

Technical Document of Clinical Costing Mechanism

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Abbreviations

ACO	Accountable Care Organizations
ALB	Arm's Length Bodies
AR-DRG	Australian Refined Diagnosis Related Groups
CCSC	Cluster Costing Steering Committee
CCST	Clinical Costing Scoring Tool
CNHI	Center for National Health Insurance
CTAS	Canadian Triage and Acuity Scale
DRG	Diagnosis Related Groups
DMO	Data Management Office
ECSC	Executive Costing Steering Committee
EHR	Electronic Health Record
EMR	Electronic Medical Record
ERP	Enterprise Resource Planning (General Ledger)
FAQ	Frequently asked questions
HFMA	Healthcare Financial Management Association (www.hfma.org.uk)
HHC	Health Holding Company
ICD-10-AM	The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification
KSA	Kingdom of Saudi Arabia
AC	Average Cost
EC	Efficient Cost
EP	Efficient Price
CC	Cost Collection
NHCDC	National Hospital Cost Data Collection
PHS	Power Health Solutions
PLICS	Patient Level Information and Costing System
PPM	Power Performance Manager
RVU	Relative Value Units
TWG	Technical Working Group
WTE	Whole Time Equivalent

Introduction

Reference

This document issued based on the Mechanism for Calculating Healthcare Costs issued by CNHI Board Resolution No. (000000) in (00/00/0000 G), and shall be read, and execute along with the (“Mechanism for Calculating Healthcare Costs”).

Foreword

In line with the Kingdom of Saudi Arabia’s Vision 2030 and the transformation of the national health financing system, the Council of Ministers Decision No. 469 on the Date 19/08/1443h, established the Center for National Health Insurance (CNHI) as the future national system payer. The establishment of CNHI formalizes the system-wide separation of regulatory, purchaser, and provider roles and underpins a unified, transparent, and accountable healthcare financing framework for the Kingdom.

As the national purchaser of healthcare services, CNHI is responsible for funding and purchasing care on behalf of more than two-thirds of the Kingdom’s population. CNHI allocates budgets and enters into contractual arrangements with geographically defined Accountable Care Organizations (ACOs), referred to as Health Clusters, for the delivery of the Health Benefits Package and any additional services commissioned outside the defined scope. Health Clusters operate as independent entities accountable for the cost, quality, access, and outcomes of care delivered to defined beneficiary populations within specific geographic areas.

From a payer and regulatory perspective, effective purchasing, contract management, and financial stewardship require the availability of standardized, transparent, and auditable cost information. Accordingly, patient-level clinical costing is mandated as a core system capability to support CNHI’s funding, purchasing, and oversight functions.

National Payer Perspective for Clinical Costing

This Clinical Costing Standards document establishes the nationally mandated requirements governing the production and use of patient-level cost information for all providers and Health Clusters funded, contracted, or reimbursed by CNHI within the public sector and Other Governmental Sectors (OGS). Compliance with these Standards is a prerequisite for participation in CNHI-funded payment arrangements and for eligibility to receive funding under the Provider Payment Strategy (PPS).

From a national payer perspective, the Standards define the minimum principles, methodologies, and technical requirements necessary to ensure that cost data used for CNHI purposes are:

- Accurate, complete, and produced on a consistent basis;
- Comparable across providers, Health Clusters, and time periods;

- Fully traceable from source financial systems to patient-level outputs; and
- Auditable for assurance, validation, and regulatory review.

These Standards are designed to ensure that patient-level cost information can be relied upon by CNHI for the design, calibration, implementation, and ongoing management of payment mechanisms, including risk-adjusted capitation, activity-based payments, bundled payments, and performance-linked incentives.

Scope and Applicability

These Clinical Costing Standards apply to all Healthcare institutions accredited in CNHI network.

Non-compliance with these Standards may result in corrective actions, payment adjustments, contractual remedies, or other measures in accordance with CNHI contractual and regulatory frameworks.

Clinical costing outputs used for CNHI funding, payment, or performance purposes must be aligned with applicable national financial and accounting requirements, including SOCPA and IPSAS standards, as well as relevant Ministry of Finance (MoF) and ZATCA policies.

Regulatory Objectives

From a national payer perspective, the objectives of these Standards are to:

- Establish a single, consistent approach to cost classification, cost center structures, overhead allocation, and patient-level cost assignment.
- Ensure full transparency and end-to-end auditability of cost flows from source financial systems through to patient-level outputs used for payment and funding decisions.
- Enable fair, evidence-based comparison across Health Clusters, providers, service lines, and regions to support purchasing decisions and performance management.
- Provide reliable and fit-for-purpose costing outputs that directly support CNHI payment models, contractual arrangements, and value-based performance frameworks.

These Clinical Costing Standards will be periodically reviewed and updated by CNHI to reflect policy evolution, system maturity, and international best practice. Compliance with the Standards is essential to maintaining the integrity of the national payer system and to ensuring that public funds are allocated efficiently, equitably, and in a manner that maximizes value for the people of the Kingdom of Saudi Arabia.

