Independent Hospital Pricing Authority

Australian Hospital Patient Costing Standards

Part 3: Costing guidelines

Version 4.0

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IHPA

Australian Hospital Patient Costing Standards – Part 3: Costing guidelines – Version 4.0 – February 2018

Contents

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 organisation and their respective jurisdiction to enable them to adhere to the Australian Hospital Patient Costing Standards (AHPCS) Version 4.0.

Structure

The Australian Hospital Patient Costing Standards Version 4.0 consists of three parts:

Part 1: Standards (including Attachments)

Part 2: Business rules

Part 3: Costing guidelines

This document forms the Costing guidelines.

Standards

The Standards are overarching principles to support and to 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 more closely align with the product costing process. The Standards are evolving guidelines that will continue to be updated and improved upon, as processes develop.

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 take into account the practical and operational constraints faced by costing practitioners within their organisation when seeking to address the AHPCS Version 4.0. 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 (GL) through to the final reconciliation of audited accounts and other information sources used in the costing process, such as feeder systems.

Costing guidelines

Costing guidelines have been developed to guide costing practitioners on how to cost various services within their hospital. These Costing guidelines demonstrate the practical consolidated steps to be undertaken by the 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 to costing practitioners the practical steps of costing for specific services raised 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 that indicates that it is a Costing guideline

N = the Costing guideline number

Definitions

The Glossary of Terms contains definitions for terms present throughout the Costing guidelines.

CG 0 The patient costing process

CG 0.1 Scope

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

CG 0.1.2 This Costing guideline also provides a guidance on the process of assigning expenses from cost centres to final cost centres, to intermediate products, the use of relative value units 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 Costing guideline is to present the steps required to patient level cost.

CG 0.3 Costing guideline

CG 0.3.1 This Costing 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 overhead and direct 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 by service's 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.

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. To do this, it must be clear on:

- what services or outputs are being costed. These may be defined in a hospital or jurisdictional policy;
- who will use the cost information, such as the primary user and stakeholder; and

- how this information is made useful for stakeholder decision making requirements.

Stakeholder identification and reporting requirements

CG 0.3.4 Costing practitioners should consult their jurisdictions 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:

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

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 overhead and direct expenses, including overhead allocation methods

CG 0.3.7 Consultation with service areas will allow an understanding of the nature of services provided. The nature of these services and their associated expenses are defined as either overheads to production or directly related to production (production centres).

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 or payroll information.

CG 0.3.9 Based on these data costing practitioners should (within the patient costing system). use stakeholder insights to ensure alignment of costs with activity either by appropriate product mapping or 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 total expenses of the Chief Executive Officer as a means to allocate these expenses to each final cost centre/Department.
- weighted floor space for cleaning

CG 0.3.11 Where overheads are traceable, say through a feeder, and can be directly allocated to 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 with their service's 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. Ideally, 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;
- 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 might be further enhanced through the use of 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 a number of 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 jurisdictions for any mandated requirement of specific 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 (such as the Commonwealth Medical Benefits Schedule) or benchmark.
- the use of National Diagnostic Related Group (DRG) Service Weights

CG 0.3.22 Developing 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. However, consideration needs to be given to the materiality of costs.

Step 6: Create intermediate product costs in final cost centres

CG 0.3.23 Two allocation processes are performed:

- When overhead costs are allocated to the Production Cost Centre (using an appropriate allocation statistic)
- When 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 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 patient or encounter level.

Step 9: Cost data review by service's stakeholders

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

CG 1 Critical Care

CG 1.1 Scope

CG 1.1.1 This Costing guideline provides the scope of critical care services and a guideline on the approach to cost activity within a Critical Care Unit.

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

Critical care scope

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

- Intensive care,
- Coronary care,
- Cardiothoracic intensive care,
- Psychiatric intensive care,
- Paediatric intensive and
- Neonatal 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's 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 (SCN) 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 will be treated as clinical care area.

CG 1.2 Objective

CG 1.2.1 The objective of this Costing 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; and
- 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 ICU or High dependency. For example, the Critical Care Unit cost centre may include bed expenses that are classified as high dependency (i.e. not Critical Care). When meeting with relevant stakeholders these issues require clarification as the cost model will need to be developed to reflect practice. The meeting should also discuss the available critical care feeder systems and the most appropriate way to allocate expenses and the appropriate RVUs that should be applied at the intermediate product level.

Step 2: Align expense to the service department and define overhead and direct 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, FTE, timesheets, occupied bed days and/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 the level of rotations 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 Critical Care cost centre.

CG 1.3.8 This approach enables the cost practitioner to consider the medical resource costs for Critical Care patients 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 Detailed documentation should be made on key decisions, including:

- which expenses 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;
- the stakeholders who were consulted and the date of consultation; and
- a date for future review with these stakeholders.

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 how long. Ideally, the Critical Care feeder system (and other datasets) will include some or all of the following fields:

- the patient's unique identifier;
- the patient unique episode identifier;
- unit code (e.g., ICU, NICU, CCU);
- the time into and out of the unit;
- hours of mechanical ventilation;
- campus/site; and
- 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 – i.e., where start time is after 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 (e.g., 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, but may also include other factors such as the Critical Care level, admission and discharge from the unit, time of day (e.g., 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 (i.e., 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. 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

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 cost allocation to account for resource intensity.

