Australian Hospital Patient Costing Standards

Part 3: Costing Guidelines

Version 4.2
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IHACPA

Australian Hospital Patient Costing Standards – Part 3: Costing Guidelines – Version 4.2

Preface

The **Independent Health and Aged Care Pricing Authority (IHACPA)** is an independent government agency. We promote efficiency and increase transparency in the delivery and funding of public health and aged care services across Australia.

IHACPA's primary function is to enable activity-based funding for Australian public hospital services. Learn more about the national pricing framework, classifications, costing, data collections and protheses.

IHACPA's organisational values shape the culture of the agency and form the basis for stakeholder engagement to achieve our vision. Our core values are as follows:

- We act with independence, transparency, fairness, respect, accuracy and accountability.
- We value collaboration and demonstrate our values in the way we interact internally, with our stakeholders and broader community.
- Our staff act ethically, support a collaborative culture and take pride in their work.

Australian Hospital Patient Costing Standards – Part 3: Costing Guidelines – Version 4.2

The Costing Guidelines listed in this document are drafted within the Australian context for costing practitioners. Costing practitioners may encounter practical limitations within their organisation when seeking to adhere to the Standards and Business Rules, noting:

- Costing practitioners are advised to understand the nuances of their hospitals and jurisdictions, understand how these can be applied to the Business Rules and how the costing methodology can be adapted to their local environment.
- Where the costing practitioner is unable to fully adopt the process identified within the Business Rules, this should not be considered as a 'failure to comply' to either the Business Rule or the Standard.
- Importantly, the costing practitioner should document the costing process for transparency purposes and seek to make changes within their hospitals to assist with long term costing, Standards and Business Rules development.

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Introduction

The purpose of this document is to practically assist costing practitioners to identify and attain all the relevant information for costing purposes, both within their organisations and their respective jurisdictions, to enable them to adhere to the Australian Hospital Patient Costing Standards (AHPCS) Version 4.2.

Structure

The AHPCS Version 4.2 consists of three parts:

Part 1: Standards (including attachments)

Part 2: Business Rules

Part 3: Costing Guidelines

This document forms the Costing Guidelines.

Part 1: Standards

The Standards are overarching principles to support and inform each step in the process of patient level and product costing. They are designed to inform the recommended approach to the costing process and are not meant to be static. The structure of the Standards is intended to align with the product costing process. The Standards are evolving guidelines that will continue to be updated and improved upon, as processes develop.

Part 2: Business Rules

The Business Rules provide practical or detailed guidance on how a standard can be translated into action. They have been written from a costing practitioner's perspective and consider the practical and operational constraints faced by costing practitioners within their organisations when seeking to address the AHPCS Version 4.2. They provide information requirements, definitions, and more detailed information to assist with the costing of more complex services.

These Business Rules follow the costing process from the general ledger through to the final reconciliation of audited accounts and other information sources used in the costing process, such as feeder systems.

Part 3: Costing Guidelines

The Costing Guidelines have been developed to guide costing practitioners and other relevant stakeholders on how to cost various services within their hospitals. These guidelines demonstrate the practical consolidated steps to be undertaken by a costing practitioner to address the relevant Business Rules within each stage, to best demonstrate adherence to the Standards.

The Costing Guidelines do not purport to include all hospital services but have been developed to demonstrate the practical steps of costing specific services within the Australian context over a 20-year period.

Guide to using this document

Application

The Costing Guidelines should be read in conjunction with all Standards and Business Rules.

The Costing Guidelines outline the steps to cost various services within hospitals. The relationship between these steps and the costing process stages are illustrated in the flow chart provided at Attachment A – The Patient Costing Process.

Numbering convention

The numbering convention of each Costing Guideline is in terms of 'CG N', where:

CG = the prefix indicating a Costing Guideline

N = the Costing Guideline number

Definitions

The Glossary contains definitions for terms present throughout the Costing Guidelines.

CG 0 The Patient Costing Process

CG 0.1 Scope

CG 0.1.1 This guideline provides guidance on feeder extraction, intermediate product development and the matching of these to patient level activity.

CG 0.1.2 This guideline also provides guidance on the process of assigning expenses from cost centres to final cost centres to intermediate products, the use of relative value units (RVUs) and the cost allocation process to obtain an intermediate product cost and, following the matching process, a patient level cost.

CG 0.2 Objective

CG 0.2.1 The objective of this guideline is to present the steps required to patient level cost.

CG 0.3 Costing Guideline

CG 0.3.1 This guideline presents nine steps that may be followed to undertake patient level costing. These are:

Step 1: Stakeholder identification and service scale and scope

Step 2: Align expense to the service department and define direct and indirect patient expenses, including overhead allocation methods

Step 3: Identify patient level activity and feeder data and perform quality assurance checks

Step 4: Creating and mapping service costing products or intermediate products

Step 5: Apply relative value units (RVUs) by service

Step 6: Create intermediate product costs in final cost centres

Step 7: Match intermediate products and their costs to patient activity

Step 8: Report costs

Step 9: Cost data review with service stakeholders

Step 1: Stakeholder identification and service scale and scope

CG 0.3.2 Costing practitioners should obtain their jurisdictional policy with regards to the products that require allocation of costs and must identify how the organisation operates, the associated expense and the activities performed in relation to that product. All relevant stakeholders involved in the product costing should be identified and included in the product costing process.

Purpose of cost information

CG 0.3.3 Costing practitioners need to be clear on the purpose of producing product level cost information to ensure that results are relevant for stakeholder use.

Stakeholder identification and reporting requirements

CG 0.3.4 Costing practitioners should consult their jurisdiction to understand reporting requirements and ensure these are reflected in the hospital costing process.

CG 0.3.5 Consultation with hospital stakeholders should also be done to understand and identify:

- reliable data collection systems that are suitable to use as a basis to allocate expenses to patient activity or other products including indirect patient costs
- the individual service area's reporting needs
- where services are delivered within the hospital
- third-party arrangements.

CG 0.3.6 Costing practitioners should undertake the following steps to assign expenses from production cost centres to intermediate products and matching them to patient level activity.

Step 2: Align expense to the service department and define direct and indirect patient expenses, including overhead allocation methods

CG 0.3.7 Consultation with the service areas will allow an understanding of the nature of services provided. The nature of these services and their associated expenses are defined depending on their relationship with patient care:

- Direct - production and overhead expenses incurred in the delivery of a patient care product and/or service allocated to a patient using evidence of resource utilisation.
- Indirect - production and overhead expenses incurred in the delivery of a patient care product and/or service that is allocated using a method to apportion the expense (for example, relative value units).

CG 0.3.8 Costing practitioners should align expenses from production cost centres within the general ledger to final cost centres based on informed decision-making, including service activity or information from external sources such as timesheets, invoices or payroll information.

CG 0.3.9 Based on the data, costing practitioners should (within the patient costing system) use stakeholder insights to ensure alignment of hospital costs with activity by appropriate product mapping and moving expenses to the relevant cost centres.

CG 0.3.10 Costing practitioners will also need to apply an objective and systematic way to allocate overhead expenses to final centres. Some examples of these methods can include:

- using the total expenses of the chief executive officer to allocate these expenses to each final cost centre or department
- weighted floor space for cleaning.

CG 0.3.11 Where overheads are traceable (for example, through a feeder) and can be directly allocated to patient activity, costing practitioners should prioritise this allocation approach.

Step 3: Identify patient level activity and feeder data and perform quality assurance checks

CG 0.3.12 Costing practitioners should meet their service stakeholders to identify what activity occurs within their service area and whether these activities are recorded in information systems.

CG 0.3.13 The level of activity detail captured will influence the costing methodology and final costed output. The feeder data from an information system will include some or all of the following fields:

- the patient's unique identifier
- the patient unique episode identifier
- establishment unique identifier
- the unit where the service was requested (for example, ward A, outpatient clinic B, ward C)
- the date of service
- the type or category of service provided that will define the intermediate product (for example, language interpreted, type of drug, type of pathology test, type of image, ward name)
- the volume driver or unit of measure for each intermediate product that will be used to allocate expenses such as time, the quantity of service, the actual cost or traceable cost.

CG 0.3.14 Costing practitioners should perform quality assurance checks on the feeder activity file prior to the costing process. For example, checks should be made on the date of service to test reliability, to remove error dates and ensure dates are relevant to the period being costed.

Step 4: Creating and mapping service costing products or intermediate products

CG 0.3.15 Intermediate products are generally created for services listed in the feeder. Once the intermediate products are created, costing practitioners will be required to ensure these are mapped in the costing system to the appropriate final cost centre.

Step 5: Apply relative value units (RVUs) by service

CG 0.3.16 The cost allocation process may be further enhanced by using RVUs.

CG 0.3.17 Costing practitioners should be aware that RVUs are generally applied in the cost allocation process to demonstrate the relative effort in producing one cost object against another.

CG 0.3.18 The relative values should be determined in consultation with service stakeholders. The process of developing RVUs is similar across several service areas (final cost centres) within a hospital, such as wards or nursing, imaging, pathology, pharmacy, and prosthesis. The difference between them generally is the description of effort or value that is used to define the RVU per service area.

CG 0.3.19 The determination of effort or value is generally dependent on the area being costed and the intermediate products being produced from that area. Examples of effort include:

- acuity (or patient classification or dependency) for wards

- work effort (time based and resource classification based) for imaging and pathology
- actual prices (paid by the hospital) for prosthesis and pharmaceuticals.

CG 0.3.20 Costing practitioners should consult their jurisdiction for any mandated requirement and guidelines for RVUs to be used in the costing process.

CG 0.3.21 Costing practitioners should note that where expenses are allocated to an intermediate product using an RVU, the following hierarchy should be considered:

- The use of local RVUs that are derived from an organisation's own historical information and accurately reflect the organisation's operational behaviours.
- The use of RVUs that are derived from external information, such as an industry standard (for example, Medicare Benefits Schedule) or benchmark.
- The use of national Diagnostic Related Group service weights.

CG 0.3.22 Developing accurate local RVUs should always be the highest priority for costing practitioners, as the costs will be more reflective of resource consumption and hospital practice, than using external price lists or service weights. Consideration of the materiality of costs is required by costing practitioners.

Step 6: Create intermediate product costs in final cost centres

CG 0.3.23 Two allocation processes are performed:

- Overhead costs are allocated to the production cost centre (using an appropriate allocation statistic).
- The production cost centre costs (overhead and direct) are allocated to the intermediate products.

Step 7: Match intermediate products and their costs to patient activity

CG 0.3.24 Service point is the preferred matching method, as outlined in Business Rules 5.2 B. Costing practitioners should establish a series of matching rules within the costing system to match intermediate products defined in each feeder to the appropriate activity and final product.

CG 0.3.25 Intermediate products should be matched to the patient or encounter level for which they have been ordered as this match defines the resources consumed and the associated costs of care.

CG 0.3.26 Costing practitioners will need to develop and apply matching rules that fit with their local service model. Costing practitioners may wish to consider the following matching criteria in this order of preference, for activity and feeder data:

- Admitted patients: match intermediate products by date of service within the admission and discharge.
- Emergency encounters: match intermediate products by date of service within the admission to and discharge from emergency.
- Outpatient encounters: match intermediate products by date of service 30 days before and 30 days after outpatient clinic attendance.

Step 8: Report costs

CG 0.3.27 Costing practitioners should perform the required steps to consolidate and report costs at a patient or encounter level.

Step 9: Cost data review with service stakeholders

CG 0.3.28 Costing practitioners should meet with their service stakeholders to report on costs calculated for validation and sign off.

CG 1 Critical Care

CG 1.1 Scope

CG 1.1.1 This guideline provides the scope of critical care services and a guideline on the approach to costing activity within a critical care unit.

CG 1.1.2 This guideline also provides practical steps and examples to guide staff on the patient costing process for this activity.

CG 1.1.3 For patient level costing purposes, the following units will be included in critical care:

- cardiothoracic intensive care
- coronary care
- intensive care
- neonatal intensive care
- psychiatric intensive care
- paediatric intensive care.

CG 1.1.4 High dependency, special care nurseries and other close observation units either located within general wards or stand alone will be costed as general wards.

CG 1.1.5 Where close observation unit costs are integrated with critical care units, these will be treated as critical care, recognising the difficulty in disaggregating critical care services from high dependency services in combined units.

CG 1.1.6 Special care nurseries (SCNs) attached to either a neonatal intensive care unit or in another combined unit, will be treated as critical care. Where the SCN can be identified as a separate ward or cost centre, it will be treated as a clinical care area.

CG 1.2 Objective

CG 1.2.1 The objective of this guideline is to guide costing practitioners on the end-to-end steps required to ensure that all critical care activity and expense contributing to the day-to-day production of final critical care products are included in the patient costing process to determine the full cost of production.

CG 1.3 Costing Guideline

Step 1: Stakeholder identification and service scale and scope

CG 1.3.1 Costing practitioners should meet with the appropriate stakeholders within the critical care department and finance department to identify both the expense and activity related to critical care. Critical care stakeholders may include:

- the director of critical care (or local equivalent)
- the critical care nursing manager
- the cost centre manager.

CG 1.3.2 Stakeholders will explain the operation of the critical care unit. This information is required to understand the configuration of the unit, the scope of expenses, the activities and what drives costs within the unit.

CG 1.3.3 In some hospitals, the expense associated with a critical care unit may not be aligned to each critical care service such as in ICU or high dependency. For example, the critical care unit cost centre may include bed expenses that are classified as high

dependency (that is, not critical care). When meeting with relevant stakeholders, these issues require clarification as the cost model will need to be developed to reflect the hospital's practice. The meeting should also discuss the available critical care feeder systems, the most appropriate way to allocate expenses and the appropriate RVUs that should be applied at the intermediate product level.

Step 2: Align expenses to the service department define direct and indirect patient expenses, including overhead allocation methods

CG 1.3.4 Costing practitioners should work with critical care department stakeholders to define the expense within the critical care department that relates to final products. This includes obtaining agreement on the cost centre/s to map to critical care for costing purposes.

CG 1.3.5 Align expenses to final cost centres – where the general ledger has consolidated expenses for both critical care and high dependency beds within the one cost centre, costing practitioners must work with the critical care stakeholders to define and agree on the methods and assumptions to be used (for example, staff rosters, full-time equivalent, timesheets, occupied bed days or other relevant data) to transfer expenses to other intermediate products.

CG 1.3.6 Costing practitioners should then use stakeholder insights to move expenses appropriately between the critical care and high dependency activity.

CG 1.3.7 Costing practitioners should seek to access staff rosters to understand rotation of residents and junior staff to critical care. This information can be used to demonstrate the medical resources used to support critical care (or high dependency) patients from other hospital units as these expenditures are held outside the critical care cost centre.

CG 1.3.8 This approach enables cost practitioners to consider the medical resource costs for critical care patients that are represented not only by critical care medical staff (where expenses are held within critical care cost centres), but the activity for medical staff rostered to critical care where associated expenses are held outside critical care cost centres.

CG 1.3.9 Key decisions should be documented in detail, including:

- a date for the future review of these decisions with stakeholders
- the stakeholders who were consulted and the date of consultation
- expenses that have been summarised and classified into the critical care final cost centre
- what expenses have been summarised into the critical care and high dependency final cost centres.

Step 3: Identify patient level activity and feeder data and perform quality assurance checks

CG 1.3.10 The main feeder system used for the allocation of critical care is generally the ward transfer file, as this provides data related to the time a patient spends in critical care.

CG 1.3.11 Other data may be used for the cost allocation process, for example, the episodic dataset may record whether the patient was ventilated and the time duration. The critical care feeder system (and other datasets) will include some or all of the following fields:

- the patient's unique identifier
- the patient's unique episode identifier
- establishment unique identifier
- unit code (for example, ICU, neonatal ICU, critical care unit)
- cost centre (for example, COVID-19 critical care)
- the time into and out of the unit
- hours of mechanical ventilation
- campus or site
- other relevant information.