1.1 Information requirements for Clinical Costing

Clinical Costing relies on two primary data streams used to produce costing results:

Financial data (operational expenditure): general ledger, cost center and account structures, payroll/HR where applicable, and other approved subledgers required to identify and allocate costs.

Activity data (patient-level): reportable outputs (ROs) and underlying **costed service events (CSEs)**, defined and measured in line with the **KSA Minimum Data Set (MDS)** (see Standard 4.1).

Data sources.

Activity data shall be sourced from the **Hospital Information System (HIS)** and relevant clinical subsystems (e.g., ED, theatre, radiology, pathology, pharmacy, allied health, virtual care) or other approved electronic patient systems.

Financial data shall be sourced from the organization's **ERP/GL**. Where an ERP is not available, the organization shall use approved **central information systems** that provide equivalent data quality and granularity.

Third-party activity.

Where services are delivered by third parties, the activity **shall be supplied at patient level** and **linked to the relevant encounter/RO** using the same identifiers and timestamps as local activity, or recorded as a stand-alone RO where policy requires.

Measurement and compliance.

Measurement of ROs (e.g., admitted episodes, ED presentations, non-admitted encounters) **shall conform to the definitions and units** specified in the KSA MDS and future related collections. Organizations **shall** maintain a controlled catalog of CSEs with units of measure and aggregation/reporting rules.

Reconciliation.

Organizations **shall** reconcile activity measurement and cost results in accordance with **Standard 6.1 — Reconciliation of Activity and Cost Results**, ensuring end-to-end traceability (GL → cost center → driver/CSE → RO).

Layout of the Standards

Standards Description

Each standard in this document is described using the following attributes:

Name	Title of Standard
Number	To be allocated for each standard
Standard	The standard which is to be met
Purpose	The reason for creating the standard, referencing its intended objective
Objectives	
Definitions	An explanation of terms in the standard which need to be defined
Guidelines	Advice and assistance for implementation of the standard

Glossary of Terms

Term	Definition
Account code	A unique code for each expense type in the general ledger (GL)—e.g., salaries, consumables, depreciation. Used for mapping to Line Items .
Activity data	Patient-level or service-level records describing clinical care and services (e.g., episodes, ED presentations/visits, clinic attendances, tests). Sourced from authoritative systems per KSA MDS .
Allocation methodology	The method used to link expenses to outputs (ROs/CSEs) or to consuming cost centers when direct trace is not feasible.
Allocation statistics	Objective drivers (financial or non-financial) used to move costs from Overhead CCs (and some Indirect CCs) to Patient Final / Patient Intermediate CCs .
Ambulance services	Emergency medical transport by ground or air, operated by trained staff; includes inter-facility transfer and retrieval where in scope.
Asset recognition threshold	The monetary threshold above which purchases are capitalized as PPE/Intangibles under IFRS/IPSAS ; below-threshold items are expensed.
Building depreciation	Depreciation of buildings and fixed fittings per IFRS/IPSAS.
Causal relationship (causality)	The principle that costs should be matched to outputs/CCs that cause or consume them, based on direct evidence, contractual links, or defensible operational knowledge.
Chart of Accounts (CoA)	The structured list of all GL accounts used by the provider.
Commercial business units	Non-patient service units generating external revenue (e.g., parking, retail). Usually costed as non-patient direct and excluded from RO costing unless policy requires.
Consultation/clinical liaison	Advisory or assessment services provided by a second clinician/team to the treating team; may produce CSEs or be embedded in RO depending on the delivery method of the service.
Consumption Matrix	A structured table that shows which hospital departments provide services internally (such as imaging, pathology, pharmacy, catering or linen), which departments use those services , and in what quantity or unit of measure (for example, scan counts, test weights, minutes, hours, portions or kilos). It ensures that all intermediate services are correctly linked to the areas that consumed them so that costs can be allocated accurately.