CG 1.3.17 For example, patients recently transferred into Critical Care from the Emergency Department or post theatre may require more medical and nursing care than patients who are in a critical condition, but stabilised or ready to be stepped down into high dependency. While the normal nursing staff patient ratio in an intensive adult and paediatric intensive care unit is 1 to 1 there are treatments such as Extra Corporeal Membrane Oxygenation (ECMO) where the staff patient ratio may be higher. Similarly, in Intensive Care areas there may be bed locations such that, as the patient's condition improves a 1 to 2 or even 1 to 4 ratio may be the norm for that acuity patient.

CG 1.3.18 Where these type of areas or patient types can be readily identified from the electronic data available to the costing team RVU's should be adjusted to more accurately reflect the relative costliness of patients as they pass through the intensive 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 NICU. The RVU needs to consider this level of acuity also.

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 Two allocation processes are performed:

- When overhead costs are allocated to the Production Cost Centre (using an appropriate allocation statistic)
- When the 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 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 encounter level.

Step 9: Cost data review with critical care stakeholders

CG 1.3.24 Costing practitioners should meet with 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 Costing guideline outlines an approach to cost Emergency Department (ED) encounter activity.

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

Emergency department scope

CG 2.1.3 Emergency department 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 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 Costing guideline is to guide costing practitioners through the end to end steps required to ensure that all ED activity and expenses which contribute 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 and 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 Expense to the Emergency Department and Define Overhead and Direct 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 (e.g., weekly meetings for Junior doctors led by a senior ED clinician).
- call outs of ED physicians to other clinical areas (e.g., 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 and/or other relevant data such as 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 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 Emergency Department. This information can be used to demonstrate the medical resources used to support Emergency Department patients from other hospital units as these expenditures are held outside the Emergency Department cost centre.

CG 2.3.8 This approach enables the cost practitioner to consider the medical resource costs for Emergency Department patients are represented not only by Emergency Department medical staff (where expenses are held within Emergency Department cost centres), but the activity for medical staff rostered to critical care where associated expenses are held outside Emergency Department 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; and
- 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 of the following fields:

- the patient's unique identifier;
- the patient unique episode identifier;
- unit code (for example, ED);
- the date/time of service;
- triage category;
- any measure of acuity
- Clinical interaction or resource consumption or intensity

- the time into and out of the unit; and
- 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/time, patient ED location and/or diagnosis for intermediate product creation. This should be appropriately reflected in the costing system. Please 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% 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 work flow 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

CG 2.3.16 Costing practitioners should obtain agreement from within their hospital (or jurisdiction) as to the agreed methodology for RVU creation.

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 consider or 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 time 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, but consumes a number of resources (medical supplies and alike) 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 a number of 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

- When overhead costs are allocated to the Production Cost Centre (using an appropriate allocation statistic)
- When the Production Cost Centre costs (overhead and direct) are allocated to the intermediate products.

Step 7: Match Intermediate Products and their Costs to Emergency Department Encounter

CG 2.3.21 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 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 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 encounter level.

CG 3 Operating room and special procedure suites

CG 3.1 Scope

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

CG 3.1.2 The business provides a guide to cost each separately.

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

OR and SPS scope

CG 3.1.4 For the purposes of patient level costing, operating room expenses are those that relate to areas of the hospital that would typically be found in the 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 a number of other areas in hospitals where procedures are performed, which should not be included as operating rooms but classified as specialist procedure suites for patient level costing purposes including:

- angiography,
- cardiac catheter suites,
- ECT suites,
- endoscopic suites,
- general procedure suites,
- hyperbaric chamber,
- lithotripsy suites,
- lung function laboratories; non–invasive cardiac laboratories (e.g. echo labs),
- physiology laboratories,
- radiotherapy suites,
- respiratory laboratories,
- sleep laboratories.

CG 3.1.6 Operating rooms should be separated from Specialised Procedure Suites for the purposes of patient level costing.

CG 3.1.7 Expenses and activity should be identified for each and costed in their own right. The steps below should be applied for both the operating room and special procedure suite. 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 Costing guideline is to guide costing practitioners of the end to end steps required to ensure that all OR and SPS activity and expenses which contribute 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 SPSs 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 and 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 met with. 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 (e.g., 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 and/or other consumable utilisation per procedure); the most appropriate way to allocate expenses and the RVUs that should apply to different intermediate products (see Steps 4 and 5 below).

Step 2: Align expense to the OR or SPS service and define overhead and direct 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 and/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 *Record Expense Alignment Decisions* – Costing practitioners should utilise the costing system or another medium to record:

- the classification of OR and SPS expenses into the OR and SPS final cost centres;

- the stakeholders met with;
- the date of the meeting; and
- a date for future review of OR and SPS expense alignment.