CG 1.3.12 Costing practitioners should perform quality assurance checks on the critical care datasets prior to the costing process. For example, checks should be made on:

- the date of service (check error dates, relevancy to costing period)
- time into and out of the critical care department (check for negative values – where the start time is after the finish time).

Step 4: Creating and mapping critical care costing products or intermediate products

CG 1.3.13 The most widely used method for allocating critical care expenses to patients includes the use of patient duration in the department, which may also be combined with a relative value unit (RVU).

CG 1.3.14 Intermediate products created for critical care will depend on the fields available in the ward transfer feeder systems and the availability of other data (for example, from nursing dependency systems and the episodic dataset). Usually, the intermediate product will include, at a minimum, the unit code of the critical care department and may also include other factors such as the critical care level, admission and discharge date from the unit, time of day (for example, am, pm, and night) and patient specialty.

CG 1.3.15 Where critical care intermediate products are created in the costing system, they will also need to be mapped to the relevant final cost centre (for example, critical care or high dependency as appropriate). An example of such a product is: 'ICU_1_TransfIn_ED', which denotes the ward (ICU), the acuity level of the patient (1) and the fact that this patient has been transferred into ICU from the emergency department (ED). Once the intermediate products are created, costing practitioners will be required to map these in the costing system to the critical care final cost centre.

Step 5: Apply relative value units (RVUs)

CG 1.3.16 Patient duration on the critical care ward is usually the primary cost driver used to allocate the labour related expenses within a critical care department. Used in isolation, this means that all patients are assumed to have the same nurse/medical staff to patient ratio. Costing practitioners may also wish to discuss with critical care stakeholders whether it is possible, or feasible, to assign RVUs to adjust the patient cost allocation to account for staff resource intensity.

CG 1.3.17 For example, patients recently transferred into critical care from the ED or post theatre may require more medical and nursing care than patients who are in a critical condition and stabilised or are ready to be stepped down into high dependency. While the normal nursing staff patient ratio in an adult and paediatric intensive care

unit is 1 to 1, there are treatments such as extra corporeal membrane oxygenation where the staff patient ratio may be higher. Similarly, intensive care areas may have bed locations such that as the patient's condition improves, a 1 to 2 or 1 to 4 ratio may be allocated to the patient.

CG 1.3.18 Where these patient types can be readily identified from the electronic data available to the costing team, RVUs should be adjusted to accurately reflect the relative costliness of patients as they pass through the critical care unit.

CG 1.3.19 Neonatal intensive care units normally have one or two rooms with lower acuity patients requiring a lower staff patient ratio and may also include an attached special care nursery area through which the initially sick neonate passes during their overall stay in the neonatal ICU. The RVU also needs to consider this level of acuity.

CG 1.3.20 These relative values should be determined in consultation with the critical care stakeholders.

Step 6: Create intermediate product costs in final cost centres

CG 1.3.21 Costing practitioners should refer to the key principles outlined in the AHCPS Standards, Stage 3: Create Final Cost Centres. Two allocation processes are performed:

- Overhead costs are allocated to the production cost centre (using an appropriate allocation statistic).
- Production cost centre costs (overhead and direct) are allocated to the intermediate products.

Step 7: Match intermediate products and their costs to critical care activity

CG 1.3.22 Service point is the preferred matching method, as outlined in Business Rules 5.2B. Activity within the critical care unit will consume resources from other hospital departments, such as imaging, pathology, pharmacy, and allied health on their journey of care and these should be attached to patient activity as these resources contribute to the cost of production.

Step 8: Report costs

CG 1.3.23 Costing practitioners should then perform the required steps to consolidate and report costs at an encounter level.

Step 9: Cost data review with critical care stakeholders

CG 1.3.24 Costing practitioners should meet their relevant critical care stakeholders to report on costs calculated.

CG 1.3.25 Cost data should be reviewed for, amongst other checks, cost relativity per product and resource completeness per episode to determine if the cost data captures resources that have been provided at encounter level.

CG 2 Emergency Department

CG 2.1 Scope

CG 2.1.1 This guideline outlines an approach to costing emergency department (ED) encounter activity.

CG 2.1.2 This guideline also provides practical steps and examples to guide staff on the patient costing process for this activity.

CG 2.1.3 The ED is a department which may comprise short-stay admitted units, clinical decision units, short-stay medical assessment units and emergency management units.

CG 2.1.4 Expenses for such collocated units are associated to admitted products and not to products that are defined as ED products.

CG 2.1.5 ED expenses that are associated to products will include all services provided in the period from a patient's presentation to their departure from the ED including all ancillary services ordered for the patient during that period.

CG 2.2 Objective

CG 2.2.1 The objective of this guideline is to guide costing practitioners through the end-to-end steps required to ensure that all ED activity and expenses contributing to the day-to-day production of final ED products are included in the patient costing process to determine the full cost of production.

CG 2.3 Costing Guideline

Step 1: Stakeholder identification and service scale and scope

CG 2.3.1 Costing practitioners should meet with the appropriate stakeholders within the ED and finance department to identify both the expenses and activity related to the ED. Stakeholders may include:

- the medical director of emergency services (or local equivalent)
- the nursing manager for emergency services
- the ED cost centre manager.

CG 2.3.2 The agenda for this meeting should include an overview of the operation of the ED (for example, ED status level, cubicle numbers and if it includes a short-stay admitted unit). This information is required to understand the configuration of the ED. These insights should enable further detail to be gathered such as the expenses reported within and across the ED and the associated activity within its configuration.

Step 2: Align expenses to the emergency department and define direct and indirect patient expenses, including overhead allocation methods

CG 2.3.3 Costing practitioners should work with ED stakeholders to define which expenses within the ED relate to ED products.

CG 2.3.4 From a practical sense, this will require the costing practitioner to identify all cost centre/s in the general ledger that map to ED products. It will also require the costing practitioner to transfer out any expenses in the ED that relate to other products. Examples include:

- expenses for admitted products – short-stay admitted units, clinical decision units, short-stay medical assessment units and emergency management units (where expenses for these units is mapped to the defined ED cost centres)
- teaching and training expenses associated with the ED (for example, weekly meetings for junior doctors led by a senior ED clinician)
- call outs of ED physicians to other clinical areas (for example, critical care wards).

CG 2.3.5 Align expenses to final cost centres – costing practitioners should also work with ED stakeholders to define and agree on the methods and assumptions to be used to estimate the transfer of expenses to other products (for example, staff rosters, timesheets or other relevant data such as medical emergency team (MET) calls).

CG 2.3.6 Costing practitioners should use stakeholder insights to guide them in moving the appropriate expense into the ED final cost centre and other relevant final cost centres (for example, from the general ED cost centre to the cost centre related to the short stay unit (SSU)).

CG 2.3.7 Costing practitioners should seek to access staff rosters to understand the level of rotations of residents and junior staff to the ED. This information can be used to demonstrate the medical resources used to support ED patients from other hospital units as these expenditures are held outside the ED cost centre.

CG 2.3.8 This approach enables the cost practitioner to consider that the medical resource costs for ED patients are represented not only by ED medical staff (where expenses are held within ED cost centres), but the activity for medical staff rostered to critical care where associated expenses are held outside ED cost centres.

CG 2.3.9 Record expense alignment decisions – costing practitioners should utilise the costing system or another medium to record:

- the classification of ED expense into the ED final cost centre and other final cost centres
- the stakeholders participating in meetings
- the date of the meeting
- a date for future review of ED expense alignment.

Step 3: Perform quality assurance checks on emergency department feeder system data

CG 2.3.10 Ideally, the ED feeder system will (where possible) include some or all the following fields:

- measure of acuity
- clinical interaction or resource consumption or intensity
- date and time of service
- patient unique identifier
- patient unique episode identifier
- establishment unique ID
- time into and out of the unit
- unit code (for example, ED)
- triage category
- other patient demographic factors such as sex and age.

CG 2.3.11 Costing practitioners should perform quality assurance checks on the ED file prior to the costing process. For example, checks should be made on the date of service to test reliability, to remove error dates, check time into and out of the unit, and ensure dates are relevant to the period being costed. If ED duration is used as a cost driver, checks should be performed to ensure that the time out of the unit does not occur before the time into the unit.

Step 4: Creating and mapping emergency department costing products or intermediate products

CG 2.3.12 Costing practitioners should use date and time, patient ED location or diagnosis for intermediate product creation. This should be appropriately reflected in the costing system. Note that triage should only be used for product creation where other options are not available.

CG 2.3.13 Once this product code is created, costing practitioners will be required to map this in the costing system to the ED final cost centre. The ED feeder system may also include unit codes, such as SSU, that need to be mapped to the SSU final cost centre. In this case, costing practitioners should create a product for example 'SSU' and map this product to the SSU cost department in the costing system.

CG 2.3.14 It is generally recognised that ED costs comprise approximately 70 per cent of staff (nursing and medical) costs and staffing profiles can vary according to the location staff are assigned within the ED (such as general cubicles, resuscitation treatment areas and SSU).

CG 2.3.15 Costing practitioners should work with ED stakeholders to also consider staff profiles as a means of understanding the workflow within the ED for various patient cohorts and understand where a standard staffing rate per hour by location, modified by the triage and disposition of the patient, can be used to inform the cost allocation process.

Step 5: Apply relative value units (RVUs)

CG 2.3.16 Costing practitioners should obtain agreement from within their hospital (or jurisdiction) as to the agreed method to create RVUs.

CG 2.3.17 Whilst the most common methodology for allocating ED expenses to encounter activity is to create products for ED based on the triage category assigned to the encounter activity, costing practitioners should consider RVUs that combine the location of patient within the ED such as general cubicles, resuscitation treatment areas and SSUs with patient diagnosis.

CG 2.3.18 These RVUs can then be mapped to the appropriate intermediate product which may be based on triage or a combination of location and diagnosis.

CG 2.3.19 However, costing practitioners should also give context to the type of encounter they are seeking to cost before applying their costing methodology. For example, time in and out of an ED alone may not be the best indicator of resource use and relative encounter cost. There may be instances where a patient with high acuity spends little time within the ED and consumes several resources (for example, medical supplies) given their complexity, whilst lower acuity patients stay within the ED for longer periods for observational purposes. In this example, the costing practitioner should seek a cost outcome where the higher acuity encounter demonstrates a higher cost than the low acuity encounter, irrespective of their time in the ED, given they are

likely to be complex and consume several ED resources in a short period of time. Costing practitioners should consider these types of workflows when determining the creation and attachment of an RVU.

Step 6: Create intermediate product costs in final cost centres

CG 2.3.20 Two allocation processes are performed:

- Overhead costs are allocated to the production cost centre (using an appropriate allocation statistic).
- Production cost centre costs (overhead and direct) are allocated to the intermediate products.

Step 7: Match intermediate products and their costs to emergency department encounters

CG 2.3.21 Service point is the preferred matching method, as outlined in Business Rules 5.2B. ED encounters will consume resources from other hospital departments, such as imaging, pathology, pharmacy, and allied health on their journey of care and these should be attached to the ED encounter as these resources contribute to the cost of production. Costing practitioners must ensure that services from other departments provided to ED patients are matched appropriately to the ED encounter.

Step 8: Report costs

CG 2.3.22 Costing practitioners should then perform the required steps to consolidate and report costs at an encounter level.

Step 9: Cost data review with emergency department stakeholders

CG 2.3.23 Costing practitioners should meet with their relevant ED stakeholders to report on the costs calculated.

CG 2.3.24 Cost data should be reviewed for, amongst other checks, cost relativity per triage category and resource completeness per episode to determine if the cost data captures resources that have been provided at the encounter level.

CG 3 Operating Room and Special Procedure Suites

CG 3.1 Scope

CG 3.1.1 This guideline outlines an approach to costing activity within an operating room (OR) and special procedure suites (SPS).

CG 3.1.2 The business rules provide a guide to cost OR and SPS separately.

CG 3.1.3 This guideline also provides practical steps and examples to guide staff on the patient costing process for this activity.

Operating room and special procedure suites scope

CG 3.1.4 For the purposes of patient level costing, OR expenses are those that relate to areas of the hospital that would typically be found in the operating theatre suite. SPS may have their own cost centres to account for SPS expense, but may have related expenses in other cost centres, such as the OR, as the OR theatre manager may order goods and services on behalf of the SPS.

CG 3.1.5 There are several other areas in hospitals where procedures are performed, that should not be included as OR and classified as SPS for patient level costing purposes, including:

- angiography
- cardiac catheter suites
- electroconvulsive therapy suites
- endoscopic suites
- general procedure suites
- hyperbaric chamber
- lithotripsy suites
- lung function laboratories
- non–invasive cardiac laboratories (for example, echo labs)
- physiology laboratories
- radiotherapy suites
- respiratory laboratories
- sleep laboratories.

CG 3.1.6 OR should be separated from SPS for the purposes of patient level costing.

CG 3.1.7 OR and SPS expenses and activity should be identified and individually costed. The steps below should be applied for both the OR and SPS. There is no change in the application of the steps required to separately cost each.

CG 3.2 Objective

CG 3.2.1 The objective of this guideline is to guide costing practitioners on the end-to-end steps required to ensure that all OR and SPS activity and expenses contributing to the day-to-day production of final OR and SPS products, are included in the patient costing process to determine the full cost of production.

CG 3.3 Costing Guideline

Step 1: Stakeholder identification and service scale and scope

CG 3.3.1 Costing practitioners should meet with the appropriate stakeholders within the OR, relevant SPS and finance department to identify both the expense and activity related to OR and SPS. OR stakeholders may include:

- the director of surgical services (or local equivalent)
- the OR nursing manager
- the OR cost centre manager.

SPS stakeholders may include the clinical directors that relate to the relevant SPS within the hospital.

CG 3.3.2 For example, the medical director of gastroenterology may have responsibility for the endoscopy suite, while the medical director of cardiology may have responsibility for the cardiac catheter suite. The relevant SPS cost centre managers should also be consulted. The finance department should be able to assist with providing the contact details for these staff.

CG 3.3.3 In some hospitals, expenses associated with an SPS may not be discrete and may fall within an OR cost centre (for example, endoscopy). In this case, costing practitioners should seek to meet with the appropriate stakeholders within the OR, as described above.

CG 3.3.4 The agenda of these meetings should include an overview to the operation of the OR or SPS. This information is required to understand the configuration of these areas. This insight should enable further detail to be gathered such as the expense that is reported within and across the OR or SPS and the associated activity within its configuration. The meeting should also discuss the available feeder systems and the data within (for example, some hospitals may have feeder systems used in the OR or SPS that capture prosthesis or other consumable utilisation per procedure), the most appropriate way to allocate expenses and the RVUs that should apply to different intermediate products (see Step 4 and 5 below).

Step 2: Align expenses to the operating room or special procedure suites service and define direct and indirect patient expenses, including overhead allocation methods

CG 3.3.5 Costing practitioners should work with OR and SPS stakeholders to define the expenses within the OR and SPS that relate to final products. This includes obtaining agreement on the cost centres to map to OR and SPS for costing purposes in the costing software.

CG 3.3.6 Align expenses to final cost centres – where the general ledger has consolidated expenses for both OR and SPS within the one cost centre, costing practitioners should also work with the OR and SPS stakeholders to define and agree on the methods and assumptions to be used (for example, staff rosters, timesheets or other relevant data) to transfer expenses to other intermediate products.

CG 3.3.7 Costing practitioners should then, within the patient costing system, use stakeholder insights to move expenses appropriately between the OR and SPS.

CG 3.3.8 Costing practitioners should record expense alignment decisions, utilising the costing system or another medium to record:

- a date for future review of OR and SPS expense alignment
- the classification of OR and SPS expenses into the OR and SPS final cost centres
- the date of the meeting
- the stakeholders who they met with.

Step 3: Identify patient level activity and operating room or special procedure suites feeder data and perform quality assurance checks

CG 3.3.9 Ideally, the OR and SPS feeder system will include some or all of the following fields:

- prosthesis or consumable code
- surgeon code
- patient unique identifier
- patient unique episode identifier
- establishment unique identifier
- unit code (for example, theatre one, theatre two, endoscopy, cardiac catheter suite)
- date of service
- time into and out of the unit (including pre operation, skin to skin and recovery times, anaesthesia start and finish time, anaesthesia type).