Corporate overheads	Costs borne at corporate/cluster/head-office level that support providers globally (e.g., Board, Finance, HR, ICT shared platforms).
Cost ledger	The costing-ready view of financials after mapping GL → CCs and Account codes → Line Items , and after including third-party costs and offsets/recoveries.
Cost center (CC)	The organizational unit where costs are held. Categorized as Patient Final , Patient Intermediate , Non-patient Direct , Indirect , or Overhead .
Costed service event (CSE)	The unit of measure used to transfer costs from a Patient Intermediate CC directly to ROs using patient-level consumption (e.g., test, weighted exam, dose/compounding unit) and either actual cost or approved RVU/weight tables. CSEs do not include time-based measures for OR/ICU/wards; those services use actual time/volume drivers within the relevant Final CC to assign costs to ROs.
Direct assignment	Linking a cost directly to an RO (or to a consuming CC) using patient/episode identifiers or unique evidence (e.g., implant billed to a patient).
Economic feasibility	The test that the benefit of direct assignment exceeds the cost of collecting/processing the evidence; otherwise use RVU/statistical methods.
Edge-case rule	A specific handling rule used when standard matching/allocation would misstate costs or activity (e.g., missing timestamps, split episodes, cancellations). Must be documented.
Emergency department (ED)	The service responsible for triage-to-departure emergency care. ED ROs are ED presentations/visits per KSA MDS.
Equipment depreciation	Depreciation of movable clinical equipment and fit-out, per IFRS/IPSAS.
Expenses	Outflows or liabilities recognized in the GL under IFRS/IPSAS (e.g., wages, consumables, depreciation).
Feeder data	Activity extracts from departmental systems (HIS, RIS/PACS, LIS, Theatre, ICU, Pharmacy, Scheduling) prepared for costing.
Final cost center (Final CC)	A cost center that delivers direct clinical care or non-patient services and whose fully absorbed costs are assigned to Reportable Outputs (ROs) using patient-level drivers (e.g., ward patient-minutes, ICU minutes, OR minutes, clinic attendances). Final CCs do not hold or produce ROs ; they provide the financial interface to assign cost to ROs using cost drivers based on activity held in HIS/clinical systems. Final CCs may also have directly attributable patient-level items (e.g., implants, patient-labelled meds) that are matched straight to ROs.
Final output → Reportable Output (RO)	The final costed unit for reporting (e.g., admitted episode, ED presentation/visit, non-admitted encounter/attendance).
Financial/non-financial drivers	Types of allocation statistics used to allocate Overhead/Indirect to Patient Final/Intermediate CCs.
Full cost	The total cost of delivering outputs, including included third-party costs and internal consumption.
Fully Absorbed Cost	The total cost of a cost center after all overhead and indirect costs have been allocated to it in accordance with the Standards. A fully absorbed cost therefore includes: 1. Direct costs recorded in the CC 2. Allocations from Overhead CCs 3. Allocations from Indirect CCs (if applicable) Fully absorbed cost represents the complete unit cost base of a cost center before its costs are assigned to Reportable Outputs (ROs).

General ledger (GL)	The organization's official accounting record used to prepare financial statements.
HDU (High Dependency Unit)	Monitored inpatient care for higher acuity than a general ward but below ICU; placement within clinical services per local policy.
Hotel services	Hotel services refer to non-clinical support services required to operate a healthcare facility and to maintain a safe, clean, and functional environment for patients, visitors, and staff. These services do not provide direct clinical care but support its delivery. Hotel services typically include: • Cleaning and environmental hygiene services • Linen and laundry services • Patient and ward food services • General facility services such as portering, waste management, and utilities support Hotel services costs are accumulated in designated cost centers and fully absorbed before allocation to Final and Patient Intermediate cost centers or directly to ROs.
Imaging services	Diagnostic imaging services (radiology, nuclear medicine) recorded in RIS/PACS; produce CSEs with modality sensitive complexity weights.
Insurance	Risk transfer contracts (e.g., buildings, equipment, medical indemnity, workers' compensation) whose premiums are in-scope where borne for the provider's operations.
Intangible asset	Identifiable non-monetary asset without physical substance (e.g., software) per IFRS/IPSAS; amortized over useful life.
ICU (Intensive Care Unit)	Dedicated unit for organ support and continuous monitoring. ICU time is actual time for assignments (not a CSE).
Internal consumption (matrix)	The mapped flows of intermediate services from Provider CCs → Consumer CCs/ROs , used to allocate CSEs and some non-patient services.
Intermediate output	In KSA, synonymous with CSE (RVU-based units such as imaging/pathology/pharmacy compounding) or medical sub-functions. Excludes OR/ICU/ward time.
Interpreter services	Professional language/sign services. May be treated as Indirect or Non-patient Direct per policy.
Knowledge of operations	Clinically/operationally informed expertise used to select credible drivers where direct evidence is unavailable.
Labor cost	Total employer cost for labor (wages/salaries, allowances, employer on-costs, payroll taxes where applicable).
Lease / Lessee / Lease term	IFRS 16/IPSAS 13 definitions for right-of-use arrangements.
Line Items	Costing line-item categories to which account codes are mapped for consistent reporting and benchmarking.
Matching	Matching has two complementary meanings: A) Data matching (activity linkage). The process of linking clinical/operational activity records from source systems to the correct Reportable Output (RO). Examples include:

	- Linking laboratory tests and imaging exams (CSE sources) to the patient's RO (e.g., admitted episode, ED presentation, non-admitted encounter) using patient identifiers, dates/times, and order/request metadata. - Linking ward stays, ICU hours, and operating room time to the same RO using admission/discharge timestamps, bed movements, theatre start/stop times, and other encounter keys. B) Cost matching (expense assignment). The process of assigning expenses from the cost ledger to cost objects in a way that reflects causality and is auditable: Direct matching: When an expense can be clearly and economically traced to a specific RO or CSE (e.g., a named implant billed to a patient; a patient-specific high-cost drug). Allocation (when direct is not feasible): When expenses cannot be directly traced, they are allocated using defensible drivers or RVUs (e.g., allocating nursing ward costs across patients on that ward using time/LOS; allocating imaging department costs to ROs using exam-based RVUs).
Materiality	The threshold at which an omission/misstatement could influence users' decisions, applied per IFRS/IPSAS.
Medical Intermediate Cost Centre	Local CC(s) used only to apportion medical remuneration into sub-functions (e.g., OR, ward rounds, clinics, ED, admin, research, teaching). Produces local sub-product units (not CSEs).
Minimum Data Set (KSA MDS)	The specified minimum fields for activity/identity/timing used in costing.
Negative costs	Costs < 0 arising after allocation/assignment (e.g., recoveries > expense). Must be identified and treated per negative-cost rule.
Non-admitted clinic/service unit	Organized non-admitted service team delivering outpatient/day services. Generates ROs per KSA rules.
Non-admitted patient	A person receiving care without admission as defined in KSA MDS.
Non-patient direct	Costs for activities not directly attributable to patients (e.g., research, teaching) that may absorb overheads but do not generate patient ROs. See definition in Section 2.1C Output Fractions (for example medical sub-functions)
Offset/Recovery	Netting an expense against an associated recovery where it reflects the substance of the transaction (policy-controlled). Must be visible in reconciliation.
Operating room / Special procedure suite	Designated areas for surgical/procedure care. OR time uses actual time for assignment; it is not a CSE.
Order request point	The ordering location/team for an intermediate service; used for matching CSEs to consuming CCs/ROs.
Overhead cost center	CCs that provide organization-wide support (Finance, HR, Executive, ICT, Facilities). Allocated to Final/Intermediate/Non-patient Direct using statistics.
Overhead expenses	The costs held in Overhead CCs.
Pathology services	Diagnostic testing and related consumables/fees; produce CSEs (tests/batteries, with weight tables where endorsed).
Pharmaceuticals	Pharmacy manufacture/dispensing, distribution, storage, clinical pharmacy. Patient-level direct where possible; otherwise CSE for compounding/dispensing units.
Private patient (policy)	In KSA public sector, classification/charging is per policy.
Program fractions / Product fraction	KSA: "Fractions" mainly used for medical remuneration via Medical Intermediate CCs to create sub-product units; may also be used where a GL CC spans multiple functions.
Prostheses	Medical devices implanted to replace/support body functions; ideally direct assigned to the patient RO.

Reportable Output (RO)	The final unit for costing and reporting: admitted episode, ED presentation, non-admitted encounter (and other defined outputs).
Revaluation method	Revaluation of PPE per IFRS/IPSAS; changes impact depreciation profile included in costing.
Right-of-use (ROU) asset / ROU depreciation	Lease accounting objects and expenses per IFRS/IPSAS recognized in costing.
Service weight	Relative weights by class (e.g., DRG) used for benchmarking or price derivation; not a costing RVU unless explicitly approved.
Shared services	Centrally provided services (e.g., HR/ICT/procurement/food/pharmacy) supporting multiple sites; treated as corporate/overhead or third-party costs as applicable.
Specialised procedure suite	A designated clinical area where specialized surgical or non-surgical procedures are performed by appropriately credentialed clinicians (including medical scientists and allied proceduralists). SPS areas generally require specialist equipment and trained staff but do not meet the full requirements of an Operating Room (e.g., general anesthesia capability). Typical examples (KSA context): • Cardiac Catheterization Laboratory (Cath Lab) • Endoscopy / GI suites • Lithotripsy / ESWL unit • Minor procedure suites (non-OR) • Interventional radiology bays (where not classified as OR)
Sub-product (medical)	Local unit generated from Medical Intermediate CCs to split medical remuneration (e.g., OR sessions, ward rounds, clinics). Not a CSE.
Teaching and training	Activities to develop workforce capability (direct, embedded, and indirect). Typically Non-patient Direct ; treated per policy if funding/reporting require.
Third-party expenses	Costs incurred on behalf of the provider by an external party (e.g., central labs, imaging, insurance) that must be included if they contribute to outputs.
Traceable costs	Costs that can be uniquely matched to a patient/event/CC and directly assigned.
Useful life	Period over which an asset is expected to be used (IFRS/IPSAS); basis for depreciation/amortization included in costing.
Variable lease payments	Lease payments that vary with usage/performance; included per IFRS/IPSAS and local finance policy.
Visiting medical officers (VMOs)	Where applicable under KSA contracts, external medical staff remunerated by session/on-call/fee-for-service. Included per remuneration type and Medical Intermediate CC rules.
Wages and salaries	Remuneration in cash/kind to employees; includes allowances and employer taxes/on-costs per KSA law.
Work in Progress (WIP)	ROs that span periods; intermediate costs incurred before completion carry forward and are recognized when the RO completes.

2 Stakeholders in the Costing Process



Overview

Clinical Costing is a complex and strategic function involving a wide range of stakeholders across the healthcare ecosystem. Its success relies on collective alignment regarding data ownership, awareness of the costing process, and shared accountability for how outputs are used to support continuous improvement and long-term sustainability.

Importantly, the Kingdom is transitioning from traditional input-based approaches to **true cost-based** models that reflect the actual consumption of resources rather than historic expenditure. This shift underpins the movement toward value-based healthcare and requires a new way of thinking across financial, clinical, and operational domains.

While Clinical Costing depends heavily on financial data — particularly for determining the total expenditure envelope — **it is not solely a finance function**. Accurate costing requires collaboration across data management, clinical coding, health informatics, and operational planning. In this sense, Clinical Costing is better aligned with economic analysis and integrated data matching than traditional accounting alone.