Step 3: Identify patient level activity and OR and SPS 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:

- the patient's unique identifier;
- the patient unique episode identifier;
- unit code (for example, Theatre 1, Theatre 2, Endoscopy, Cardiac Catheter Suite);
- the date of service;
- the time into and out of the unit (including pre operation, skin to skin and recovery times, anaesthesia start and finish time, anaesthesia type); and
- Surgeon code;
- Prosthesis or consumable code

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:

- the patient's unique identifier;
- the patient's unique episode identifier;
- the prosthesis or consumable code and description;
- the prosthesis or consumable price; and
- the date of service.

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:

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

Step 4: Creating and mapping OR and SPS costing products or intermediate products

CG 3.3.12 With the exception of prosthesis (which generally uses the traceable cost i.e. 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, a number of 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 are available that measure prosthesis and/or consumable utilisation, products will need to be created in the costing system and mapped to the relevant final cost centre (i.e., 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 (i.e., OR or SPS). An example of such a product is: 'OR1_ProcX', where 'OR1' denotes Operating Theatre 1, 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 by OR and SPS 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. This includes medical, nursing, and consumable (where consumable feeder systems are unavailable). 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 MBS codes for like prosthetic against the nominated procedure codes.

Step 6: Create intermediate product costs in final cost centres

CG 3.3.22 Two allocation processes are performed:

- When overhead costs are allocated to the Production Cost Centre (using an appropriate allocation statistic)
- When 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 3.3.23 Intermediate products from the OR and/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 and or SPS intermediate products for matching for patient activity as the relevant sessions will fall between these dates.

Step 8: Report costs

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

Step 9: Cost data review with OR and SPS 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 encounter level.

CG 4 Teaching and training

CG 4.1 Scope

CG 4.1.1 This Costing guideline outlines how to identify expenses relating to direct and indirect Teaching and Training activities.

CG 4.1.2 This Costing guideline also outlines an approach to cost to 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 discreet 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 Training activities and their associated expense can be identified after consultation with appropriate stakeholders, these may include:

- the managers of the medical administration areas (i.e., surgical, medical, obstetric);
- nursing administration; and

- allied health administration departments.

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:

- the proportion of time and Full Time Equivalent (FTE) 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.
- supporting information from staff rosters or timetabling systems.

CG 4.3.9 To determine direct Teaching and Training department 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:

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

CG 4.3.11 Identified expenses for direct and indirect Teaching and Training activities need to be moved the Teaching and Trading 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 Broadly, costing practitioners must ensure that hospital overheads are allocated appropriately to the Teaching Training final cost centre. However, 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 FTE will also need to be moved to the Teaching and Training final cost centre to ensure that HR and Payroll service expenses flow accordingly.

CG 4.3.15 Teaching and Training, expenses for indirect activities need to be allocated to direct Teaching and Training products using appropriate allocation methods. Although these are expense for indirect activities, they are to be categorised as overheads.

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/trainee specialty categories. This would require the costing practitioner to understand the nature of Teaching and Training activities delivered to different cohort of student/trainees.

CG 4.3.19 Ideally, final Teaching and Training products would reflect the actual trainee/student placement, where a placement has a start and end period. Preferably, the feeder data from information system about these products would include some or all of the details listed in Table 1. This table also suggest key cost drivers that influence resources needed to deliver Teaching and Training to different students/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 (e.g. 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/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 speciality (e.g. orthopaedic surgery, cardiology, paediatric medicine) Allied health discipline	Trainees have different resource requirements depending on their specialty. Important for clinical credibility to differentiate between

Data element	Possible values	Rationale
	(e.g. physiotherapy, social work, psychology)	specialities/disciplines.
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 also be depended 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 TTR costing methodology.

CG 4.3.21 Upon processing expenses through the costing system, the outputs will consist of direct 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 RR-R Matching Production and Cost – Reconciliation to Source Data.

CG 5 Research

CG 5.1 Scope

CG 5.1.1 This Costing guideline outlines an approach for identifying the scope and source of expenses, activity and costing application which relate to Research.

Research scope

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 a clinical trial, these activities are part of patient products and 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 products categories that sufficiently differentiate it 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 direct and indirect (overhead) Research final cost centre

CG 5.3.1 Costing practitioners should establish a Research direct and indirect final cost centre within the costing system to align expense which are within scope.

Step 2: Align direct 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 staff Full Time Equivalents (FTE) 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); and managers of clinical directorates (e.g., 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 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 supporting hospital departments such as Decision Support or Business Intelligence Units whom 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 with regard to 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 Research final cost centre and use the proportions derived from stakeholder discussions to move staff expenses to the Research final cost centre.

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 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 FTE will also need to be moved to the 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 Broadly, costing practitioners must ensure that hospital overheads are allocated appropriately to the Research final cost centre. However, where a hospital has identifiable research related overhead expenses, such as Research Administration, these must be allocated solely to the 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 Research product.

CG 5.3.11 Costing practitioners should ensure that any offsets or adjustments are specified as per Standard RR-R Matching Production and Cost – Reconciliation to Source Data.

CG 6 Blood products

CG 6.1 Scope

CG 6.1.1 This Costing guideline outlines an approach to cost activity with regard to the consumption of Blood Products.