CG 3.3.10 Where hospitals have feeder systems that measure prosthesis or consumable consumption at the patient level, these feeder systems will ideally include the following fields:

- date of service
- patient unique identifier
- patient unique episode identifier
- prosthesis or consumable code and description
- prosthesis or consumable invoiced price.

CG 3.3.11 Costing practitioners should perform quality assurance checks on the OR and SPS files prior to the costing process. For example, checks should be made on:

- surgeon codes
- date of service (check error dates, relevancy to costing period)
- time into and out of the OR or SPS (check for negative values – that is, where start time is after finish time).

Step 4: Creating and mapping operating room or special procedure suites costing products or intermediate products

CG 3.3.12 With the exception of prosthesis (uses a traceable cost, the actual charge), the most widely used method for allocating OR and SPS expenses to patients includes the use of the procedure duration, which may also be combined with a relative value unit (RVU). Where hospitals have feeder systems that capture consumable utilisation by

procedure, this information can be used to allocate consumable costs within the OR or SPS.

CG 3.3.13 Depending on the fields available in the OR or SPS feeder systems, several products can be created and used within an OR, including products for medical and nursing anaesthesia (where these expenses are located with the OR cost centre), surgical procedure products, recovery products and consumable products. Usually, the product will include the procedure code and the unit code.

CG 3.3.14 If feeder systems that measure prosthesis or consumable utilisation are available, products will need to be created in the costing system and mapped to the relevant final cost centre (that is, OR or SPS). Where such data is available, products may resemble the code of the prosthesis or consumables.

CG 3.3.15 Where prosthesis feeder systems are unavailable, the costing practitioner should consider constructing products, which utilise known prosthesis procedure codes.

CG 3.3.16 Where OR and SPS products are created in the costing system, they will also need to be mapped to the relevant final cost centre (that is, OR or SPS). An example of such a product is: 'OR1_ProcX', where 'OR1' denotes operating theatre one, and is derived from the unit code field, and 'ProcX' is derived from the procedure category field of the OR or SPS feeder file. Once this product code is created, costing practitioners will be required to map this code in the costing system to the OR or SPS final cost centre.

CG 3.3.17 Where SPS activity is captured within the OR feeder system, this may also include unit codes, (for example, 'CCS' for cardiac catheter suite), that need to be mapped to the SPS final cost centre. In this case, costing practitioners should create a product for example 'SPS_ProcX' and map this product to the relevant SPS cost department in the costing system.

Step 5: Apply relative value units (RVUs) by operating room or special procedure suites product

CG 3.3.18 Procedure duration is usually the primary cost driver used to allocate the labour related expenses within an OR or SPS. Where the OR or SPS product uses duration to allocate cost, costing practitioners may also wish to assign RVUs to adjust the cost allocation to account for resource intensity.

CG 3.3.19 For example, some procedures in the OR or SPS may require more medical and nursing staff than others. The RVU for these products then becomes the average number of nursing and medical staff per procedure. Similarly, some procedures may require more consumables than others.

CG 3.3.20 These relative values should be determined in consultation with the OR and SPS stakeholders (see Step 1 above). It may be useful for RVU development for costing practitioners to provide a template which includes the list of OR and SPS procedures (sorted in order of volume) to stakeholders.

CG 3.3.21 Where prosthesis feeder systems are available, the costing practitioner may consider using the prosthesis price (the traceable cost or actual charge) as the RVU. Where prosthesis feeder systems are unavailable, the costing practitioner may need to construct products based on known prosthesis procedure codes and may use RVUs based on the known average cost per unit (as sourced from the material management department) or bands costing based on the Medicare Benefits Schedule codes for like prostheses against the nominated procedure codes.

Step 6: Create intermediate product costs in final cost centres

CG 3.3.22 Two allocation processes are performed:

- Overhead costs are allocated to the production cost centre (using an appropriate allocation statistic).
- Production cost centre costs (overhead and direct) are allocated to the intermediate products.

Step 7: Match intermediate products and their costs to patient activity

CG 3.3.23 Service point is the preferred matching method, as outlined in Business Rules 5.2B. Intermediate products from the OR or SPS will be matched to patient activity according to defined matching criteria in accordance with Standard 2.2. For example, for inpatients, the dates between the admission and discharge date will be used to find OR or SPS intermediate products for matching to patient activity.

Step 8: Report costs

CG 3.3.24 Costing practitioners should then perform the required steps to consolidate and report costs at an encounter level.

Step 9: Cost data review with operating room or special procedure suites stakeholders

CG 3.3.25 Costing practitioners should meet with their relevant OR and SPS stakeholders to report on costs calculated.

CG 3.3.26 Cost data should be reviewed for, amongst other checks, cost relativity per product and resource completeness per episode to determine if the cost data captures resources that have been provided at the encounter level.

CG 4 Teaching and Training

CG 4.1 Scope

CG 4.1.1 This guideline outlines how to identify expenses relating to direct and indirect teaching and training activities.

CG 4.1.2 This guideline also outlines an approach to costing teaching and training products.

CG 4.2 Objective

CG 4.2.1 To ensure that teaching and training related expenses are identified and classified into product categories that sufficiently differentiate them from other products (such as research).

CG 4.2.2 To ensure that products which relate to teaching and training include those expenses and activities that have occurred within the period and that they are correctly identified and appropriately allocated to final products.

CG 4.3 Costing Guideline

Step 1: Direct teaching and training scope

CG 4.3.1 Expenses that relate to research activity are not to be included in the cost of teaching and training products.

CG 4.3.2 Expenses that relate to embedded teaching and training activities are not considered economically feasible to measure. Embedded activities and their associated expenses are considered part of patient care and included within patient products.

CG 4.3.3 Direct and indirect activities and their associated expenses should be costed as a non-patient product. Costing practitioners should be aware that the primary resource consumed in the delivery of these activities is staff time.

Step 2: Create a direct and overhead teaching and training final cost centre

CG 4.3.4 Through consultation, costing practitioners must identify expenses that relate to direct and indirect teaching and training activities.

CG 4.3.5 Expenses, for direct and indirect teaching and training activities provided by the hospital, should be grouped to discrete final cost centres within the costing system. These areas will accumulate expenses for direct and indirect teaching and training activities respectively, including overhead expenses from the hospital as appropriate.

Step 3: Identify direct and indirect teaching and training activities and associated expenses

CG 4.3.6 Indirect teaching and training activities and their associated expense can be identified after consultation with appropriate stakeholders, these may include:

- allied health administration departments
- nursing administration
- the managers of the medical administration areas (for example, surgical, medical, obstetric).

CG 4.3.7 The goal of these meetings is to determine the proportion of time spent by these departments coordinating teaching and training activities in the hospital.

CG 4.3.8 The type of information that needs to be understood for costing purposes includes:

- supporting information from staff rosters or timetabling systems
- the proportion of time and full-time equivalent spent coordinating pre-entry student placements, rotations, lectures, tutorials, workshops, educational program development, or negotiation with higher education providers
- the proportion of non-salary expenses related to these activities.

CG 4.3.9 To determine direct teaching and training department expenses, consultation should be done with the managers of junior doctors, clinical directorates, the director of nursing and the director of allied health. Meeting with these stakeholders, the costing practitioner needs to determine the proportion of time staff spent on direct teaching and training activities.

CG 4.3.10 Costing managers will need to seek the following information during these meetings:

- non-salary related expenses associated with the direct activities
- supporting information from staff rosters or timetabling systems
- the proportion of staff time spent attending lectures, tutorials, simulations, grand rounds, and workshops.

CG 4.3.11 Identified expenses for direct and indirect teaching and training activities need to be moved to the indirect patient teaching and training final cost centre, as indicated above.

CG 4.3.12 It is important that information used as the basis for identifying these amounts are understood and signed off by the relevant manager/s who have responsibility for these activities.

Step 4: Overhead allocation to the teaching and training final cost centre and indirect teaching and training expenses

CG 4.3.13 Costing practitioners must ensure that hospital overheads are allocated appropriately to the teaching and training final cost centre. Where a hospital has identifiable teaching and training related overhead expenses, such as a clinical training coordinator, these must be allocated solely to the teaching and training final cost centre.

CG 4.3.14 Where necessary, overhead statistics will need to be determined and applied to enable overhead expenses to flow correctly to the teaching and training final cost centre. For example, if FTE is the statistic used to allocate human resource and payroll service expenses within the costing system, a proportion of the calculated FTE will need to be moved to the teaching and training final cost centre to ensure that human resources and payroll service expenses flow accordingly.

CG 4.3.15 Teaching and training expenses for indirect activities should be allocated to direct teaching and training products using appropriate allocation methods.

Step 5: Final teaching and training product

CG 4.3.16 Through consultation, the costing practitioner needs to identify the different outputs of teaching and training to cost as final products.

CG 4.3.17 Depending on the identified final products, the costing practitioner will also need to understand the cost drivers for activities that are delivered in producing these

products. The type and level of detail about these products that is available to the costing practitioner will influence the costing methodology and final costed output.

CG 4.3.18 A hospital may consider teaching and training products to be hours of training received by the different student or trainee specialty categories. This would require the costing practitioner to understand the nature of teaching and training activities delivered to different cohorts of students or trainees.

CG 4.3.19 Final teaching and training products would reflect the actual trainee or student placement, where a placement has a start and end period. Preferably, the feeder data from information system for these products would include some or all of the details listed in Table 1. This table also suggests key cost drivers that influence resources needed to deliver teaching and training to different students or trainees.

Table 1: Suggest data elements for costing trainee placements

Data element	Possible values	Rationale
Training start date	Date	Records the commencement of a placement or period of training.
Training end date	Date	Records the end of a placement or period of training.
Full time equivalent value (FTE)	Numerical (for example, 0.5)	Records the FTE of a trainee, as not all trainees will be full time trainees or employees.
Stage of training	Professional entry student New graduate Postgraduate or vocational	Trainees have different resource requirements depending on their stage of training.
Profession	Allied health Dentistry Medicine Midwifery Nursing	Trainees have different resource requirements depending on their profession. Important for clinical credibility to differentiate between professions.
Specialty	Medical specialty (for example, orthopaedic surgery, cardiology, paediatric medicine) Allied health discipline (for example, physiotherapy, social work, psychology)	Trainees have different resource requirements depending on their specialty. Important for clinical credibility to differentiate between specialties or disciplines.

Data element	Possible values	Rationale
Year of training	Year 1 Year 2 Year 3 etc.	Year of training may influence the type of training provided and its resources requirements.
Type of degree	Undergraduate Postgraduate	The type of training and its resources requirements will depend on the subject matter delivered.
International medical trainee	Yes No	International medical trainees may require additional resources.

Step 6: Matching expenses to teaching and training product

CG 4.3.20 Classifications to provide the 'document' used to apply the teaching, training and research costing methodology.

CG 4.3.21 Upon processing expenses through the costing system, the outputs will consist of non-direct patient and overhead costs only for the teaching and training product.

CG 4.3.22 Costing practitioners should ensure that any offsets or adjustments are specified as per Standard 6.2 – Reconciliation to Source Data.

CG 5 Research

CG 5.1 Scope

CG 5.1.1 This guideline outlines an approach for identifying the scope and source of expenses, activity and costing applications that relate to research.

CG 5.1.2 In general terms, research activities are those where the primary aim is the advancement of knowledge through observation, data analysis and interpretation, or other techniques that do not involve the provision of patient care.

CG 5.1.3 Curriculum-based research projects are deemed as teaching and not research.

CG 5.1.4 Where research requires delivery of patient care such as in a clinical trial, these activities are part of patient products and should not be allocated to the research product.

CG 5.1.5 Costing practitioners must ensure research expense is aligned with the research product. The key to determining research expense is through discussions with relevant stakeholders throughout the hospital.

CG 5.2 Objective

CG 5.2.1 To ensure that research related costs are identified into product categories that sufficiently differentiate them from other products (such as teaching and training).

CG 5.2.2 To ensure that products that relate to research include those expenses and activities that have occurred within the period are correctly identified and appropriately costed to final products.

CG 5.3 Costing Guideline

Step 1: Create a patient indirect research final cost centre

CG 5.3.1 Costing practitioners should establish patient indirect research final cost centres within the costing system to align research expenses that are in scope.

Step 2: Align research expense to the research final cost centre

CG 5.3.2 Costing practitioners should meet with relevant stakeholders to determine research related cost centres and the proportion of full-time equivalent staff located in other cost centres that support or undertake research activities.

CG 5.3.3 The relevant stakeholders include:

- the finance department
- research administration (if available)
- managers of clinical directorates (for example, medical, nursing, and allied health).

The purpose of these meetings is to determine the proportion of time spent by these areas supporting or undertaking research activities in the health service. These expenses will be primarily staff time related.

CG 5.3.4 Costing practitioners need to seek the following information during these meetings:

- the proportion of staff time or full-time equivalent (FTE) spent supporting or undertaking direct research activities during rostered hours

- supporting information from staff rosters or timetabling systems.

CG 5.3.5 Costing practitioners should consider the following departmental expenses that contribute to research activities:

- time spent by the supporting hospital departments such as decision support or business intelligence units who supply researchers with data for research purposes
- where relevant, time also spent by hospital committees, which support research activities, such as privacy and ethics committees.

CG 5.3.6 Costing practitioners will then obtain sign off from the relevant managers for the proportion of expense to be moved to the research final cost centre.

Step 3: Move expenses to the research final cost centre

CG 5.3.7 Costing practitioners should move identified direct cost centres to the patient indirect research final cost centre and use the proportions derived from stakeholder discussions to move staff expenses.

Step 4: Align overhead statistics to the research final cost centre

CG 5.3.8 Where necessary, overhead statistics will need to be determined and applied within the costing system to enable overhead expenses to flow correctly to the non-patient research final cost centre. For example, if FTE is the statistic used to allocate human resource and payroll service expenses within the costing system, a proportion of the FTE will also need to be moved to the non-patient research final cost centre to ensure that human resource and payroll service expenses flow accordingly.

Step 5: Allocate overheads to the research final cost centre

CG 5.3.9 Costing practitioners must ensure that hospital overheads are allocated appropriately to the non-patient research final cost centre. Where a hospital has identifiable research related overhead expenses, such as research administration, these must be allocated solely to the non-patient research final cost centre.

Step 6: Final research costed product

CG 5.3.10 When cost data is processed through the costing system, the outputs will consist of direct and overhead only for the final non-patient research product.

CG 5.3.11 Costing practitioners should ensure that any offsets or adjustments are specified as per Standard 6.2 – Reconciliation to Source Data.

CG 6 Blood Products

CG 6.1 Scope

CG 6.1.1 This guideline outlines an approach to costing the consumption of blood products.

CG 6.1.2 This guideline also provides practical steps and examples to guide staff on the patient costing process for this activity.

CG 6.1.3 Blood product expenses are those that can generally be found in pathology and pharmacy departments. Expenses for blood products may not be found on the hospital general ledger, as the jurisdiction may purchase blood products from a contracted supplier on behalf of the hospital. Blood products form a component of the cost of production and should be patient level costed.

CG 6.2 Objective

CG 6.2.1 The objective of this guideline is to guide costing practitioners on the end-to-end steps required to ensure that all blood product consumption and expenses contributing to the day-to-day production of final blood products are included in the patient costing process to determine the full cost of production.

CG 6.3 Costing Guideline

Step 1: Stakeholder identification and service scale and scope

CG 6.3.1 Costing practitioners should first seek guidance from their jurisdiction to ascertain what rules apply within their jurisdiction regarding the costing of blood products. Some jurisdictions will hold expenses related to blood products centrally, while for others, this expense will devolve to the health service. These local circumstances may dictate how health services are to cost blood products.