Beyond producing patient-level cost data, the real imperative is to use this information proactively — to understand what drives the cost of delivering healthcare services, identify variation, and uncover opportunities for efficiency and quality improvement.

Internal Stakeholders

As costing is not solely a finance-led function, its successful implementation relies on collaboration across a wide group of internal stakeholders. Accurate and clinically credible results require alignment between Finance, Clinical Operations, and Digital/Analytics functions, together with strong sponsorship from senior leadership.

Dependencies typically extend to clinical departments, who validate the allocation of medical and nursing effort; nursing and allied health units, who provide activity-level information; Health Information Management and Clinical Coding, who ensure the accuracy of diagnostic and procedural data; ICT / HIS teams, who manage data capture, system integration and feeder extract quality; and People & Culture / HR, who maintain position, roster and salary data to support labor costing.

Procurement and Supply Chain are essential for reliable product and consumables information, while Facilities/Engineering inform the use of building and equipment assets. Where teaching, research or specialized activities are undertaken, medical education units, research administration, and grant management offices may also be engaged.

Together, these stakeholders form the internal ecosystem needed to ensure that costing outputs are complete, reliable, and clinically interpretable. An example of Cluster roles and responsibilities is included in [Annex I - Recommended Internal Stakeholders](#)

Stage 1 – Identify Relevant Expenses

Stage 1 establishes the foundation of patient-level costing by defining which expenses are in scope and ensuring they are appropriately captured, categorized, and prepared for costing. This includes determining the inclusion of operating expenditures, treatment of third-party expenses, and permitted offsets and recoveries.

Clear and consistent identification of expenses ensures that all costs relevant to the provision of care—whether patient or non-patient—are recognized, while ensuring exclusions and adjustments are transparent and auditable.

This stage defines **what expenses are in scope** for clinical costing and how they enter the costing process. It covers:

- **1.1 Relevant Expenses** — the expense boundary and the role of the general ledger (GL)
- **1.2 Third-Party Expenses** — when costs incurred outside the provider's GL must be included
- **1.3 Offsets & Recoveries** — when netting is appropriate for costing

(Read with Stage 2 — Create the Cost Ledger, and Stage 6 — Review & Reconcile)

⚠ Important Clarification:

KSA policy status (capital): Capital accounting (depreciation, revaluation, lease ROU accounting beyond expensed lease payments) is not currently mandated for and remains optional. Providers who elect to include capital must follow the

Standard 1.1 - Relevant Expenses

Name	Relevant Expenses
Standard	All operating expenditure incurred in direct patient care and non-patient outputs for the defined reporting period shall be prepared from the organization's general ledger (GL) and structured for costing. The GL should be the primary, auditable source; where the GL contains activities not related, directly or indirectly, to patient care, these shall be handled via explicit, non-patient outputs. Where material costs are incurred on behalf of the organization by a third party and directly support outputs, they shall be included (see 1.2). Offsetting is permitted only where it better reflects the substance of the transaction for costing (see 1.3). All included amounts must reconcile to audited financial statements (Stage 6).
Purpose	Provide a complete, consistent, and auditable recognition of in-scope expenses for clinical costing.
Objectives	1. Capture all relevant operating expenses for the costing period. 2. Align general ledger recognition with costing scope. 3. Identify and document excluded items. 4. Provide transparency to support audit and comparison. 5. Include third-party costs that directly support outputs (with evidence), or document exclusions (1.2) 6. Apply offsets/recoveries only as permitted (1.3) 7. Ensure full reconciliation to audited financials (Stage 6)
Definitions	• Relevant expense: An operating cost that contributes to outputs delivered during the costing period. • Final outputs (ROs): admitted episodes, ED stays, non-admitted events (see Stage 5) that are completed within the reporting period. • Intermediate outputs (CSEs): are internally delivered services such as imaging exams, pathology tests, pharmacy issues (see Stage 5). • Indirect CCs: embedded operational support CCs (e.g., HIM/medical records, portering) distinct from corporate Overhead CCs. • Medical Intermediate Functions: local CCs or sub-products (fractions) that hold medical remuneration and split by sub-functions (OR time, ward rounds, OP clinics, ED cover, admin, research, teaching) before routing to ROs via fractions.

Relevant expenses include all operating costs directly or indirectly attributable to the generation of patient or non-patient outputs. These include clinical and non-clinical labor, supplies, contracted services, support functions, and other recurrent operating costs aligned to the organization's chart of accounts.

Certain expenses require specific treatment. Third-party services must be costed at the value recognized by the organization, and—where activity is identifiable—matched to patient encounters. Where activity detail is unavailable, defensible allocation bases must be used.

Offsets and recoveries can be made only where they relate to the same expense stream and where net treatment more accurately reflects cost of operations. All offsets must be documented.

Capital expenditure may be included once depreciation practices are mature enough to reliably reflect consumption; until then, local policy must be explicitly documented.