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

Blood product scope

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 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 Costing guideline is to guide costing practitioners of the end to end steps required to ensure that all Blood Product consumption and expenses which contribute 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 if any local rules apply within their jurisdiction with regard to 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 with 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 ICD10-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 (i.e., labour and consumables) within a separate cost centre (for example, Pathology), costing practitioners should also work with the Blood Products 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 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:

- the classification of Blood Products expense into the Blood Products cost department;
- the stakeholder/s met with;
- the date of the meeting; and
- a date for future review of Blood Products expense alignment.

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 of the following fields:

- the patient's unique identifier;
- the patient unique episode identifier;
- the Blood Product code;
- the Blood Product description;
- the Unit or Department the Blood Product was delivered to (e.g., Ward; Operating Theatre; Emergency Department; Non Admitted) and
- the date of service.

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 ICD10-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 product 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 ICD10-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 ICD10-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 (i.e., Blood Products).

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 upon 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

CG 6.3.17 RVUs need to be assigned to Blood Products regardless of whether they are derived from local feeder system or the ICD10-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, but must be mapped to the correct Blood Product available from the feeder system or the ICD10-AM code. Costing practitioners should contact their jurisdictional representative or the NBA to obtain this price list. The NBA website is: https://www.blood.gov.au/

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:

- When overhead costs are allocated to the Production Cost Centre (using an appropriate allocation statistic)

- When 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 6.3.21 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 for 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 (i.e., Inpatient, Emergency Department, Non Admitted). This is especially the case where local feeder systems are unavailable and the costing practitioner is reliant upon ICD10-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 Costing guideline relates to posthumous organ donation to 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 Costing guideline does not relate to live donation (such as kidney donation).

CG 7.2 Objective

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

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

CG 7.2.3 IHPA acknowledges that there are sensitivities and limitations to costing posthumous organ donation, due to patient privacy. IHPA 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 (AIHW) 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 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:

- Setting (generally intensive care)

- Medical/clinician
- Nursing
- Drugs
- Other resources (such as 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:

- Surgeon
- Assistant Surgeon
- Theatre Technician/Perfusionist
- Medical supplies
- Drugs
- Perfusion fluids
- Goods and services
- Mode of transport (especially high cost flight for external retrievals)
- Organ cold storage
- 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 4-6 hours, with additional time required for travel. Retrieval may occur after hours and consideration should be given to additional expenses (such as staff salaried loadings) in an afterhours 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 upon the procedure, up to 3 surgical teams may be collocated within the theatre at any given time.
- relevant medical supplies and goods and services required for transplantation.

CG 8 Non-admitted patients

CG 8.1 Scope

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

CG 8.1.2 This Costing 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 Costing guideline is to guide costing practitioners of the end to end steps required and ensure that all non-admitted activities and expenses 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 IHPA'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 ABF 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 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 and nursing/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 area
- Home delivered renal dialysis, nutrition procedure and home ventilation

Step 2: Align expense to Non-admitted activities 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/unit that is both within and out of scope for non-admitted final products. This includes obtaining agreement on:

CG 8.3.10 The cost centre/s to 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/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 which, say, 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:

- the classification of expense into the Non-admitted final cost centre;
- the stakeholders met with;
- the date of the meeting; and
- a date for future review of Clinic expense alignment.

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:

- the patient's unique identifier;
- the patient unique episode identifier;
- Clinic code;
- the 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 code 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; and
- 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 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 clinic 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 and with 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 upon 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 by intermediate product code

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

- duration in clinic (including actual duration, if captured);
- average/Weighted time in clinic;
- service weight by Tier 2 classification;
- traceable cost (example: charges on outsourced services);
- other Relative Value Unit (RVU) by clinic or Tier 2 classification;
- number of clinicians

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

- visit type (new or Repeat)
- modality of care
- remoteness of clinic
- treatment type (for example, the types of procedures)

Step 6: Create intermediate product costs in final cost centres

CG 8.3.22 Two allocation processes are performed:

- When overhead costs are allocated to the Production Cost Centre (using an appropriate allocation statistic)
- When the 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 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, in a Tier 2 20.03 medical service event in 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 jurisdiction advice on how to report costs at service event level.

Step 9: Cost data review with relevant 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 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 Costing guideline provides outlines an approach to cost Mental Health encounter activity.

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

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

Mental health scope

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

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

CG 9.2 Objective

CG 9.2.1 The objective of this Costing guideline is to guide costing practitioners of 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 to 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 hospital and public acute hospitals with specialised psychiatric units or wards.
- Ambulatory/Community mental health care services.

CG 9.3.4 This includes all mental health services/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;

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

- Residential mental health services.

CG 9.3.5 Cost practitioners must identify all expenses associated with mental health services and create a separate cost are to record these. 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/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 ward/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/from other cost centres.

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

CG 9.3.9 An example of where this occurs is electroconvulsive therapy (ECT). ECT is a common procedure for patients in specialist mental health is regarded as high cost treatment. Generally, ECT is administered only to clients that are admitted to hospital, it may be done for community mental health that are generally a same-day patient admission.