CG 6.3.2 Costing practitioners should meet with the appropriate stakeholders within the health service to identify both the expense and activity related to blood products. Blood products may have its own cost centre, or this expense may reside within the pathology cost centre/s of the health service (or elsewhere). The manager of blood products within the hospital may be found within the organisation chart, or alternatively, the pathology or finance department should be able to assist in providing the contact details for these staff.

CG 6.3.3 The agenda of this meeting should include an overview of the processes involved in distributing blood products to patients. This meeting should seek to elicit information regarding the feeder data available to include in the costing system. Hospitals must keep information regarding the distribution of blood products to patients, as there are rigorous safety and quality processes required to ensure the blood products provided, match the patient's blood type. Where electronic feeder data is unavailable, blood product consumption will be present in the ICD-10-AM coding, which forms part of the inpatient episodic dataset.

CG 6.3.4 This meeting should also seek information regarding the labour related expense that is associated with the distribution of blood products and the cost of the blood products themselves where health services are responsible for this expense.

Step 2: Align expense to the blood products service department and define overhead and direct expenses, including overhead allocation methods

CG 6.3.5 Costing practitioners should work with blood products stakeholders to define the expense within the blood products department that relates to final products. This includes obtaining agreement on the cost centre/s to map the blood products department for costing purposes in the costing software.

CG 6.3.6 Where jurisdictional health departments hold these expenses centrally, the expense will be required at hospital level for inclusion in the costing process. This expense will need to be added to the cost ledger before the general ledger is imported into the costing system as the cost ledger.

CG 6.3.7 Align expense to final cost centres – where the general ledger has consolidated expenses for blood products (that is, labour and consumables) within a separate cost centre (for example, pathology), costing practitioners should work with the blood products stakeholders to define and agree on the methods and assumptions to be used (for example, staff rosters, timesheets or other relevant data) to transfer expense to the blood product related cost centre.

CG 6.3.8 Costing practitioners should then, within the patient costing system, use stakeholder insights to move expenses appropriately to the blood products department.

CG 6.3.9 Record alignment decisions – costing practitioners should utilise the costing system or another medium to record:

- a date for future review of blood products expense alignment
- the classification of blood products expense into the blood products cost department
- the date of the meeting
- the stakeholders who they met with.

Step 3: Identify patient level activity and blood product feeder data and perform quality assurance checks

CG 6.3.10 Ideally, the blood products feeder system will include some or all the following fields:

- blood product code
- blood product description
- date of service
- patient unique identifier
- patient unique episode identifier
- establishment unique identifier
- unit or department the blood product was delivered to (for example, ward, operating theatre, emergency department (ED), non-admitted).

CG 6.3.11 Where health services do not have separate electronic patient level feeder systems that measure blood product consumption at the patient level, costing practitioners may have to use the ICD-10-AM procedure codes available in the patient episodic dataset to identify blood product consumption.

CG 6.3.12 Costing practitioners should perform quality assurance checks on the blood products feeder files prior to the costing process. For example, checks should be made on the date of service and data relevance to costing period.

Step 4: Creating and mapping blood products service costing products or intermediate products

CG 6.3.13 An acceptable method for allocating blood product to patients includes the use of the blood product from the feeder system (or ICD-10-AM code), which may also be combined with a relative value unit (RVU).

CG 6.3.14 Depending on the data available, the products can be the code of the blood product or the ICD-10-AM related blood product code.

CG 6.3.15 Where blood products are created in the costing system, they will also need to be mapped to the relevant blood products final cost centre.

CG 6.3.16 Consideration should also be given to blood stock that has not been used in the production process and discarded. These are costs associated with maintenance and storage of blood stock. Depending on what data is available to the costing practitioner, the following options are listed as examples for consideration for cost allocation:

- Data is available on discarded blood stock: an intermediate product is created, and these expenses and a proportion of overhead expense are assigned to a non-patient product.
- No data is available on discarded stock, but data is available on consumed stock: all relevant (direct and overhead) expenses for both consumed and discarded stock are allocated. In this case each intermediate product costed will include a proportion of consumed and discarded cost. Once matched to patient activity, total blood cost is confined to those consuming direct blood product costs with a proportion of discarded costs.

Step 5: Apply relative value units (RVUs)

CG 6.3.17 RVUs need to be assigned to blood products regardless of whether they are derived from a local feeder system or the ICD-10-AM codes to help determine the relative cost of each blood product.

CG 6.3.18 The National Blood Authority (NBA) has a price list of blood products. These prices can be used as RVUs in the cost allocation process and must be mapped to the correct blood product available from the feeder system or the ICD-10-AM code. Costing practitioners should contact their jurisdictional representative or the NBA to obtain this price list. You may read more on the NBA website.

CG 6.3.19 Other relative values may be used – for example, the jurisdiction may have its own price list. Local RVUs may also be developed, however this should be done in consultation with the blood products stakeholder/s within the health service (see Step 1 above).

Step 6: Create intermediate product costs in final cost centres

CG 6.3.20 Two allocation processes are performed:

- Overhead costs are allocated to the production cost centre (using an appropriate allocation statistic).
- Production cost centre costs (overhead and direct) are allocated to the intermediate products.

Step 7: Match intermediate products and their costs to patient activity

CG 6.3.21 Service point is the preferred matching method, as outlined in Business Rules 5.2B. Intermediate products for blood products will be matched to patient activity according to defined matching criteria. For example, for inpatients, the dates between the admission and discharge date will be used to find blood product intermediate products for matching to patient activity as blood product consumption will fall between these dates.

Step 8: Report costs

CG 6.3.22 Costing practitioners should then perform the required steps to consolidate and report costs at an encounter level.

CG 6.3.23 Costing practitioners will need to ensure that blood product expenses are appropriately allocated between the various patient encounter settings (that is, inpatient, ED and non-admitted). This is especially the case where local feeder systems are unavailable and the costing practitioner is reliant upon ICD-10-AM coding to allocate these costs.

Step 9: Cost data review with blood products stakeholders

CG 6.3.24 Costing practitioners should meet with their relevant blood product stakeholder/s to report on the costs calculated.

CG 6.3.25 Cost data should be reviewed for, amongst other checks, cost relativity per product and resource completeness per episode to determine whether the cost data captures resources that have been provided at encounter level.

CG 7 Posthumous Organ Donation

CG 7.1 Scope

CG 7.1.1 This guideline relates to posthumous organ donation and transplantation, where a patient is formally discharged upon death (brain death or cardiac/circulatory death) and reclassified as a posthumous care episode.

CG 7.1.2 This guideline does not relate to live donation (for example, kidney donation).

CG 7.2 Objective

CG 7.2.1 This guideline outlines the nationally consistent approach to costing posthumous organ donation.

CG 7.2.2 This guideline clarifies the three types of episodes to be considered when allocating costs related to posthumous organ donation. These should be considered to support a nationally consistent costing approach.

CG 7.2.3 The Independent Health and Aged Care Pricing Authority (IHACPA) acknowledges that there are sensitivities and limitations to costing posthumous organ donation, due to patient privacy. IHACPA will work with stakeholders to provide further clarification to standardise costing of posthumous organ donation.

CG 7.2.4 It is recognised that the timing of circulatory death may be difficult to identify precisely in the clinical notes. At the time of publishing, the Australian Institute of Health and Welfare is reviewing definitions of care type which may facilitate definition and reporting of the posthumous care period.

CG 7.3 Costing Guideline

CG 7.3.1 The following three episodes should be considered in posthumous organ donation:

- donor episode
- posthumous care episode
- recipient episode.

Donor episode

CG 7.3.2 Costing practitioners should consult with their relevant clinicians, such as intensivists, to understand the pathway for posthumous care including the resources and time taken to prepare the donor for the retrieval process.

CG 7.3.3 External revenue or funding from third party sources, such as DonateLife, should not be offset against expenses. Furthermore, costs of maintaining the donor are to be allocated to the donor hospital.

Posthumous care episode

CG 7.3.4 The costs of preparation for posthumous organ donation are allocated to the posthumous episode under ‘care type 9 – organ procurement – posthumous’.

CG 7.3.5 The costing practitioner should consider the following resources for the posthumous care episode:

- drugs
- medical or clinician

- nursing
- setting (generally intensive care)
- other resources (for example, pathology).

Recipient episode

CG 7.3.6 The costs of organ retrieval are allocated to the transplantation patient episode at the same or other hospital under ‘care type 1 – acute care’.

CG 7.3.7 Costs of retrieval are to be allocated to the recipient. The costing practitioner should consider the following resources when costing the retrieval process:

- assistant surgeon
- drugs
- goods and services
- medical supplies
- mode of transport (especially high-cost flight for external retrievals)
- organ cold storage
- perfusion fluids
- surgeon
- theatre technician/perfusionist
- transplantation coordinator
- transplantation service/departmental costs.

CG 7.3.8 Costing practitioners should also discuss the relevant procedure time taken in the retrieval process. For example, on average these procedures may take four to six hours, with additional time required for travel. Retrieval may occur after hours, and consideration should be given to additional expenses (for example, staff salaried loadings) in an after-hours setting.

CG 7.3.9 The recipient episode, with respect to the transplantation, should be costed as per all other activity. Costing practitioners should, however, also seek to understand the nuances of this process. For example, they should seek to ensure:

- the correct theatre time is available within the theatre system for feeder purposes, as these procedures have significant durations
- the appropriate surgical teams are recognised within the transplantation process. In some instances, and depending on the procedure, up to three surgical teams may be collocated within the theatre at any given time
- they understand what relevant medical supplies and goods and services are required for transplantation.

CG 8 Non-Admitted Patients

CG 8.1 Scope

CG 8.1.1 This guideline outlines an approach to costing non-admitted encounter activity.

CG 8.1.2 This guideline provides practical steps and examples to guide staff on the patient costing process for these activities.

CG 8.2 Objective

CG 8.2.1 The objective of this guideline is to guide costing practitioners on the end-to-end steps required to ensure that all non-admitted activity and expense contributing to the day-to-day production of non-admitted products are included in the patient costing process to determine the full cost of production.

CG 8.3 Costing Guideline

Step 1: Stakeholder identification and service scale and scope

CG 8.3.1 All services that meet the definition in IHACPA's Tier 2 Non-Admitted Services Compendium, together with non-Tier 2 activity are to be costed in accordance with this costing guideline.

CG 8.3.2 Costing practitioners should note that there may be other activity such as other out-of-scope, non-admitted activities in the hospital which should be costed for internal management or jurisdictional reporting.

CG 8.3.3 Costing practitioners should consolidate costing of all non-admitted activity.

CG 8.3.4 Costing practitioners should seek guidance and understanding of the counting rules and reporting of the Tier 2 non-admitted activities. Under activity-based funding the unit of count is a service event.

CG 8.3.5 Costing practitioners should liaise with their jurisdictions and stakeholders to understand the costing approach required for these activities and advice on how, or if, these activities are to be reported at service event level for funding and/or reporting purposes.

CG 8.3.6 For classification purposes, costing practitioners should note the following:

- The non-admitted activities in a clinic are grouped into clinic-based classes (Tier 2 classes and other non-admitted).
- The Tier 2 classes are structured into procedures, medical consultation services, diagnostic services, and allied health and/or clinical nurse specialist intervention services.
- Costing practitioners should refer to the Tier 2 Non-Admitted Services Definitions Manual for guidance and understanding on the classification and reporting of the Tier 2 non-admitted activities.
- The mapping of the clinic to Tier 2 classes may be done at the hospital or jurisdictional level. Most jurisdictions require hospitals to register their clinics with them.

CG 8.3.7 Costing practitioners should meet with the appropriate non-admitted stakeholders such as outpatient or specialist clinic business managers and finance stakeholders to

identify both the expense and activity related to the non-admitted services. Stakeholders may include:

- the non-admitted service or specialist clinic business managers (or local equivalent)
- various directors of medical services
- nursing or clinic managers.

CG 8.3.8 Costing practitioners should seek to understand the spread of non-admitted (both Tier 2 and other non-admitted) services to understand the level of service provision and to help inform where expenses and activity are recorded. This information will inform the costing methodology. Examples of service provision include:

- non-admitted patient service events involving multiple health care providers
- telehealth services
- service events provided to group sessions
- non-admitted services provided to admitted patients
- visiting-specialist services (specialist outreach) activities in rural areas
- home delivered renal dialysis, nutrition procedure and home ventilation.

Step 2: Align expense to non-admitted activity and define overhead and direct expenses, including overhead allocation methods

CG 8.3.9 Costing practitioners may refer to their (master) clinic list and work with relevant stakeholders to define the expense of each clinic or unit that is both in and out of scope for non-admitted final products.

CG 8.3.10 This includes obtaining agreement on the cost centre/s that map to the clinics for costing purposes in the costing software. Most clinics do not normally have a one-to-one mapping to a cost centre code. Expenses may need to be moved to or from other cost centres.

CG 8.3.11 Align expense to final cost centres – costing practitioners should also work with relevant stakeholders to define and agree on the methods and assumptions to be used (for example, staff rosters, timesheets and/or other relevant data) to transfer expenses to other products.

CG 8.3.12 Costing practitioners should then, within the patient costing system, use stakeholder insights to move expense appropriately to the non-admitted final cost centre and other relevant final cost centres (for example, from the medical/allied unit cost centre to the outpatient clinic cost centre).

CG 8.3.13 Costing practitioners may also need to consider how they will treat activities that fall outside the definition of service events or require further consideration. For example, ‘did not attend’ records may require a minimum allocation of expense to recognise costs associated with bookings, medical record retrieval and other associated costs. Where a patient is simultaneously an admitted patient and attends non-admitted clinics, the clinic event will not be costed. Costing practitioners should refer to their jurisdictions for further advice.

CG 8.3.14 Record expense alignment decisions – costing practitioners should utilise the costing system or another medium to record:

- a date for future review of clinic expense alignment
- the classification of expense into the non-admitted final cost centre

- the date of the meeting
- the stakeholders who they met with.

Step 3: Identify patient level activity and non-admitted feeder data and perform quality assurance checks

CG 8.3.15 Non-admitted feeder systems should be able to capture and report some or all of the following fields:

- patient unique identifier
- patient unique episode identifier
- establishment unique identifier
- clinic code
- date of service
- Tier 2 codes
- multiple health care provider indicator
- provider type – to identify the specialty of the individual health care providers who are involved in the service events. This field may be used to create intermediate product codes and identify the cost centre to map expense and activity
- modality of care (for example, face-to-face, telephone)
- service type (for example, endocrine, midwifery)
- funding source
- setting type (for example, hospital outpatient clinic, home-private residence)
- the time into and out of the unit
- other patient demographic factors such as sex and age.

CG 8.3.16 Costing practitioners should perform quality assurance checks on the non-admitted file prior to the costing process. For example, checks should be made on the date of the service to test reliability, to remove error dates, check time into and out of the unit, and ensure dates are relevant to the period being costed. If clinical duration is used to allocate costs, checks should be performed to ensure that the duration of the service event is reasonable.

Step 4: Creating and mapping non-admitted department costing products

CG 8.3.17 Intermediate products should be created according to the services defined in the feeder and mapped to the relevant final cost centre. For example, services in a pain clinic may have the following intermediate products:

- ‘OP-Pain-2003’, where ‘pain’ is derived from the clinic code field, ‘2003’ is derived from the Tier 2 field of the non-admitted feeder file, Consult or Nursing describes the resources (or treatment type) consumed within the clinic.
- ‘OP-Pain-2003-First-Consult’, same as above and with visit type and treatment type medical consultation.
- ‘OP-Pain-2003-First-Nursing’, same as above and with visit type and treatment type nursing intervention.
- ‘OP-Pain-2003-First-Face-Consult’ – same as above and with treatment type medical consultation.
- ‘OP-Pain-2003-First-Face-Nursing’ – same as above and with modality of care, visit type and treatment type nursing intervention.

- ‘OP-Pain-2003-First-Face-Consult-2532113’ – same as above and with additional information on the specialty of the health care provider (2532113=Pain Management Specialist).