Guidelines

1.1A Medical expenses for private/public patients

- Include **all medical expenses** that appear in the GL (e.g., clinician payments funded through hospital accounts).
- **Externally held funds** that **do not** flow through the GL (e.g., private accounts/trusts outside the entity) are **out of scope**.
- Where clinicians' income streams (e.g., private billings, research grants) are used to purchase goods or services, **only those purchases that are recorded in the organization's general ledger (GL) or otherwise meet the formal inclusion criteria under Standard 1.2 shall be included in costing**.

Purchases made privately by clinicians, and **not processed through the GL**, must be excluded.

This ensures that only **verifiable organizational expenditure** forms part of the cost base; privately purchased items that never enter the organizational finance system **cannot be reliably valued, traced, or audited**, and therefore cannot be costed.

- Maintain documentation of **remuneration arrangements** and **allocation methods** applied to final cost centers; review each costing cycle.

1.1B Capital expenses — asset recognition (OPTIONAL)

- If capital is included, recognize and cost **depreciation/amortization** for assets per **IAS 16/38 (IPSAS 17/31)** and entity policy (thresholds, low-value pooling).
- Define and document the **capitalization threshold(s)** used; thresholds may be stricter than *any future* finance policy but not looser. As this policy does not currently exist any locally implemented mechanisms should be documented including:
 - threshold value(s)
 - governing policy reference
 - any asset-class-specific variations
- Expenses **below** the threshold or not meeting recognition criteria shall be **expensed** through the GL (e.g., repairs, minor equipment).
- Where multiple components each fall below threshold but form a single functional asset, apply componentization rules as per IFRS (**IAS 16 – PPE**)/ **IPSAS (17-PPE)**; document the decision.

1.1C Capital expenses — revaluation of assets (OPTIONAL)

- If revaluations are performed:
 - Keep assets on a **consistent valuation cycle**; document the **method** (e.g., fair value).
 - Clarify how revaluation increments/decrements interact with **depreciation** posted to cost centers.
 - Disclose methodology, frequency, and financial impact in the audit file.

1.1D Capital expenses — useful life (OPTIONAL)

- Maintain a **useful-life policy** by asset class; deviations must be justified against service capacity and documented.
- Reassess prospectively where serviceability changes; do not retrospectively adjust fully written-down assets without an approved revaluation of the class.

1.1E Capital expenses — classes of assets (OPTIONAL)

- For costing clarity, group assets into classes suitable for allocation: **buildings & improvements; intangibles; medical equipment; plant & non-medical; right-of-use**.
- Create **sub-groups** where different allocation drivers apply (e.g., Radiology: CT, MRI, X-ray).
- **Re-classify** assets for costing purposes if GL groupings are not meaningful for driver selection.

1.1F Commercial business units

- Identify commercial units (e.g., **parking, retail, rented suites, catering/central kitchen, linen services, external diagnostics**).
- Determine whether they **contribute to patient care**:
 - If **no**, treat as **non-patient ROs**.
 - If **yes** (e.g., a central kitchen serving patients and external clients), **partition** costs between patient and commercial activity using auditable statistics (e.g., portions, kg linen, test counts, square meters, hours).
- Document cost centers/accounts in scope and the partition method; include in Stage 6 reconciliation.

1.1G Funded Mandates

- Some programs are funded separately from clinical service delivery and must be costed and reported separately from Reportable Outputs (ROs).
- These activities are not patient-specific and are therefore considered Non-Patient Outputs, but must still be included within scope to ensure a full cost view of organizational activity.
- **Example** programs are listed below. These services are not necessarily delivered at each cluster, however, where services such as these (that are not directly linked to individual patient care) do exist, they should be separately costed:
 - Anti-smoking programs
 - Clinical Education
 - Disease Vectors and Communicable Diseases
 - Emergency Preparedness
 - Environmental Health
 - Field Epidemiology
 - Hajj and Umrah
 - Health Programs and Chronic diseases
 - Infectious Disease Control
 - Mass Gathering Medicine
 - Public Health
 - Radiation Control

- School Health
- Port Security
- Individual programs should be costed beneath the categories – for example Public Health should be disaggregated into Immunizations, preventative programs etc.

1.1H Lease costs (IFRS 16) (OPTIONAL beyond expensed items)

- If including capital/ROU accounting:
 - Recognize **right-of-use depreciation** and **lease interest** per IFRS 16 (**IPSAS 43 – Leases** (effective 1 Jan 2025)).
 - Include **low-value, short-term, and variable** lease expenses where applicable.
 - Ensure lease costs posted to capital centers are **moved to consuming centers** before assignment; document capacity drivers (e.g., device hours, room time).
- If capital/ROU is **not** included (optional status), you shall still **include expensed lease payments** that appear in the GL.

Implementation Steps

Once mature GL systems are implemented within the cluster/ACO the following implementation steps should be followed, however, the core principles should apply within current models.

1. Extract the period general ledger, including a trial balance by cost center and account, and lock the source version using a timestamp or hash.
2. Compile the Cost Inclusion Register for the entities, cost centers and accounts that are within scope, and flag any exclusions with the reason and the approver.
3. Identify third-party services that support outputs, request cost statements from the providers and book the journals required to include these costs in the cost ledger.
4. Decide the capital policy for the period and either load the fixed-asset and lease subledgers or prepare the Capital Exclusion Statement accordingly.
5. Generate the pre-reconciliation report that demonstrates one-hundred percent mapping coverage and the absence of unmapped accounts.