CG 9.3.10 These expenses may be reported against the Operating Room. Costing practitioners should move these expenses to separate 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/organisations do not collect patient level data in their ambulatory/Community mental health care services. Costing practitioners may consider the use of product fractions to move cost across program/product type.

CG 9.3.12 A key driver of mental health costs relates to the provision a secure environment for the treatment of forensic mental health patients. These additional costs have been attributed to 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 or from Mental Health units should be appropriately defined.

CG 9.3.15 Consultation Liaison includes services provided by specialist mental health clinicians as:

- consultation services by providing an opinion to the patient's/client's primary clinician; and
- liaison services by discussing the case of a patient/client with the patient's/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/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:

- the classification of expense into the Mental Health final cost centre;
- the stakeholders met with;
- the date of the meeting; and
- a date for future review of Mental Health expense alignment.

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 hospital 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 IHPA's Australian Mental Health Care Classification version 1.0 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:

- the patient's unique identifier;

- the patient unique episode identifier;
- the phase of care
- Program code;
- the date of service;
- multiple health care provider indicator;
- provider type;
- the time into and out of the unit; and
- 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/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. For example, services in a secluded inpatient ward intermediate product.

CG 9.3.25 ‘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

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

- Actual duration;
- Average/Weighted time in ward/clinic;
- Traceable cost/charges (for example, charges on outsourced services)
- Relative Value Unit (RVU) derived within or outside hospital.

CG 9.3.28 To demonstrate the relative cost of service provision within the mental setting, costing practitioners should consider developing and/or applying RVU’s 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/Setting types: such as face to face vs telephone, group settings, multiple health care providers, seclusion.

- Treatment types: for example, administration of ECT, 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:

- When overhead costs are allocated to the Production Cost Centre (using an appropriate allocation statistic)
- When the 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 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 represent 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/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 cost are assigned and accumulated over periods for the complete encounter.

Step 9: Cost data review with relevant 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 Costing guideline outlines an approach to cost community outreach and specialist services activity.

CG 10.1.2 This Costing 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 Costing guideline is to guide costing practitioners of 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 services provided 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:

- District and home nursing;
- Needle and Syringe programs;
- Community based palliative care;
- Post-acute care programs;
- Early childhood intervention programs;
- Home, personal, or respite care;
- Meals on wheels;
- Community social work/counselling;
- Maternal and child health programs; and
- Genetic counselling services.

CG 10.3.2 It is important to note that for the purpose of national reporting, some services excluded from scope of Outpatient care (METeOR: 584108). 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, e.g. activities such as home cleaning, meals on wheels or home maintenance.

Step 1: Identify scope of activities and stakeholders

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 discreet cost centres exist for community outreach and specialist services. Costing practitioners will need to establish which programs are provided, and the staff member 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 of the various Outreach and Specialist Services provided; the availability of data (e.g., patient contact or occasion of services) for the services; and 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, but 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/establishment and provide outreach across a number of 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 service department, and define overhead and direct 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 centre/s 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 service 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 centre.

CG 10.3.12 Any stakeholder insights and decision made to movement of expenses to the Outreach and Specialist Services final cost centre need to be documented, including the:

- classification of Outreach and Specialist Services expenses into the Outreach and Specialist Services final cost centres;
- stakeholder/s who were consulted;
- date of the meeting/s; and
- date for future review of Outreach and Specialist Services expenses alignment.

Step 3: Identify outreach and specialist service 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 care data collection, that 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/client contacts or occasions of service to assist with costing.

Step 4: Creating and mapping outreach and specialist services service 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 centre.

CG 10.3.17 Aggregated (dummy) episode records and intermediate product codes may be created for cost centre or outreach and specialist service program 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 map the relevant intermediate products to the non-admitted product or products within the costing system.

Step 5: Apply Relative Value Units

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

Step 6: Create intermediate product costs in final cost centres

CG 10.3.20 Two allocation processes are performed:

- When overhead costs are allocated to the Production Cost Centre (using an appropriate allocation statistic)
- When the 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 data

CG 10.3.21 Outreach and specialist 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 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 service activity.

Step 9: Cost data review with relevant 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 Costing guideline outlines an approach to cost interpreter services.

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

Interpreter service scope

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, is requested by the patient or a family member, or the patients English skills are assessed to be inadequate for messages to be conveyed.

CG 11.1.5 Interpreter services can be performed in a number of 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 Costing guideline is to guide costing practitioners on the end to end steps required to ensure that where an interpreter is engaged within the hospital; the objective of this Costing guideline is to guide costing practitioners on the end to end steps required to ensure that all interpreter service activity is costed and matched to final products as they contribute to the full cost of production.

CG 11.3 Costing guideline

Step 1: Identify scope of activities and stakeholders

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 a number of interpreters are employed by the hospital as it has defined a fixed percentage of its cohort

requiring interpreter service 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 overhead and direct 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 service model) to be allocated to final products.