CG 8.3.18 Once the intermediate products are created, costing practitioners will be required to map this in the costing system to the appropriate final cost centre. The cost per intermediate product is dependent on the data captured in the feeder, for example, these could be actual minutes, or a derived set of minutes based on standard consultation times informed by the stakeholders.

CG 8.3.19 Aggregated (dummy) episode records and intermediate product codes may be created for non-admitted activities with no feeder system.

Step 5: Apply relative value units (RVUs) by intermediate product code

CG 8.3.20 The most widely used methods for allocating costs to non-admitted service events include:

- average/weighted time in clinic
- duration in clinic (including actual duration, if captured)
- number of clinicians
- other RVU by clinic or Tier 2 classification
- service weight by Tier 2 classification
- traceable cost (for example, charges on outsourced services).

CG 8.3.21 Costing practitioners may use the intermediate product codes to create corresponding RVUs and these may be based on:

- modality of care
- remoteness of clinic
- treatment type
- visit type (new or repeat).

Step 6: Create intermediate product costs in final cost centres

CG 8.3.22 Two allocation processes are performed:

- Overhead costs are allocated to the production cost centre (using an appropriate allocation statistic).
- Production cost centre costs (overhead and direct) are allocated to the intermediate products.

Step 7: Match intermediate products and their costs to non-admitted activity and non-admitted service events

CG 8.3.23 Service point is the preferred matching method, as outlined in Business Rules 5.2B. Non-admitted service events will consume resources from other hospital departments, such as imaging, pathology, pharmacy, and allied health on their journey of care. For example, patients visiting the pain clinic will consume pathology tests as part of their care. The intermediate products from these departments should be matched to the appropriate non-admitted activity.

CG 8.3.24 Costing practitioners must ensure that services from other departments provided to non-admitted patients are matched appropriately to the service event.

Step 8: Report costs

CG 8.3.25 Costing practitioners should then perform the required steps to consolidate and report costs of the non-admitted activities and decipher how to report at service event level.

CG 8.3.26 For example, a Tier 2 20.03 medical service event at a pain clinic involving multiple health care providers. The patient may be seen by a pain specialist and then followed up with further consultations/interactions with an allied health professional and/or a nurse within the same clinic and session. This encounter should be reported as one service event but may be costed in individual occasions of services (medical, allied and nursing), depending on the booking system.

CG 8.3.27 The costing practitioner may need to understand how to aggregate costed activity to service events or seek jurisdictional advice on how to report costs at the service event level.

Step 9: Cost data review with non-admitted services stakeholders

CG 8.3.28 Costing practitioners should meet with their relevant non-admitted stakeholders to report on the costs calculated.

CG 8.3.29 Cost data should be reviewed for, amongst other checks, cost relativity per the Tier 2 classification and resource completeness per service event to decipher if the cost data captures resources that have been provided at service event level. For example, medical clinics should incorporate medical costs, whilst nurse led clinics should demonstrate nursing costs as they are mainly driven by nurses and midwives.

CG 9 Mental Health Services

CG 9.1 Scope

CG 9.1.1 This guideline outlines an approach to costing mental health encounter activity.

CG 9.1.2 This guideline also provides practical steps and examples to guide staff on the patient costing process for these activities.

CG 9.1.3 This guideline encompasses admitted mental health and community mental health encounters. Mental health services may take place in admitted, ambulatory, emergency department or residential settings.

CG 9.1.4 A hospital or organisation that is costing mental health products will identify all expenses that meet the definition of mental health care, including services provided as assessment only activities. Costing practitioners should also consider expenses incurred for the provision of:

- ambulatory mental health care services
- inpatient services
- residential mental health care services.

CG 9.2 Objective

CG 9.2.1 The objective of this guideline is to guide costing practitioners on the end-to-end steps required to ensure that all mental health activities and expenses contributing to the day-to-day production of mental health services are included in the patient costing process to determine the full cost of production.

CG 9.3 Costing Guideline

Step 1: Stakeholder identification and service scale and scope

CG 9.3.1 Costing practitioners should be aware of the scope, counting rules and classification of mental health services.

CG 9.3.2 Costing practitioners should meet with mental health stakeholders and finance department stakeholders to identify both the expense and activity related to the mental health services and familiarise themselves with the overview of the operation of the mental health services in the organisation.

CG 9.3.3 Within a hospital, mental health services may be reported by their service settings, these include:

- admitted patient services in public psychiatric hospitals and public acute hospitals with specialised psychiatric units or wards
- ambulatory or community mental health care services.

CG 9.3.4 This includes:

- all mental health services or activities delivered by ambulatory specialist mental health service units (for example, crisis or mobile assessment and treatment services, day programs, outreach services)
- all mental health services delivered by inpatient or residential specialist mental health service units to non-admitted and non-residential clients

- all client related activities delivered by specialist mental health consultation liaison teams.

Residential mental health services

CG 9.3.5 Costing practitioners must identify all expenses associated with mental health services and create a separate cost to record them. A key resource in doing this may be to review the organisational chart structure to obtain a list of all mental health programs available in the hospital or entity.

CG 9.3.6 This information can be used to identify and to work with relevant stakeholders to define the expense of each mental health final cost centre.

Step 2: Align expense to the mental health service department and define overhead and direct expenses, including overhead allocation methods

CG 9.3.7 Programs and cost centres identified by and consulted with stakeholders need to be mapped to the mental health units for costing purposes. It is important to note that some wards/clinics/mental health programs do not normally have a one-to-one mapping to a cost centre code. Expenses may need to be moved to or from other cost centres.

CG 9.3.8 In consultation with stakeholders, agreement should be reached on the methods and assumptions to transfer expense to or from other products.

CG 9.3.9 For example, electroconvulsive therapy (ECT), a common procedure for patients in specialist mental health, is regarded as a high-cost treatment. Generally, ECT is administered only to clients that are admitted to hospital. It may be done for community mental health patients who are generally same-day patient admissions.

CG 9.3.10 These expenses may be reported against the operating room (OR). Costing practitioners should move these expenses to separate specialist procedure suites (SPS) final cost centres so that they can be mapped and costed accordingly. The full cost of administering ECT should be included in the designated final cost centre and may include:

- labour cost of medical health specialists, anaesthetists, nurses and other supporting staff
- depreciation of medical equipment and devices used in the procedure
- consumables and drugs.

CG 9.3.11 Many hospitals or organisations do not collect patient level data in their ambulatory or community mental health care services. Costing practitioners may consider the use of product fractions to move cost across program or product type.

CG 9.3.12 A key driver of mental health costs relates to the provision of a secure environment for the treatment of forensic mental health patients. These additional costs have been attributed to the need for strict protocols and mental health legislative requirements.

CG 9.3.13 Costing practitioners should work with their mental health stakeholders to understand the resources required to treat an involuntary patient. Such patients will have specific statutory requirements that will influence treatment and administrative resources used.

CG 9.3.14 Expenses for consultation liaison services to and/or from mental health units should be appropriately defined.

CG 9.3.15 Consultation liaisons include services provided by specialist mental health clinicians as:

- consultation services, by providing an opinion to the patient's or client's primary clinician
- liaison services, by discussing the case of a patient or client with the patient's or client's primary clinician.

CG 9.3.16 Expenses for these services provided to and from the hospital or organisation need to be identified and linked with the hospital's or organisation's products.

CG 9.3.17 Attention should be provided to consultation liaison services that are provided as an outreach service. Whilst the process of expense identification should follow the same processes as other mental health services, further discussion may be required to ensure that activity is captured to enable expense alignment to activity and the ability to allocate costs.

CG 9.3.18 Expense alignment decisions – costing practitioners should utilise the costing system or another medium to document all information used as the basis to identify and align mental health expense, including:

- a date for future review of mental health expense alignment
- the classification of expense into the mental health final cost centre
- the date of the meeting
- the stakeholders they met with.

CG 9.3.19 Hospital overheads need to be allocated appropriately to the mental health final cost centre. However, where a hospital has identifiable mental health service related overhead expenses, such as mental health administration, these must be allocated solely to the mental health final cost centre.

CG 9.3.20 Mental health services often receive support services from an auspice organisation. If these support services are essential to the production process, then hospitals need to ensure that these expenses are included as third-party expenses and brought to account in the costing process.

Step 3: Identify patient level activity and mental health feeder data and perform quality assurance checks

CG 9.3.21 Costing practitioners should refer to IHACPA's Australian Mental Health Care Classification (AMHCC) User Manual for guidance and understanding on the classification and reporting of the mental health activities. Costing practitioners should also note that mental health services in each jurisdiction are regulated by jurisdictional legislation and guidelines and must ensure that these are considered for different reporting purposes.

CG 9.3.22 Given the statutory requirements of mental health services, many systems already exist that may act as feeders for costing purposes. Common mental health feeder systems should capture and report, amongst other items, the following fields:

- multiple health-care provider indicator
- program code
- provider type
- date of service
- patient unique identifier

- patient unique episode identifier
- establishment unique identifier
- phase of care
- time into and out of the unit
- other patient demographic factors such as sex and age.

CG 9.3.23 Costing practitioners should perform quality assurance checks on the mental health extracts prior to the costing process. For example, checks should be made on the date of service to test reliability, to remove error dates, check time into and out of the unit, and ensure dates are relevant to the period being costed. If ward or appointment duration is used as a cost driver, checks should be performed to ensure that the duration of the service event is reasonable.

Step 4: Creating and mapping mental health service costing products or intermediate products

CG 9.3.24 Intermediate products are created for services listed in the feeder. Once the intermediate products are created, costing practitioners will be required to ensure these are mapped in the costing system to the appropriate cost centre.

CG 9.3.25 For example, services in a secluded inpatient ward intermediate product. 'Ward 3North-Sec-Nursing', where 'Ward 3North' describes the ward, 'Sec' describes the function in this case seclusion and 'Nursing' the treatment type. In this example the intermediate product would be used to define the nursing resources used to care for patients on this ward.

CG 9.3.26 Aggregated (dummy) episode records and intermediate product codes may be created for a cost centre or mental health program with no feeder system or patient-level activities.

Step 5: Apply relative value units (RVUs)

CG 9.3.27 Costing practitioners may wish to consider the following methods for allocating expenses to mental health service events:

- actual duration
- average or weighted time in ward or clinic
- RVUs derived within or outside hospital
- traceable costs or charges (for example, charges on outsourced services).

CG 9.3.28 To demonstrate the relative cost of service provision within the mental health setting, costing practitioners should consider developing or applying RVUs which consider the following factors to demonstrate the type of services offered (which are generally the intermediate product build) and the relative resource intensity required for each:

- consumer related factors – such as diagnoses, complications and comorbidities, symptoms severity, function, and ethnicity
- service or setting types – such as face-to-face vs telephone, group settings, multiple health care providers, seclusion
- treatment types – for example, administration of electroconvulsive therapy, psychological therapies, pharmacotherapies
- legal status, safety, and emergency care – for example, voluntary vs involuntary patient, mechanical or physical restraint
- chronic disease management

- remoteness of clinic or location of service.

Step 6: Create intermediate product costs in final cost centres

CG 9.3.29 Two allocation processes are performed:

- Overhead costs are allocated to the production cost centre (using an appropriate allocation statistic).
- Production cost centre costs (overhead and direct) are allocated to the intermediate products.

Step 7: Match intermediate products and their costs to mental health patient activity

CG 9.3.30 Service point is the preferred matching method, as outlined in Business Rules 5.2B. Mental health patients will consume resources from other hospital departments, such as imaging, pathology, pharmacy, and allied health on their journey of care. The consumption of these resources represents the production function of output.

CG 9.3.31 Costing practitioners must ensure that services from other departments provided to mental health patients are matched appropriately to the encounter or service event.

Step 8: Report costs

CG 9.3.32 Costing practitioners should then perform the required steps to consolidate and report costs of the mental health activity.

CG 9.3.33 This data should be reported as per the relevant mental health counting rules (such as episode or phase of care level).

CG 9.3.34 Some encounters may occur in more than one financial year. Costing practitioners should ensure that all costs are assigned and accumulated over periods for the complete encounter.

Step 9: Cost data review with mental health stakeholders

CG 9.3.35 Costing practitioners should meet with their relevant mental health stakeholders to report on the costs calculated.

CG 9.3.36 Cost data should be reviewed for, amongst other checks, cost relativity classification and resource completeness per service event to decipher if the cost data captures resources that have been provided at service event level.

CG 10 Outreach and Specialist Services

CG 10.1 Scope

CG 10.1.1 This guideline outlines an approach to costing community outreach and specialist services activity.

CG 10.1.2 This guideline also provides practical steps and examples to guide staff on the costing process for this activity.

CG 10.2 Objective

CG 10.2.1 The objective of this guideline is to guide costing practitioners on the end-to-end steps required to identify and allocate expense associated with the provision of community outreach and specialist services to related products.

CG 10.3 Costing Guideline

CG 10.3.1 Outreach services involve travel by the service provider, or by a service provider via ICT (including but not limited to telephone and telehealth consultations). Such services may also be provided in the home, place of work or other non-hospital site. Generally, outreach and specialist services provided by a hospital may include:

- community based palliative care
- community social work or counselling
- district and home nursing
- early childhood intervention programs
- genetic counselling services
- home, personal or respite care
- maternal and child health programs
- meals on wheels
- needle and syringe programs
- post-acute care programs.

CG 10.3.2 It is important to note that for the purpose of national reporting, some services are out of scope for outpatient care (METEOR: 764455). To ensure correct alignment between expenses and products, these rules should be understood and reflected in how expenses are matched with different products. Specifically, non-admitted products exclude service events which deliver non-clinical care, for example, activities such as home cleaning, meals on wheels or home maintenance.

Step 1: Stakeholder identification and service scale and scope

CG 10.3.3 Costing practitioners should meet with the appropriate stakeholders within the hospital to identify both the expense and activity related to the provision of community outreach and specialist services.

CG 10.3.4 The general ledger will provide a useful guide to establish if discrete cost centres exist for community outreach and specialist services. Costing practitioners will need to establish which programs are provided and the staff members responsible for managing the budgets or cost centres of these programs. This information will be available from the Finance department.

CG 10.3.5 Stakeholders that should be consulted include the directors of nursing and allied health. The agenda of this meeting should include:

- a request for information on the various outreach and specialist services provided
- the availability of data for the services, for example, patient contact or occasion of services
- the expense associated with these services.

CG 10.3.6 Costing practitioners must be aware that expenses associated with these services may not reside within discrete outreach and specialist services cost centres. For example, a social worker may be paid from the social work cost centre and rostered to provide community-based counselling services one day per week. The costing practitioner will need to seek this information from the stakeholders.

CG 10.3.7 Where staff are based in a particular hospital or establishment and provide outreach across several locations, their expenses should be reported against the location where the activity is provided. This ensures compliance with the fundamental principal of matching expense with activity.

Step 2: Align expense to the outreach and specialist services departments and define direct and indirect patient expenses, including overhead allocation methods

CG 10.3.8 Costing practitioners should work with stakeholders to identify the expense within the outreach and specialist services departments. This includes obtaining agreement on the cost centres to map to the outreach and specialist services departments for costing purposes in the costing software.

CG 10.3.9 Usually, these expenses will eventually map in the costing system to community outreach or other non-admitted products. Care should be taken to ensure expense for outreach services that that are also excluded for non-admitted products are correctly matched to community outreach, or as appropriate.

CG 10.3.10 Align expense to final cost centres – where the general ledger has consolidated expenses for outreach and specialist services within other cost centres (for example, social work), costing practitioners should work with the stakeholders to develop an appropriate method to transfer expenses to the outreach and specialist services related products.

CG 10.3.11 Using stakeholder insights, expenses need to be appropriately moved to the outreach and specialist services final cost centres.

CG 10.3.12 Any stakeholder insights and decision made to movement of expenses to the outreach and specialist services final cost centres need to be documented, including the:

- classification of outreach and specialist services expenses into the outreach and specialist services final cost centres
- stakeholders who were consulted
- date of the meetings
- date for future review of outreach and specialist services expenses alignment.