Standard 1.2 Third-Party Expenses

Name	Recognition and treatment of third-party expenses
Standard	Expenses incurred by a third party on behalf of the organization that directly contribute to the delivery of patient care or non-patient outputs shall be included for costing if they are reliably evidenced , valued, and attributable to the reporting period; otherwise, they may be imputed using a documented, standard method. Where no reliable method exists, exclude and disclose.
Purpose	Capture the full economic cost of outputs where material inputs are sourced outside the GL.
Objectives	1. Identify third-party services integral to operations (e.g., corporate/shared services, contracted diagnostics/therapeutics, patient transport, insurance). 2. Obtain expense values and, where feasible, patient-level linkages (or service mapping). 3. Apply standard imputation only where a dataset is incomplete but comparable internal references exist. (For example – only 9 months invoices are available for sent-out laboratory tests – impute the last quarter from the first 3, label it as an estimate and true-up when the invoice arrives) 4. Disclose inclusions/exclusions and methods in Stage 6.
Definitions	• Third-party expense: a cost not initially recorded in the provider GL that supports outputs (e.g., central IT, state-level linen, contracted imaging). • Imputation: deriving an estimated value from a defensible reference (e.g., internal unit prices for similar services). • Objective statistics are fact-based measures such as full-time equivalents served, device endpoints supported or square meters serviced that can be verified independently.

Guidelines (Business Rules)

1.2A Corporate and shared services

- Include central services (e.g., corporate **IT, procurement, HR, legal, data platforms**) where they support hospital operations.
- Obtain **charge-out** or cost detail; where only a lump sum exists, document basis for apportionment to the facility/service lines
- For hosted **shared services** (e.g., a cluster pathology hub), the host provides expense detail to recipients; the host offsets non-recipient activity appropriately.

1.2B Patient transport

- Include **non-emergency patient transport, inter-facility transfers, aerial retrievals** and similar services when funded for patient care and attributable to the provider's activity.
- Where a transport provider **bills the patient directly** (and the cost is not borne by the GL nor by a third-party payer on the provider's behalf), **exclude**.
- Staff costs for internal transport are in scope unless directly billed externally.
- Use separate line items for in-scope patient transport vs other/externally funded transport; assign with objective statistics (e.g., kms, hours, trips, setting).

1.2C Insurance

- Include insurance costs that support operations (e.g., **property/equipment, medical indemnity, workers' compensation**) whether paid centrally or locally.
- If paid centrally, obtain the **allocated value** (preferably by facility/specialty) and include with documentation.

Evidence & linkage (for all 1.2 subsections)

- Prefer **data extracts** enabling traceability to cost centers and, where applicable, to **patient/encounter/RO**.
- For estimates, document **method, inputs, reference sources, period of applicability**, and mark as an **assumption** for refinement.

Implementation Steps

1. List the central services that are consumed by the provider and allocate internal owners.
2. Request certified cost statements that identify cost type, period and the consuming units or services.
3. Select objective cost drivers such as full-time equivalents, device endpoints or serviced square meters and compute the allocation for each consuming cost center.

Illustrative Example

The 3rd party contract for IT (Infrastructure installation and maintenance) Cost Centre has a total expenditure of SAR9m and is allocated on the basis of number of endpoints. There are 9,200 endpoints in the provider distributed as per the table below. This gives an average cost of 978.26 SAR per endpoint (9,000,000 / 9,200).

The allocated cost in each consuming unit is therefore the #endpoints * 978.26:

Consuming unit (Target Cost Centre)	No. Endpoints	Share of total endpoints	Cost per endpoint (SAR)	Allocated cost (SAR)
Ward A	2,800	30.43%	978.26	2,739,130.43
ICU	900	9.78%	978.26	880,434.78
Operating Room 1	1,300	14.13%	978.26	1,271,739.13
Imaging	1,700	18.48%	978.26	1,663,043.48
Outpatients	1,000	10.87%	978.26	978,260.87
Admin Block	1,500	16.30%	978.26	1,467,391.30
Total	9,200	100%		9,000,000.00

Parameters: IT Expenditure = SAR 9,000,000. Cost/endpoint = SAR 978.26 (= 9,000,000 / 9,200).

Standard 1.3 Offsets and Recoveries

Name	Permissible offsetting and recoveries for costing
Standard	Offsetting is permitted only when it better reflects the substance of the transaction for costing and is supported by evidence—for example, error corrections or cost recoveries for services not constituting outputs of the organization. Offsetting must not produce net negative costs in cost center/line items after processing.
Purpose	Apply offsets/recoveries consistently and transparently , to prevent distortion of costs.
Objectives	1. Permit offsetting for error corrections, supplier rebates, and genuine cost recoveries for non-output services. 2. Do not offset revenues that arise from output provision (e.g., patient charging, commercial income, grants/subsidies). 3. Ensure no negative costs remain after offset logic. 4. Document rationale and treatment for all offsets in Stage 6.
Definitions	• An offset or recovery is a credit that reduces an expense which is not tied to the production of outputs, consistent with the presentation principles in IAS 32. • Recovery: Reimbursement for activities not contributing to provider outputs (e.g., seconded staff repaid by another entity). • Contra expense account: a GL account with a credit balance that offsets an expense category (e.g., workers' compensation recoveries). • A negative cost is a value below zero that appears after allocations or assignments and that does not represent a legitimate credit event.

