatient Booking System

o Non-Admitted Sub-Acute System

o Mental Health (CMI) etc.

The number of records in these extracts relate to the number of admitted patients, emergency patients, non-admitted patients (including outpatient clinics), non-admitted mental health contacts and other mental health (for examples: community care units, prevention and recovery care, recovery residential aged care), = in the current submission year.

#### Part B Feeder data - Patients' Utilisations from service areas/departments

This section requests details for patients' utilisation data from hospital’s service areas or departments that can be linked to patient activity data above, for example *(not a complete list – health services will have more to be included)*:

Pharmacy Pathology Radiology

Emergency attendances Theatre Allied Health

Cath Lab Wards Transfers Blood Products

Patient Transport Mental health contacts etc.

This utilisation is the number of services each patient receives from each service area and/or department during the current fiscal year and how these departmental / service areas are linked to patient activity in Part A. This will follow the result of the health service’s rules set up for linking and populated by the various settings.

*For example, Wards Transfers should have all its records loaded into the costing system linked to admitted patients. Similarly, all the Emergency attendances should have all its records loaded into the costing system linked to emergency patients. While the records in Imaging may be linked to patients who were admitted or in outpatient clinic or in emergency*.

###  Cost centre movements or transfers

This section provides an understanding of those expenditures within the costing general ledger that have been moved and assigned from the finance general ledger to ensure the correct expenditures are being allocated to the patients.

###  Virtual Episodes

The purpose of the virtual or aggregated episodes report is to understand which departmental feeders are without patient level data within the health service. It is expected that health services review this report and comment on any plans to electronically capture data at the patient level for costing.

##  Reconciliation of VINAH and AIMS

Non-admitted patient level activity data is collected at the contact level through the Victorian Integrated Non-Admitted Health (VINAH) dataset and at the aggregated service events through the Agency Information Management System (AIMS) via S10, S11 and S12 forms.

As part of the VCDC submission process, health services are provided with their end of year final data sourced from VINAH to ensure those records have a corresponding cost (where applicable) and identify the relevant key fields and values that the records are to include to ensure a link/match between the costed record and the activity can be made.

Health services are encouraged to seek further advice and guidance from their activity reporting teams regarding the records submitted through VINAH, AIMS and NADC (if applicable) or can use the reports via the Healthcollect portal.

# Data Quality Statement (DQS)

The data quality statement has been designed to assist users of the costed results understand the quality of the data submitted to the VCDC. It is intended to be a statement that highlights Health service’s key aspects that may impact on local and national comparative results.

For users to understand the quality of health services costed data, there is a requirement that health services complete a DQS where a signed declaration confirming adherence to the national and local requirements including the standards and acknowledging the validity and completeness of the data submitted.

##  What should be included

There may be specific issues, improvements or relevant details that can assist users of the cost data to understand any key aspects that may impact on your health services' results. This includes any general comments relevant to the health service’s submission, its expenditures, it is activities and any movements made within its costing general ledger for the correct expenditures to be allocated to the patients. It also allows health services to provide further comments on any variation of the costed data.

It is expected that the DQS be submitted at the same time as the reconciliation report and signed by the Chief Executive Officer.

The department has developed a DQS template to assist with completing relevant details and submitting a final signed version to the department.It is also requested that health services’ comments follow the structure of the DQS template and not delete any questions within each section. Please ensure all sections are completed.

# Auditing and reconciliation guidance

Health services are to conduct reconciliations and audits of their cost data before their submissions to the VCDC. They are also expected to comply with this document as well as to the latest AHPCS.

However, due to the lack of any specific guidance and tools, the department is undertaking to develop a paper and tools to assist health services in their review and reconciliation. It will detail the processes for health services to undertake as well as outlines the departments review, reconciliation, and quality assurance. It is a guide that could be applied by all health services who want to ensure that their costed results are consistent, dependable, and reconciled.

The guidance focuses on the three-prong approach of audit and reconciliation before, during and after patient costing at the health services. Having observed these steps in an iterative process and once quality assured by the health services, they then proceed to submit their cost data to the department.

During the VCDC processing at the department, further audit and reconciliation are conducted to ensure the department’s results are reconciled to health services’ submitted files.

Health services that conduct audits, reconciliations, and quality assure their cost data in an iterative process before submission to the VCDC tend to finalise their submission in a timelier timeframe.

This paper is currently being finalised and will be included in this section.