Step 3: Identify outreach and specialist services activity and feeder data and perform quality assurance checks

CG 10.3.13 The maturity of information systems that collect outreach and specialist services are generally not as developed when compared to other hospital information systems.

CG 10.3.14 It is important that where patient level data is captured, such as that provided in the National Non-admitted Patient Data Collection, this should also be incorporated into the costing system.

CG 10.3.15 Ideally, information systems should provide patient details such as the number of patient or client contacts or occasions of service to assist with costing.

Step 4: Creating and mapping outreach and specialist services costing products or intermediate products

CG 10.3.16 Intermediate products are created for services listed in the feeder. The number and type of intermediate products created will depend upon the level of data capture within relevant outreach systems. Once the intermediate products are created, costing practitioners will be required to ensure these are mapped in the costing system to the appropriate final cost centres.

CG 10.3.17 Aggregated (dummy) episode records and intermediate product codes may be created for cost centres or outreach and specialist services programs with no feeder system or patient-level activities.

CG 10.3.18 Alternatively, depending on the requirements of the jurisdiction, costing practitioners may be required to map the relevant intermediate products to the non-admitted products within the costing system.

Step 5: Apply relative value units (RVUs)

CG 10.3.19 Costing practitioners will need to assess if RVUs can be derived and applied, based upon the level of data available.

Step 6: Create intermediate product costs in final cost centres

CG 10.3.20 Two allocation processes are performed:

- Overhead costs are allocated to the production cost centre (using an appropriate allocation statistic).
- Production cost centre costs (overhead and direct) are allocated to the intermediate products.

Step 7: Match intermediate products and their costs to outreach and specialist services activity

CG 10.3.21 Service point is the preferred matching method, as outlined in Business Rules 5.2B. Outreach and specialist services activity will consume intermediate products from other hospital departments, such as imaging, pathology, pharmacy, and allied health. Costing practitioners must ensure that the intermediate products from these departments are matched to the appropriate outreach and specialist services activity.

CG 10.3.22 Where patient level activity data is available, costing practitioners should ensure that intermediate products are mapped to the appropriate activity.

Where the dummy patient is used (as there is only aggregate activity data) these intermediate products and their costs should be mapped to the dummy patient.

Step 8: Report costs

CG 10.3.23 Costing practitioners should then perform the required steps to consolidate and report costs of outreach and specialist services activity.

Step 9: Cost data review with outreach and specialist services stakeholders

CG 10.3.24 Costing practitioners should meet with their relevant outreach and specialist services stakeholders to report on the costs calculated.

CG 10.3.25 Cost data should be reviewed for, amongst other checks, the average cost per product and completeness to decipher if the cost data captures resources that have been provided at product level.

CG 11 Interpreter Services

CG 11.1 Scope

CG 11.1.1 This guideline outlines an approach to costing interpreter services.

CG 11.1.2 This guideline also provides practical steps and examples to guide staff on the patient costing process for this activity.

CG 11.1.3 The use of accredited interpreters allows health professionals to fulfil their duty of care, including obtaining valid and informed consent.

CG 11.1.4 An accredited interpreter is also engaged when:

- the information to be communicated to the patient is significant for health and/or health outcomes
- requested by the patient or a family member
- the patient's English skills are assessed to be inadequate for messages to be conveyed.

CG 11.1.5 Interpreter services can be performed in several other areas within the hospital. Expenses can generally be found within culturally and linguistically diverse departmental cost centres or within allied health cost centres.

CG 11.1.6 Interpreter usage is a resource consumed by patients and should be patient level costed as they add to the cost of production.

CG 11.2 Objective

CG 11.2.1 The objective of this guideline is to guide costing practitioners on the end-to-end steps required to ensure that all interpreter services activity is costed and matched to final products as they contribute to the full cost of production.

CG 11.3 Costing Guideline

Step 1: Stakeholder identification and service scale and scope

CG 11.3.1 Costing practitioners should obtain their jurisdictional policy with regards to the use of interpreters to define the services offered by interpreters.

CG 11.3.2 Costing practitioners should identify where these interpreter directorates reside within the hospital. For example, these services may fall within the auspices of allied health, patient liaison or defined specialist departments providing services to culturally and linguistically diverse patient populations.

CG 11.3.3 Costing practitioners should meet with the appropriate hospital interpreter stakeholders and finance stakeholders. The agenda of this meeting should include an overview of the interpreter model being used by the hospital. For example, it may be more economically feasible for the hospital to contract interpreters from a third party on a 'fee for service' basis as their 'low English proficiency' (LEP) patient cohort requiring these services have arrived from multiple international origins. In some cases, it may be a mixed model, where numerous interpreters are employed by the hospital as it has defined a fixed percentage of its cohort requiring interpreter services of a particular nature, whilst also contracting with third parties for other interpreters on a 'needs' basis.

Step 2: Align expense to the interpreter service department and define direct and indirect patient expenses, including overhead allocation methods

CG 11.3.4 Costing practitioners should work with interpreter services stakeholders to define the expense (as per their interpreter services model) to be allocated to final products.

CG 11.3.5 Align expense to final cost centres – interpreter services expenses are generally defined within their own cost centre and map directly to a final cost centre for costing purposes. However, there may be instances where interpreter services hold the expense for interpreters, but that interpreter is engaged directly in another department. For example, as interpreter services encompass services for the hearing impaired, it may be the case that a hospital employed interpreter for this patient cohort resides within the audiology department of the hospital daily, with expenses held in the interpreter services cost centre. In this case, costing practitioners should work with interpreter services stakeholders to define and agree on the methods and assumptions to be used to transfer that expense to other products.

CG 11.3.6 Costing practitioners should (within the patient costing system) use stakeholder insights to transfer expense appropriately to the interpreter services final cost centre and other relevant final cost centres.

CG 11.3.7 Record expense alignment decisions – costing practitioners should utilise the costing system or another medium to record:

- the interpreter services expense and relevant mapping to the interpreter services and other final cost centres
- the stakeholders that they met with
- the date of the meeting
- a date for future review of interpreter services alignment.

Step 3: Identify interpreter activity and feeder data and perform quality assurance checks

CG 11.3.8 Costing practitioners should, with their interpreter services stakeholders, define the type of activity captured within their department. The level of activity detail captured will influence the costing methodology for interpreter services products.

CG 11.3.9 Ideally, the interpreter feeder system will include some or all the following fields:

- patient unique identifier
- patient unique episode identifier
- establishment unique identifier
- unit where the service was requested (for example, outpatient clinic A, ward B)
- date of service
- type or category of the interpreter service provided (for example, language interpreter, Auslan interpreter)
- interpreter delivered - a flag to demonstrate if the patient met with the interpreter
- time of the interpreter consultation.

CG 11.3.10 Where interpreter services are unable to provide detail of interpreter activity at patient level (for example, interpreter booked), costing practitioners should also seek the ‘interpreter required’ or ‘preferred language’ field from the hospital patient administration system (PAS) or outpatient booking system to help define the LEP cohort.

CG 11.3.11 Costing practitioners should perform quality assurance checks on the interpreter feeder activity file prior to the costing process. For example, checks should be made on the date of service to test reliability, to remove error dates and ensure dates are relevant to the period being costed.

CG 11.3.12 If the hospital is reliant on the 'interpreter required' field as the trigger for identifying interpreter activity, costing practitioners should seek advice on the reliability of this field as an identifier for interpreter activity and its use for costing purposes. Costing practitioners should be aware that this field:

- does not account for the volume or frequency of interpreter interaction at patient or encounter level (as it is a 'yes' or 'no' field)
- may be populated, but only represents that the patient or encounter required an interpreter
- may not be captured across all care settings, hence underestimate the activity at final product level
- will require further checks as it may be collected in an ad hoc manner.

Step 4: Creating and mapping interpreter services costing products or intermediate products

CG 11.3.13 The application of interpreter services to costing products will depend on how the costing practitioner establishes the final cost centre in the costing system as either an overhead or final cost centre.

CG 11.3.14 If interpreter services are treated as an overhead (as the costing practitioner and relevant stakeholders are unable to decipher the frequency of interpreter services by activity), the costing practitioner should assign the most appropriate overhead statistic to distribute these expenses. For example, the interpreter required field might be used to ensure interpreter expenses are only spread to activity where this service was reported. In this case the costing practitioner should inform relevant stakeholders that the methodology does not factor in frequency.

CG 11.3.15 If interpreter services are treated as a final cost centre, the costing practitioner should obtain the required detail from the feeder as a means of allocating costs. For example, the costing practitioner might use the type or category of interpreter service and volume of services as a cost driver.

CG 11.3.16 Where the type or category of interpreter service is used for cost allocation, intermediate products will need to be created in the costing system and mapped to the interpreter services final cost centre. An example of such a product is: 'Interpreter_Language A', where 'Interpreter' is derived from the unit code field, and 'Language A' is derived from the 'interpreter category or type' field of the interpreter service feeder file and describes the service provided (including language spoken). The same would be undertaken for Auslan services where the product would be defined as 'Interpreter_ Auslan'. Once the product codes are created, costing practitioners will be required to map this in the costing system to the interpreter services cost centre.

Step 5: Apply relative value units (RVUs)

CG 11.3.17 RVUs should be determined in consultation with the interpreter services stakeholders. For example, where interpreter services are provided by a third-party, the costing practitioner might consider the charge of the service levied by the third-

party as the appropriate RVU, as it may be considered a cost proxy or represent the value of effort or workflow.

Step 6: Create intermediate product costs in final cost centres

CG 11.3.18 Two allocation processes are performed:

- Overhead costs are allocated to the production cost centre (using an appropriate allocation statistic).
- Production cost centre costs (overhead and direct) are allocated to the intermediate products.

Step 7: Match intermediate products and their costs to patient activity

CG 11.3.19 Service point is the preferred matching method, as outlined in Business Rules 5.2B. Where interpreter services are deemed as final care areas, the intermediate products derived such as 'Interpreter_Language A' and 'Interpreter_Auslan' are matched to the appropriate patient episode or encounter using the appropriate matching criteria.

Step 8: Report costs

CG 11.3.20 Costing practitioners should perform the required steps to consolidate and report costs at a patient or encounter level.

Step 9: Cost data review with interpreter services stakeholders

CG 11.3.21 Costing practitioners should meet with their interpreter services stakeholders to report on the costs calculated.

CG 11.3.22 Cost data should be reviewed for amongst other checks, the number of costed interpreter interactions against activity collected by interpreter services, such as the number of interpreter interventions to test the reasonableness of the matching criteria collected by the service. The cost relativity per interpreter intervention should also be reviewed.

CG 12 Contracted Care

CG 12.1 Scope

CG 12.1.1 This guideline outlines an approach to identify the scope and source of expenses which relate to contracted care.

CG 12.1.2 This guideline also provides practical steps and examples to guide staff on the patient costing process for this activity.

CG 12.1.3 Many hospitals have outsourced or purchased contracted care services from another hospital or external entity for their day-to-day delivery of hospital services. They may also provide contracted care services to external organisations simultaneously.

CG 12.1.4 Examples of services contracted out or provided to external entities include:

- treatment or care of all or part of the admitted episode provided to or by another hospital or local health network
- diagnostic and clinical services provided to or by external providers, such as pathology services
- support services such as catering, security provided to or by external providers.

CG 12.1.5 These contracted services should be attached to patient activity with costs assigned as they are part of the production process.

CG 12.2 Objective

CG 12.2.1 The objective of this guideline is to ensure that all contracted care expenses contributing to an organisation's day-to-day production of final products are included in patient costing and in determining the full cost of production.

CG 12.2.2 This guideline also aims to provide a resource for staff to assist them with patient level costing by providing practical examples of contracted care services and attaching these services to activity.

CG 12.3 Costing Guideline

Step 1: Stakeholder identification

CG 12.3.1 Costing practitioners should consult contract management and finance stakeholders to ascertain existing contracted care arrangements within their hospital. All expenses for these contracted care activities relating to the day-to-day production of final outputs should be identified and accounted for accordingly.

Step 2: Align expense to the contracted care services department and define direct and indirect patient expenses, including overhead allocation methods

CG 12.3.2 Costing practitioners should engage finance stakeholders to ascertain how the various contracted care expenses are recorded within the general ledger.

CG 12.3.3 Costing practitioners will be able to establish relevant final cost centres following an understanding of expenses and contracted care activities.

CG 12.3.4 Align expense to final cost centres for the contracting hospital (or purchaser) –

The following should be noted for the contracting hospital (or purchaser):

- The contracting hospital (or purchaser) will normally receive invoices (generally in an aggregated amount) from the provider. This invoiced amount will be charged to the general ledger to a specific cost centre or assigned through an account code. Costing practitioners should seek to have this invoice disaggregated by activity to enable more informed costing.
- Where services are provided on-site by the external provider, overhead or direct expenses may be allocated to these contracted care activities.
- Depending on the contract arrangement, these expenses may be recoverable from the external providers. Costing practitioners must ensure all the expenses in the general ledger reflect the contractual arrangements.
- Where the aggregated amount is posted to one account code, the costing practitioner should review if this is the correct posting and reflects where the contracted care is provided.
- Where changes are required, costing practitioners may need to split and map the invoiced amount to separate account codes to reflect service provision. This will also allow the expenses to be mapped to appropriate line items.
- Any other direct or overhead expenses that are incurred for these activities should be moved or allocated to these final cost centres. Costing practitioners should note that some overheads are not normally allocated to off-site external providers (for example, fuel, light and power), however they should also discuss which overheads may be relevant (for example, contract management functions).

CG 12.3.5 Align expense to final cost centres for the contracted hospital (or provider). The following should be noted for the contracted hospital (or provider of service):

- Costing practitioners should ensure that expenses specifically incurred for the contracted care activities are allocated to these activities only.
- Costing practitioners must ensure that no revenue of the contracted care services is offset against the expenses. However, if the service is operated as a commercial entity and the costing practitioner is unable to partition cost to be allocated to patient product and cost incurred on the contracted care activities, the cost practitioner may use the revenue derived from the contracted care services as cost recovery against patient product costs.
- Contracted activities to non-patient products or external private parties may be classified, costed, and reported as commercial activities – as per Business Rule 1.1F Commercial Business Units.

CG 12.3.6 Record expense alignment decisions – costing practitioners should utilise the costing system or another medium to record:

- the contracted care services expense and relevant mapping to final cost centres
- the stakeholders that they met with
- the date of the meeting
- a date for future review of contracted care services alignment.

Step 3: Identify patient level activity and contracted care feeder data and perform quality assurance checks

CG 12.3.7 Costing practitioners may obtain (depending upon the service and availability of data) both the purchased and contracted out activities from their own feeder systems, including the unique establishment identifier.

CG 12.3.8 Costing practitioners should perform quality assurance checks on the contracted care activity file prior to the costing process. For example, checks should be made on the date of service to test reliability, to remove error dates and ensure dates are relevant to the period being costed.

Step 4: Creating and mapping contracted care services costing products or intermediate products

CG 12.3.9 If contracted care services are treated as an overhead, costing practitioners should assign the most appropriate overhead statistic to distribute these expenses.

CG 12.3.10 If contracted care services are treated as a direct cost, intermediate products may be created and mapped to respective final cost centres.

CG 12.3.11 Where a hospital provides services to its own patients and the same services are also provided to external entities as part of a contracted care arrangement, the intermediate product codes created should be the same.

Step 5: Apply relative value units (RVUs)

CG 12.3.12 The cost allocation process for contracted care services may be further enhanced using RVUs.

CG 12.3.13 Where traceable contracted care expenses can be identified, these expenses should be used to allocate expenses directly to the patients. However, if the total traceable cost differs from the amount recorded in the general ledger, the traceable cost should be used as an RVU weighting.

CG 12.3.14 The relative values should be determined and agreed upon in consultation with the relevant stakeholders.

Step 6: Create intermediate product costs in final cost centres

CG 12.3.15 Where contracted care is deemed a final care area, the products are matched to the appropriate patient activity using the appropriate matching criteria.