CG 11.3.5 *Align Expense to Final cost centres* –Interpreter services expenses are generally defined within its own cost centre and map directly to a final cost centre for costing purposes. However, there may be instances where interpreter services may 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 may reside within the audiology department of the hospital on a daily basis, but expenses held in the interpreter 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 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 expense and relevant mapping to the interpreter and other final cost centres;
- the stakeholders met with;
- the date of the meeting; and
- 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 with 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 of the following fields:

- The patient's unique identifier;
- The patient unique episode identifier;
- The unit where the service was requested (for example, outpatient clinic A, Ward B);
- The date of service;
- The type or category of the interpreter service provided (for example language interpreter, Auslan interpreter);
- Interpreter delivered - a flag to demonstrate if the patient actually met with the interpreter; and

- the time of the interpreter consultation

CG 11.3.10 Where interpreter services are unable to provide detail of interpreter activity at patient level (such as 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:

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

Step 4: Creating and mapping Interpreter service 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 category/type or interpreter service is used for cost allocation, intermediate products will need to be created in the costing system and mapped to the interpreter service 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/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 service cost centre.

Step 5: Apply Relative Value Units

CG 11.3.17 Relative Value Units should be determined in consultation with the interpreter service 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:

- When overhead costs are allocated to the Production Cost Centre (using an appropriate allocation statistic)
- When 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 11.3.19 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 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 Costing guideline outlines an approach to identify the scope and source of expenses which relate to contracted care.

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

Scope of Contracted care

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. The hospital may also at the same time provide contracted care services to external organisations.

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

- Treatment/care of all or part of the admitted episode provided to/by another hospital,
- diagnostic and clinical services provided to/by external providers, such as pathology services and
- support services such as catering, security provided to/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 Costing guideline is to ensure that all contracted care expenses which contribute to an organisations 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 Costing guideline also aims to provide a resource for staff to assist them undertake the patient level costing exercise 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 get an overview of all contracted care arrangements within their hospital. All expenses for these contracted care activities which relate 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 overhead and direct 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 Contracting Hospital/Purchaser* - The following should be noted for the contracting hospital/purchaser:

- The contracting hospital (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. Where possible costing practitioners, for feeder or activity purposes 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 (such as fuel light and power), however should also discuss which overheads may be relevant (such as contract management functions).

CG 12.3.5 *Align Expense to Final cost centres for Contracted Hospital/Provider* - The following should be noted for the contracted hospital/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 contract 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 BR 6 – Matching Production and Cost – Commercial Business Entities

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 met with;
- the date of the meeting; and
- 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.

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 service 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 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

CG 12.3.12 The cost allocation process for contracted care services might be further enhanced through the use of Relative Value Units (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 a RVU weighting.

CG 12.3.14 The relative values should be determined and agreed 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 as final care areas, 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, 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/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 RVU 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 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 taken into account for cost distribution purposes.

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

CG 12.3.18 The cost allocation process is performed where overhead and direct costs expenses allocated to intermediate products.

CG 12.3.19 Each intermediate product is provided with a share of defined overhead expenses and direct expenses. This allocation and the combination and share of expense is the cost per intermediate product and represents the cost of production.

Step 8: Report costs

CG 12.3.20 Costing practitioners should perform the required steps to consolidate and report costs at 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 Costing guideline outlines an approach to patient level costing consultation liaison services.

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

Consultation liaison scope

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, an emergency or non-admitted setting. These services may be provided by other departments in the hospital or from/to another organisation.

CG 13.1.4 The nature of these services supports a department in the hospital to deliver patient care. These services are not an overhead and on their own 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 to produce; and
- departments proving consultation liaison service do not assign expense for these service to its own department products.

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

CG 13.2 Objective

CG 13.2.1 The objective of this Costing guideline is to ensure that all consultation liaison expenses which contribute to an organisations day to day production of final products are included in patient costing to determine the full cost of production.

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

CG 13.3 Costing guideline

Step 1: Stakeholder identification 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 a number of units and specialities within the hospital. However key areas which that these service are generally found is within the mental health and emergency department settings.

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

Step 2: Align expense to the Consultation liaison service and define overhead and direct 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, Mental Health Consultation Liaison – Psychiatry.

CG 13.3.4 In consultation with stakeholders, 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 about how these services are provided and to where in the organisation they are delivered.

CG 13.3.5 Expenses for Clinical 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 the hospital which are provided by a third party, these expenses need to be identified by the hospital 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 service, the associated expenses and ways to measures theses 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 type of service should be supported by appropriate feeder systems and include this data 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 recorded well 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 (for example, timesheets) to derive feeder data.

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:

- The patient's unique identifier;
- The patient unique episode identifier;
- The unit where the service was requested and provided (for example, Emergency, Ward B);
- The date/time of service;
- The type or category of service provided (for example consultation);
- Delivery mode (for example: face to face, telephone); and
- the duration of the service.

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, they should be used to allocate expenses directly to the patients. For example, patients in the emergency department may receive consultation liaison services provided by clinical staff from the Consultation Liaison Psychiatry Department. The time staff attend to the emergency department 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 (RVU) may also be created from demographic or coding information. For example, the costing practitioner may use Indigenous status field (as a measure) to create a feeder or RVU to allocate expenses from Indigenous 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 (see Costing guideline 9 – Mental Health Services) to distribute these expenditures.