CG 12.3.16 Contracted care services may itself be treated as a final cost product. Consumption of resources from other hospital areas should be matched appropriately to the final costed product. For example, a contracted hospital providing endoscopy services to patients of another hospital may be required to admit and report these patients, if that data is available.

CG 12.3.17 The costing practitioner of the contracting hospital (or purchaser) should consider the following to inform the costing process for its contracted services:

- Where patient level contracted care feeder data is available, it should be used to allocate expenses directly to the patients.
- Where activity data is missing for feeder purposes, utilisation data or RVUs may also be created from demographic or coding information.
- Where feeder data cannot be found, the costing practitioner should consider allocating these expenses as an overhead.
- Where contracted care activities take place during a patient hospital stay the costing practitioner should use caution when using ‘episode length of stay’ to create intermediate products. For example, when calculating the number of meals, contract leaves need to be considered for cost distribution purposes.

Step 7: Match intermediate products and their costs to patient activity

CG 12.3.18 Service point is the preferred matching method, as outlined in Business Rules 5.2B. The cost allocation process is performed where overhead and direct costs expenses are allocated to intermediate products.

CG 12.3.19 Each intermediate product is also provided with a share of defined overhead expenses and direct expenses.

CG 12.3.20 The cost per intermediate product, or the cost of production, is the result of combining the cost allocation and the share of defined overhead and direct cost expenses.

Step 8: Report costs

CG 12.3.20 Costing practitioners should perform the required steps to consolidate and report costs at a patient or encounter level.

Step 9: Cost data review with contracted care services stakeholders

CG 12.3.21 Costing practitioners should meet with their relevant stakeholders to report and review the costs calculated for contracted care activities.

CG 12.3.22 For inter-hospital contracted care, costing practitioners should note that patients may be admitted in both the contracting and contracted hospital, and as such, care must be taken to avoid double-counting of hospital activities and duplicate reporting of costs.

CG 12.3.23 Costing practitioners may refer to the contract role and contract type field in the Admitted Patient Care National Minimum Data Set (NMDS) to identify an inter-hospital contracted care episode for reporting purposes.

CG 13 Consultation Liaison

CG 13.1 Scope

CG 13.1.1 This guideline outlines an approach to patient level costing of consultation liaison services.

CG 13.1.2 This guideline also provides practical steps and examples to guide staff on the patient costing process for this activity.

CG 13.1.3 Consultation liaison applies to any products that require these services, including where these services are provided for patients treated in admitted, emergency or non-admitted settings. These services may be provided by other departments in the hospital or from another organisation.

CG 13.1.4 These services support a hospital department to deliver patient care. These services are not an overhead and, on their own, are not patient care but are an independent product that supports patient care.

CG 13.1.5 These services are considered intermediate products and as such it is important to understand the value of these services to ensure that:

- they are matched to the patients or products that they helped produce
- departments that provide consultation liaison services do not assign the associated expenses to its own department products.

CG 13.1.6 Consultation liaison may also be provided for purposes that are not related directly to a patient, but support patient care, for example, infectious diseases staff providing advice on the need for ward super washes.

CG 13.2 Objective

CG 13.2.1 The objective of this guideline is to ensure that all consultation liaison expenses contributing to an organisation's day-to-day production of final products are included in patient costing to determine the full cost of production.

CG 13.2.2 This guideline also aims to provide a resource for costing practitioners to assist them in undertaking patient level costing by providing practical examples of consultation or clinical liaison services.

CG 13.3 Costing Guideline

Step 1: Stakeholder identification and service scale and scope

CG 13.3.1 Costing practitioners should consult relevant stakeholders to obtain an overview of the consultation liaison services within the hospital. This type of service may take place across several units and specialties within the hospital. However, these services are generally found within the mental health and emergency department (ED) settings.

CG 13.3.2 Stakeholders from these settings need to be consulted to determine the nature of these services and how they are or can be measured.

Step 2: Align expense to the consultation liaison service and define direct and indirect expenses, including overhead allocation methods

CG 13.3.3 Costing practitioners should engage finance stakeholders to ascertain how consultation liaison expenses are recorded within the general ledger. There are two scenarios that need consideration:

- Generally, these expenses are not separately identified, as they would be integrated within a department's functions. This means that consultation liaison expenses are not recorded against the same cost centre as where the services are provided.
- In some cases, cost centres may be specifically assigned for consultation liaison services, such as Aboriginal liaison and mental health consultation liaison–psychiatry.

CG 13.3.4 Consultation liaison expenses that are integrated within departments need to be moved to a consultation liaison final cost centre. The methods used to identify these expenses need to be developed in line with stakeholder insights around how these services are provided and where they are delivered.

CG 13.3.5 Expenses for consultation liaison services that are provided to third parties, where the associated products are reported by the third-party, are not to be included in the clinical costs at the host hospital. These expenses should be made available to the receiving hospital as costed intermediate products and included as third-party costs to its production.

CG 13.3.6 Similarly, where consultation liaison services are used by a hospital and provided by a third-party, these expenses need to be identified by the hospital and included in the host hospital's cost of production as a third-party cost.

CG 13.3.7 Any insights obtained from stakeholders on the nature of consultation liaison services, the associated expenses, and ways to measures these services need to be clearly documented and reviewed for currency.

Step 3: Identify patient level activity and consultation liaison feeder data and perform quality assurance checks

CG 13.3.8 Ideally, measurement of these types of services should be supported by appropriate feeder systems and this data should be included in the costing process. The availability, source and level of activity detail captured will influence the costing methodology for consultation liaison services intermediate products.

CG 13.3.9 Some consultation liaison services may not be well recorded, and feeder systems may not provide the required detail that demonstrates the use of these services across hospital units. In these cases, the costing practitioner may need to, with relevant stakeholders, refer to other sources for information to derive feeder data (for example, timesheets).

CG 13.3.10 Consultation liaison services may also be provided to advise the hospital on specific areas of interest that may not be directly related to specific patient activity. Feeder data may not be captured, and the expenditures will most likely need to be allocated as overhead. For example, an infectious diseases unit may provide advice on infection control, such as the need for isolation units or super washes of wards.

CG 13.3.11 If available, the consultation liaison feeder data will ideally include some or all of the following fields:

- delivery mode (for example, face-to-face, telephone)

- date and time of service
- duration of the service
- patient unique identifier
- establishment unique identifier
- patient unique episode identifier
- type or category of service provided (for example, consultation)
- unit where the service was requested and provided (for example, emergency, ward B).

CG 13.3.12 Costing practitioners should perform quality assurance checks on the consultation liaison feeder activity file prior to the costing process. For example, checks should be made on the date of service to test reliability, to remove error dates and ensure dates are relevant to the period being costed.

Step 4: Creating and mapping consultation liaison service costing products or intermediate products

CG 13.3.13 The costing practitioner should consider the following to inform the costing process for consultation liaison services:

- Where traceable consultation liaison costs can be identified, these costs should be used to allocate expenses directly to the patients.
- Where consultation liaison time is recorded at patient level, this should be used to allocate expenses directly to the patients. For example, patients in the ED may receive consultation liaison services provided by clinical staff from the consultation liaison psychiatry department. The time staff attend the ED should be used as a basis to allocate expenses.
- Where consultation liaison activity data is missing for feeder purposes, utilisation data or relative value units (RVUs) may also be created from demographic or coding information. For example, the costing practitioner may use the 'indigenous status' field (as a measure) to create a feeder or RVU to allocate expenses from the Aboriginal Liaison cost centre.
- Where feeder data cannot be found, the costing practitioner should consider allocating these expenses as an overhead.

CG 13.3.14 If consultation liaison services are treated as an overhead, costing practitioners should assign the most appropriate overhead statistic to distribute these expenditures (see Costing Guideline 9 – Mental Health Services).

CG 13.3.15 If consultation liaison services are treated as a direct cost, intermediate products may be created and mapped to respective final cost centres.

Step 5. Apply relative value units (RVUs)

CG 13.3.16 The cost allocation process for consultation liaison services may be further enhanced by utilising RVUs. RVUs are relative values used to assist the costing practitioner to allocate costs to better reflect the cost-of-service provision.

CG 13.3.17 The relative values should be determined and agreed upon in consultation with the relevant stakeholders.

Step 6: Create intermediate product costs in final cost centres

CG 13.3.18 Two allocation processes are performed:

- Overhead costs are allocated to the production cost centre (using an appropriate allocation statistic).
- Production cost centre costs (overhead and direct) are allocated to the intermediate products.

Step 7: Match intermediate products and their costs to consultation liaison activity

CG 13.3.19 Service point is the preferred matching method, as outlined in Business Rules 5.2B. Consultation liaison services or intermediate products are matched to the appropriate patient episode or encounter using the appropriate matching criteria.

CG 13.3.20 Consultation liaison services may itself be treated as a final cost product. For example, mental health consultation liaison services provided by specialist mental health clinicians may be counted and costed as a distinct service contact or event in some jurisdiction. In this case, consumption of resources from other hospital department should be matched appropriately to the service contact or event.

Step 8: Report costs

CG 13.3.21 Costing practitioners should perform the required steps to consolidate and report costs at a patient or encounter level.

Step 9: Cost data review with consultation liaison services stakeholders

CG 13.3.22 Costing practitioners should meet with their relevant stakeholders to report and review the costs calculated for consultation liaison activities.

Glossary

Term	Description
Account code	An account code is a unique record for each type of asset, liability, equity, revenue, and expense.
Admitted patient products	Admitted patient products are the services provided to patients who undergo an admission process, where the process of admission is defined in METEOR ID: 327206.
Allocation methodology	Allocation methodology is the process selected to allocate the identified cost to the cost objects.
Allocation statistics	Types of cost allocation bases that use financial or non-financial data to allocate costs aggregated in an overhead cost centre to relevant production cost centres. These values measure the relative consumption of products or services produced by those organisational units that are not directly involved in patient care.
Blood products and services	Blood products are products that can be manufactured by simple separation of blood into its components via centrifugation. Blood products and services are defined under the National Blood Agreement. For example, intravenous immune globulin, factors, platelets and red blood cells.
Clinical services	Clinical services are related to the observation or treatment of a patient within a health care setting. There are many types of clinical services across various disciplines in a health care setting, including in the fields of medicine, surgery, emergency, and non-critical, high-dependency care. These services are typically non-urgent in nature and can be admitted or non-admitted. Clinical services include all services, admitted and non-admitted, except those that are ancillary and highly resource intensive in nature which are categorised separately.
Commercial business units	Commercial business units are organisational units within a hospital that generate non-patient products for which revenue is obtained from third parties, including but not limited to hospital patients and staff.
Consultation (or clinical) liaison	Consultation (or clinical) liaison refers to the process where a patient who is under the care of one clinician (who holds the medical governance or bed card) is consulted by another clinician or team or is provided a liaison (or advisory) service to that treating clinician or team providing care to the patient. Examples include a ‘second opinion’, advice on a particular problem, a case review, a one-off assessment, or therapy session.
Contracted care	Contracted care refers to care provided to a patient under an agreement between a purchaser of hospital care (contracting hospital or external purchaser) and a provider of an admitted or non-admitted service (contracted hospital).
Contractual arrangement	A contractual arrangement is an enforceable agreement between two or more parties that requires something to be done by one or both. For the purposes of these standards, these agreed actions may provide a basis to measure an activity that drives total costs.

Term	Description
Coronary care unit (CCU)	A facility dedicated to acute care services for patients with cardiac diseases (METEOR ID: 619758).
Cost allocation	Cost allocation is the process whereby expenses are allocated to cost objects using cost allocation bases.
Cost ledger	The cost ledger provides the framework to be used in product costing. It generally follows the hospital general ledger but is arranged according to a series of cost centres and account codes for costing purposes.
Cost object	Cost accounting requires an organisation to measure the cost of its outputs. In this context, the output that is being measured is important and will vary depending on an organisation's business decision-making needs.
Cost outputs	Cost outputs are the items that an organisation has identified as important to measure for its own business decision-making needs. As an example, it can vary from measurements of expenses for such things as the hospital, a department, unit, service, program, activity, task, tangible good, patient, patient event, or a patient day. Cost outputs may be either intermediate products (for example a pathology test) or final products (for example, an admitted episode).
Critical care unit	Critical care unit refers to a separate and self-contained area of a hospital dedicated to the management of patients with life-threatening illnesses, injuries, and complications, and monitoring of potentially life-threatening conditions. It provides special expertise and facilities for support of vital functions and uses the skills of medical, nursing, and other personnel experienced in the management of these problems. (Source: College of Intensive Care Medicine).
Depreciation	Depreciation refers to the reduction in value of an asset over its useful life. This reduction in value occurs, for example, due to age and wear and tear. Depreciation includes building depreciation, equipment depreciation and right-of-use asset depreciation.
Direct costs/expenses	Production and overhead expenses incurred in the delivery of a patient care product and/or service allocated to a patient using evidence of resource utilisation. Non-clinical examples of these expenses may include: • interpreters • patient food.
Direct teaching and training products	Direct teaching and training products are activities as defined in METEOR ID: 756429.
Economic feasibility	Economic feasibility refers to acting with reasonableness when determining the effort required to directly allocate costs to cost objects with accuracy against the additional resource cost and effort required to do so. Economic feasibility will be influenced by several factors, such as the: • availability of (costing) information or (costing) information systems • design of operations that allows for exclusive use of a particular expense by a particular cost object.
Emergency department (ED)	An ED provides triage, assessment, treatment, care and/or treatment for patients suffering from medical condition/s and/or injury (METEOR ID: 745042 and definition of ED services, IHACPA). These include both urgent and non-urgent conditions for a broad spectrum of diseases and illnesses, some of which may be life threatening and require immediate attention. It also includes provision for resuscitation.