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

Step 5. Apply Relative Value Units

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

CG 13.3.17 The relative values should be determined and agreed 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:

- When overhead costs are allocated to the Production Cost Centre (using an appropriate allocation statistic)
- When the 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 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/event in some jurisdiction. In this case, consumption of resources from other hospital department should be matched appropriately to the service contact/event.

Step 8: Report costs

CG 13.3.21 Costing practitioners should perform the required steps to consolidate and report costs at 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	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 and/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, IVIG, factors, platelets, red blood cells etc.
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/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 purpose of this standard, these agreed actions may provide a basis to measure an activity that drives total costs.
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	In general terms, 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 organisations business decision-making needs.

Term	Description
	Cost outputs are the items that the organisation has identified important to measure for its own business decision-making needs. As an example, it can vary from measurements of expense for such things as the hospital, a department, unit, service, program, activity, task, tangible good, patient, patient event or a patient day. This may be either in intermediate product (for example a pathology test) or a final product (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. (College of Intensive Care Medicine).
Clinical services	Clinical services are related to the observation or treatment of a patient within a health 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 and non-admitted in nature. Clinical services include all services, admitted and non-admitted, except those that are ancillary and highly resource intensive in nature which are categorised separately
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.
Direct Teaching and training products	Direct Teaching and Training products are activities as defined in (METeOR ID: 572982).
Economically feasible	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 a number of factors, such as: Availability of (costing) information or (costing) information systems; Design of operation that allows for exclusive use of a particular expense by a particular cost object.
Emergency department	Emergency Department is a dedicated department responsible for triage, assessment, treatment, observation and disposition of emergency patient presentations (Meteor ID: 327158 and Definition of ED services, IHPA). 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.
Emergency department products	Emergency Department patient products are emergency services provided in an organisation, as defined in (METeOR ID: 652825).
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)).

Term	Description
	The definition of expenses encompasses those expenses that arise in the course of the ordinary activities of the organisation including losses. Expenses that arise in the course of the ordinary activities of the organisation include, 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, after review, “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 those provided by a third party that are consumed to produce the organisation’s outputs.
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 is High Dependency Unit (HDU) is a dedicated area that provides high dependency nursing care and is an area of observation for patients of higher needs than general. A 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). A 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 restrictive to a particular location in a hospital, even if there is a dedicated department within a hospital. Often the services are mobile to various locations in a hospital to provide services to patients that are not mobile.
Intensive Care Unit	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.

Term	Description
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 organisations 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; and all other costs borne by employers in the employment of labour such as costs of training, welfare services to employees, payroll taxes etc.
Line items	A series of mapped account codes. See Attachments.
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 ie 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 a given pharmaceutical prescribed to the patient; and matching expenses by means of allocation where they cannot that cannot be directly matched to the cost object, for example the allocation of the cost of nursing staff on a given ward to the patients receiving care on that ward.
Materiality	Omissions or misstatements of items are material if they could, individually or collectively, influence the economic decisions of users taken on the basis of 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. (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/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: 584028)