Term	Description
Emergency department products	Emergency department patient products are emergency services providing triage, assessment, care and/or treatment for patients suffering from medical condition/s and/or injury, as defined in METEOR ID: 745039.
Equipment depreciation	Equipment depreciation includes non-fixed building fit-out such as theatre tables, moveable furniture, and chemotherapy chairs.
Expenses	Expenses are decreases in economic benefits during the accounting period in the form of outflows or depletions of assets or incurrences of liabilities that result in decreases in equity, other than those relating to distributions to equity participants (AASB CF, 70 (b)). The definition of expenses encompasses those expenses that arise during the ordinary activities of the organisation including losses, for example, wages and depreciation. They usually take the form of an outflow or depletion of assets such as cash and cash equivalents, inventory, property, plant, and equipment (AASB CF, 78).
Feeder data	Feeder data refers to the collection of information from various hospital departmental systems used in the day-to-day operations of a hospital, generally for patient care purposes. These systems are used by hospital staff to record patient level information, or the resources required by patients from those hospital service areas as part of the care process. The term 'feeder' is generally used to describe the extract taken from these systems which is reviewed and 'fed into the costing system' for costing purposes.
Final cost centre	A final cost centre is a collection of costs, allocated from both production and overhead cost centres which are applicable to delivery of the final product.
Full cost	Full cost includes the costs of goods and services consumed by an organisation, including costs that are not included in the general ledger, that meet the criteria of the AHPCS Standards 1.1.3 and 1.2.3.
General ledger	The general ledger holds a set of accounts that summarise all transactions occurring within an organisation and is used to create its financial statements.
High dependency unit (HDU)	An HDU is a dedicated area that provides high dependency nursing care and is an area of observation for patients of higher needs than general. An HDU may be specialty specific under critical care, for example, cardiac surgery HDU, and may exist as an attachment to or step down from either ICU or coronary care unit (CCU). An HDU may be non-critical in nature and may reside within a medical or a surgical clinical ward for the purposes of close observation and provision of high levels of nursing care.
Imaging services	Imaging services use techniques and processes of creating visual representations of the interior of a body for clinical analysis and diagnosis (METEOR ID: 525782). The techniques include invasive radiology, non-invasive radiology, and nuclear medicine. Imaging is a function that is not restricted to a particular location in a hospital, even if there is a dedicated department within a hospital. Often the services are mobile between various locations in a hospital to provide services to patients that are not mobile.
Indirect costs/expenses	Production and overhead expenses incurred in the delivery of a patient care product and/or service that is allocated using a method to apportion the expense (for example, RVUs). Examples may include: • patient equipment and associated maintenance

Term	Description
	• sterilisation.
Intensive care unit (ICU)	An ICU (METEOR ID: 327234) provides special expertise and facilities for the support of vital functions and utilises the skills of medical, nursing, and other staff trained and experienced in the management of these problems.
Inter-hospital contracted care	Inter-hospital contracted care refers to an episode of care for an admitted patient whose treatment and/or care is provided under an arrangement (either written or verbal) between a hospital purchaser of care (contracting hospital) and a provider of an admitted service (contracted hospital) and for which the activity is recorded by both hospitals.
Intermediate products	Intermediate products are outputs of a production centre that are further refined or provided to another production centre to contribute to the production of an organisation's final products, for example, pathology testing to support diagnosis by the clinician within a non-admitted episode.
Interpreter services	Interpreter services refer to professional service providers being used to facilitate communication between people. It includes verbal language such as languages other than English. It also includes non-verbal communication such persons requiring interpreter services for any form of sign language.
Labour cost	The definition of labour costs is adapted from ABS Labour Statistics: Concepts, Sources and Methods Cat: 6102.0.055.001 - Employee Remuneration, and is based on the concept of cost to the employer in the employment of labour. In this context labour cost relates to: • employee salaries and wage • contributions by employers, on behalf of their employees, to social security • all other costs borne by employers in the employment of labour such as costs of training, welfare services to employees, and payroll taxes.
Lease	A lease is a contract, or part of a contract, that conveys the right to use an asset (the underlying asset) for a period in return for a payment or series of payments.
Lease term	The non-cancellable period for which a lessee has the right to use an underlying asset.
Lessee	An entity that obtains the right to use an underlying asset for a period in exchange for a payment or series of payments.
Line items	A series of mapped account codes. See attachments to Part 1: Standards.
Matching	Matching is a general term in product costing that covers both: • matching expenses to a cost object directly when the expense can be easily identified as having a direct causal relationship. That is, the cost was generated as a direct result of the use of the cost object in the delivery of the hospital service, for example, the price paid for a given pharmaceutical prescribed to a patient. • matching expenses by means of allocation where they cannot be directly matched to the cost object, for example, the cost of nursing staff on a given ward being allocated to the patients receiving care on that ward.

Term	Description
Materiality	Omissions or misstatements of items are material if they could, individually or collectively, influence the economic decisions of users taken based on the financial statements. Materiality depends on the size and nature of the omission or misstatement judged in the surrounding circumstances. The size or nature of the item, or a combination of both, could be the determining factor (refer to AASB 1031).
Multiple health care providers	Multiple health care providers refer to two or more health care providers delivering care either individually or jointly within a non-admitted patient service event. The health care providers may be of the same profession (medical, nursing, or allied health). However, they must each have a different speciality so that the care provided by each provider is unique and meets the definition of a non-admitted patient service event. In practice, this should be interpreted as meaning that the patient can separately identify the unique care provided by each healthcare provider.
Non-admitted clinic/ non-admitted patient service units	Non-admitted clinic or non-admitted patient service units are a recognised clinical team of one or more healthcare providers within a hospital, multi-purpose service or community health service that provides non-admitted patient services and/or non-admitted patient support activities.
Non-admitted patient	Non-admitted patient means services as provided as defined in METEOR ID: 652530.
Non-emergency patient transport (NEPT)	NEPT refers to non-emergency road transportation to or from a health or diagnostic facility, inter-hospital transfers and transport to or from non-acute health services such as residential aged care and community health services. NEPT only refers to road transport and must always be requested by a clinician.
Non-patient products	Non-patient products are all goods and service that an organisation may provide other than patient products.
Offsetting	Offsetting means the reduction of an expense by income, or vice versa, so that only the net amount is reflected in product costing. Income and expenses should only be offset where offsetting reflects the substance of the transaction.
Operating room	Operating room refers to a designated area of a hospital where significant surgical procedures are carried out under surgical conditions with the supervision of qualified medical practitioners. The operating room must be equipped to deliver general anaesthesia and conform to the College of Anaesthetists and the Faculty of Intensive Care Standards (METEOR ID: 584569).
Organ/tissue retrieval team	Retrieval team refers to a group of hospital staff engaged in the procurement of human tissue and organs. They are generally situated within a specific hospital and the core retrieval team generally comprises a surgeon, an assistant surgeon, and a theatre technician to provide perfusionist services. They will also carry with them a range of medical and surgical supplies, drugs, perfusion solution, and retrieval related goods and services. The retrieval team is generally supported by staff within the theatre setting to assist with the retrieval process. This staff support, including theatre nurses, will be the retrievals own support team if the retrieval is undertaken within its own hospital, or staff from the external hospital if the retrieval occurs externally.
Other non-patient products	Other non-patient products are not further sub-divided and may include, but are not limited to, commercial services.

Term	Description
Outreach and specialist services	Outreach and specialist services are: • examination, consultation, treatment, or other services provided as individual sessions to non-admitted patients through the outreach services of an establishment not defined elsewhere (METEOR ID: 270514) • hospital-based outreach services events related to the treatment of patients by hospital staff in a location that is not part of the hospital campus, such as in the patient's home or place of work (METEOR ID: 327172).
Overhead cost centre	An overhead cost centre is a collection of costs that are not related directly to the delivery of products, but are required for the delivery of the service and therefore need to be allocated to final cost centres.
Overhead expenses	Overhead expenses refer to expenses within the hospital that generally relate to organisational and administrative functions. They do not relate to patient care and include finance, human resources, general maintenance, and utility expenses
Pathology services	Pathology services are goods and services used in the provision of a pathology service and consumables (such as reagents, stains, and calibration products), or the actual cost as billed by a provider. Pathology functions are generally spread across three functional areas, including diagnostic, blood products, and management of adverse drug reactions. Whilst most pathology functions are performed within a centralised laboratory setting, there may be mobile resources which attend to a given patient as required in any setting. Hence, the functions may not be restricted to a particular location or setting.

Patient products	Patient products are either:
	• health services provided for the purpose of:
	  ○ assessing, recording, maintaining, or improving the physical, mental, or emotional health, comfort, or wellbeing of the service user
	  ○ diagnosing or treating an illness, disability, disorder, or condition of the service use
	• services provided by health professionals and non-professionals under their supervision to a patient.

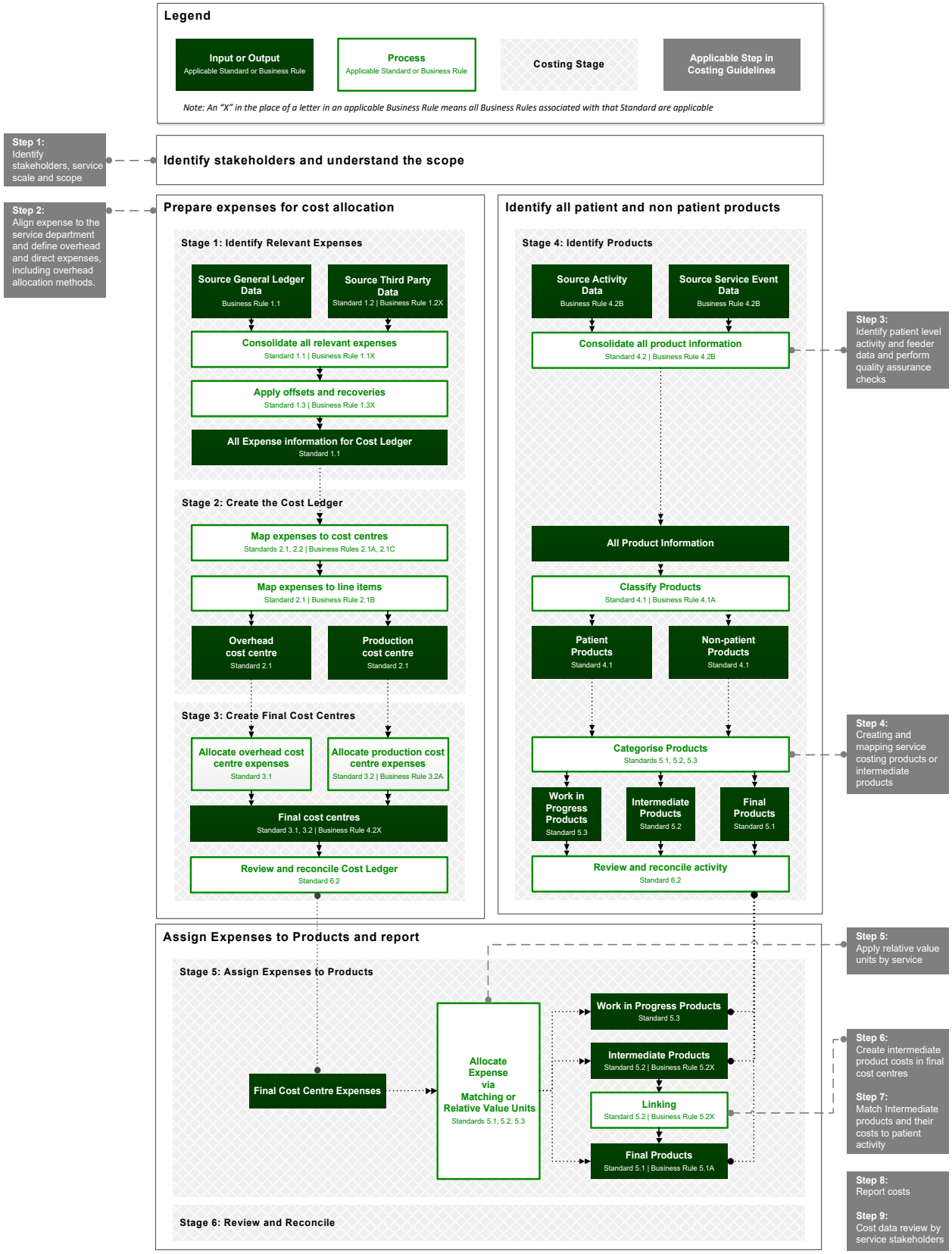
Pharmaceuticals	Pharmacy costs are goods and services used in the provision of a pharmaceutical service and consumables, or the actual cost as billed by a provider. They include the purchase, production, distribution, supply, and storage of drug products and clinical pharmacy services of both Pharmaceutical Benefits Scheme (PBS) reimbursed pharmaceuticals and PBS non–reimbursed pharmaceuticals.
Posthumous organ procurement	Posthumous organ procurement refers to an activity undertaken by hospitals in which human tissue is procured for the purpose of transplantation from a donor whose brain function or circulation of blood has permanently been stopped (METEOR ID: 711000). Diagnoses and procedures related to this activity, including mechanical ventilation and tissue procurement, should be recorded in accordance with the relevant ICD-10-AM Australian Coding Standards. These patients are not admitted to the hospital but are registered by the hospital (METEOR ID: 711010).
Product	For the purposes of these standards, products provided by an organisation are categorised into patient and non-patient products.

Term	Description
Product cost	Product cost refers to the sum of all expenses assigned to a product.
Program fractions/product fraction	Program fractions are ratios applied to production cost centres that relate to the various product categories associated with patient or non-patient products. These include, but are not limited to, admitted, non-admitted, emergency, teaching, and training.
Prostheses	An artificial substitute or replacement of a part of the body.
Recovery	Recovery refers to an amount recovered for the provision of a product or service by a hospital to a third party (that is, not a hospital patient or staff member).
Relative value unit (RVU)	An RVU is a weighted unit that reflects the comparative costs of production of one product or service against another, across the full range of products or services produced within the same department.
Research	Research is an activity undertaken in a public health service where the primary objective is the advancement of knowledge that ultimately aims to improve patient health outcomes or health system performance. The activity must be undertaken in a structured and ethical way, be formally approved by a research governance or ethics body and have potential for application outside of the health service in which the activity is undertaken. For activity based funding purposes, the definition of research relates to the public health service's contribution to maintain research capability. This excludes the costs of research activities that are funded from a source other than the state or territory or provided in kind.
Right-of-use asset	An asset that represents a lessee's right to use an underlying asset for an agreed period (lease term) in return for a payment or series of payments.
Right-of-use asset depreciation	Right-of-use asset depreciation represents the reduction in a lessee's right to use an underlying leased asset over the lease term.
Service weight	A service weight is a series of weightings by specified categories (for example AR-DRGs) and by cost bucket which are a relative measure of the resources use within a category. In the case of service weights, a weighting is applied at the classification level, and it assumes that on average the relative consumption of resources for episodes within that classification is on average similar.
Short stay unit	ED short stay units, or equivalent, (METEOR ID: 525112): • are designated and designed for the short-term treatment, observation, assessment, and reassessment of patients initially triaged and assessed in the ED • have specific admission and discharge criteria and policies • are designed for short term stays no longer than 24 hours • are physically separated from the ED acute assessment area • have a static number of beds with oxygen, suction, and patient ablution facilities • are not a temporary ED overflow area nor used to keep patients solely awaiting an inpatient bed or awaiting treatment in the ED.
Specialised procedure suites	Specialised procedure suites (SPS) refer to a designated area of a hospital where surgical and non-surgical procedures are performed by an appropriately qualified clinician (including medical scientists).

Term	Description
Teaching and training	Teaching and training refers to the activities provided by or on behalf of a public health service to facilitate the acquisition of knowledge, or development of skills. These activities are required for an individual to: • attain the necessary qualifications or recognised professional body registration to practice. • acquire sufficient clinical competence upon entering the workforce for practicing their discipline. • undertake specialist or advanced practice in medicine, dentistry, nursing, midwifery, or allied health. Several activities can be identified as teaching and training within a health service. These include: • Direct activities – distinct and separable activities that occur outside an episode of care but are directed towards skills and knowledge development (in the case of teaching and training). Direct activities may include lectures, tutorials, simulations, and workshops. • Overhead activities – those 'back office' administrative and coordination activities undertaken by a health service that are essential to facilitate teaching and training activities. These activities may include the coordination of pre-entry student placements, rotations, educational program development or negotiation with higher education providers. The medical, nursing, and allied health administration departments usually coordinate these activities within health services. • Embedded activities – where teaching and training occurs in conjunction with patient care.
Third-party expenses	Third-party expenses are expenses relating to goods and services delivered by a third party on behalf of the organisation. Third-party expenses should be captured within the general ledger through invoicing arrangements, ideally linked to the patient's episode of care. Should a third-party expense relate to a cost funded through the NHRA, this cost must be included in costing submissions and expense values imputed, if invoicing data does not exist. Where third-party expenses are raised to the Local Health Networks and Districts, these should be appropriately distributed to the applicable hospital. Examples of third-party expenses may include: • pathology and imaging services provided by a central or external agency • public private partnerships whereby private patients in public hospitals are transferred and treated in nearby facilities • support services provided by jurisdictions, such as IT, linen by a state provider, a public private partnership, and shared services provided by a jurisdiction's entity • blood products • tissue typing. Third-party expenses may or may not be reflected within the hospital general ledger. The inclusion of these and other third-party expenses in costing submissions will depend on: (1) the cost being in the general ledger and (2) relevance to the NHRA funding.

Term	Description
	Third-party expenses for private patients that do not result in a cost to the hospital general ledger sit outside of this definition/requirement and do not require imputation.
Traceable costs	Traceable costs are costs that are incurred solely for particular activities or to particular cost objects. They are usually the actual cost (such as the price paid to obtain the resource) and can be matched (traced) to the activity, intermediate product, or patient activity.

Attachment A – The Patient Costing Process



Independent Health and Aged Care Pricing Authority

Level 12, 1 Oxford Street
Sydney NSW 2000

Phone 02 8215 1100
Email enquiries@ihacpa.gov.au
Twitter @IHACPAnews

www.ihacpa.gov.au