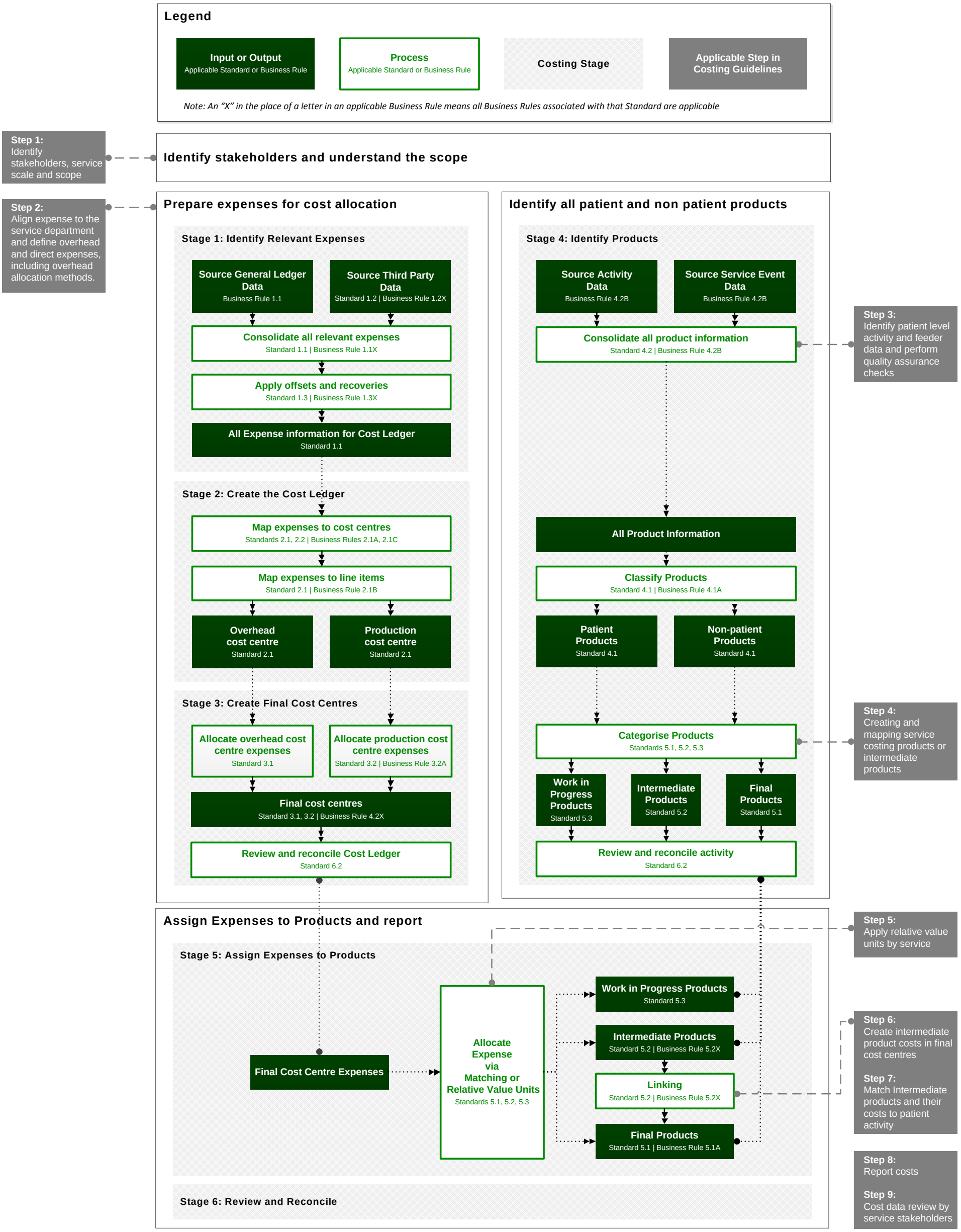
Term	Description
Non-Emergency Patient Transport (NEPT)	Non-Emergency Patient Transport (NEPT) refers to non-emergency road transportation to or from a health or diagnostic facility, inter-hospital transfers and transport to or from non-acute health services such as residential aged care and Community 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 the 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 under 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 jurisdictional specific hospital and the core retrieval team generally comprises a surgeon, assistant surgeon, 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 (Hospital A see below), or staff from the external hospital (Hospital B see below), if the retrieval occurs externally.
Other non-patient products	Other Non-patient products are not further sub-divided and may include, but not limited to, commercial services
Outreach and specialist services	Outreach and Specialist Services are: hospital-based outreach services events relate to 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: 327172); 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: 270514)
Overhead cost centre	An overhead cost centre is a collection of costs that are not related directly to the delivery of Products but which 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 of services within the hospital that generally relate to organisational services that are not directly involved in patient care, such as the functions of the Chief Executive Officer, Department of Finance and Patient Level Costing.

Term	Description
Pathology services	Pathology services are goods and services used in the provision of a pathology service and consumables (including reagents, stains and calibration products, etc.) 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 restrictive to a particular location or setting
Patient products	Patient products are either: health services provided to someone 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 user. 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 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 purposes of transplantation from a donor who has been declared brain dead (Meteor identifier 327258) Diagnoses and procedures undertaken during 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: 491557).
Product	For the purposes of these standards, products provided by an organisation are categorised into patient and non-patient products.
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 and/or service by a hospital to a third party (i.e. not a hospital patient or staff member).
Relative value unit	A relative value unit is a weighted unit that reflects the comparative costs of production of one product/service against another, across the full range of products/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 and/or health system performance.

Term	Description
	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 ABF purposes, the definition of research relates to the public health service's contribution to maintain research capability, excluding the costs of research activities that are funded from a source other than the state or territory or provided in kind
Service weight	A service weight is a series of weightings by specified categories (for example DRG) and by cost bucket which are a relative measure of resource 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 assessment	Short stay assessment (METeOR ID: 655704) is, as follows: Designated and designed for the short term treatment, observation, assessment and reassessment of patients initially triaged and assessed in the emergency department (ED) Have specific admission and discharge criteria and policies Designed for short term stays no longer than 24 hours Physically separated from the ED acute assessment area Have a static number of beds with oxygen, suction, patient ablution facilities Not a temporary ED overflow area nor used to keep patients solely awaiting an inpatient bed nor awaiting treatment in the ED Clinical Emergency care also includes non-urgent emergency care, as per the IHPA Emergency Services definition
Specialised Procedure Suite (SPS)	Specialised Procedure Suite (SPS) refers to a designated area of a hospital where surgical and non-surgical procedures are performed by an appropriately qualified clinician (including medical scientists)
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 practising their discipline; or undertake specialist/advanced practice in Medicine, Dentistry, Nursing, Midwifery or Allied Health. A number of activities can be identified as Teaching and training within a health service. These include: Direct activities – are 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. Indirect (overhead) activities – are 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.

Term	Description
	Embedded activities – which describe where Teaching and Training occurs in conjunction with patient care.
Third party expenses	Third party expenses are those expenses incurred by a third party on behalf of an organisation for the production of the organisation's outputs. Third party expenses are not recorded in an organisation's general ledger as they are not incurred by that organisation.
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



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