Guidelines

- The organization shall permit offsets for supplier error corrections and for cost recoveries that relate to goods or services that are outside the production of outputs, such as staff secondments.
- The organization shall not permit netting of clinical revenues, grants or subsidies, facility fees or patient charges against expenses that are part of output production.
- The organization shall run a post-processing scan for negative costs and shall remediate any issues.

Permitted to offset:

- Supplier **credit/refund** netted against the original expense.
- **Recoveries** for goods/services **not** contributing to outputs (e.g., payments received for seconded staff supplied to another organization).

Not permitted to offset:

- Commercial revenues; grants/subsidies tied to outputs; facility fees; patient charging (private/compensable/ineligible). Treat these as income, not offsets.

Method & controls:

- Offset within the same cost center/element; avoid negative costs.
- Prior-period recoveries may be netted to the corresponding current-period expense class; disclose in the Offsets & Recoveries Log.
- Maintain log entries with nature, rationale, evidence, period, amounts; review in Stage 6 reconciliation.

1.3A Operationalizing offsetting

- Where feasible, **reclassify** the portion of costs that generate recoveries into an appropriate **non-patient output** cost center instead of netting.
- If reclassification is impractical, treat the recovery as an **estimate** of the cost of the non-output service and net against the corresponding expense line—**without** creating negative costs.
- Recoveries for prior-year costs may be netted against the **same expense class** in the current year (with note).

1.3B Contra accounts & negative costs

- Review **contra expense accounts** and offset the recovery against the related expense category.
- If offsetting yields a **negative** post, follow the negative-cost remediation rule: reclassify to a **non-patient output** or adjust basis to prevent negative totals.

Cross-stage references

- **Stage 2** (Create the Cost Ledger): map **all GL cost centers** to overhead CCs; map **all accounts** to line items; create non-patient outputs where needed.
- **Stage 6** (Review & Reconcile): reconciliation to audited financials; documentation of inclusions, exclusions, offsets, imputations, and (if applicable) capital treatment.

Example Permitted Offset

A nursing manager is seconded to the Hospital A for six months.
The reimburses the cluster SAR 220,000 (GL-recognized).

Item	Value
Nursing salary cost (annual)	SAR 440,000
Secondment reimbursement (GL)	SAR 220,000
Net cost recognized	SAR 220,000

Application

Because the secondment:

- ✓ does not contribute to the hospital's Reportable Outputs, and
- ✓ the recovery is GL-recognized

→ The recovery may be offset.

Only the net SAR 220,000 is included in the nursing cost center.

3 Stage 2 - Create the Cost Ledger

(Read with Stage 1 — Identify Relevant Expenses, and Stage 6 — Review & Reconcile)

This stage converts the **general ledger (GL)** into a structured, frozen **cost ledger** by mapping **every GL cost center** to either a **Cost Ledger Cost Centre (Final CC)** or an **Overhead CC**, and mapping **every GL account code** to a **Line Item**. The result is a **complete, auditable ledger** that supports clinical costing.

A core principle is **matching expenses to intermediate outputs in a way that reflects cause-and-effect**. See 2.1C Output Fractions

Cost-center categories used in Stage 2

- **Direct cost centers**
 - **Patient final CCs** — centers that can link directly to **final outputs** through an appropriate cost driver (ROs) (e.g., wards , Operating Rooms, Orthopedic OP clinics)
 - **Patient intermediate** — centers whose outputs are allocated via **RVUs** to other centers (e.g., **Imaging, Pathology, Pharmacy manufacturing/dispensing**)
 - **Non-patient** — centers whose outputs are non-patient (e.g., teaching & training, research, funded mandate elements, commercial units)
- **Indirect cost centers** — operational services that support clinical delivery but aren't corporate overhead (e.g., **medical records/HIM, catering/food services, portering/transport within facility, sterile services** where treated as site-level support).
- **Overhead cost centers** — corporate/administrative services (e.g., finance, HR, executive, procurement, ICT corporate, general admin, governance, facilities management/corporate estates).

Standard 2.1 — Cost Ledger Creation

This Standard establishes the cost ledger as the basis for clinical costing and describes how expenses are organized so they can be matched to intermediate outputs (CSEs) and final outputs (ROs).

Name	Cost Ledger Creation
Standard	The organisation will prepare a frozen, version-controlled cost ledger each cycle that: - maps every GL cost centre to a Cost Ledger Cost Centre (Final CC) or to an Overhead CC finer local CCs); - maps every GL account code to a Line Item per costing rules; - classifies centres as Direct (patient final / patient intermediate / non-patient), Indirect, or Overhead; - Preserve complete reconciliation from GL → CL → post-allocation and assignment results. - Enable overhead absorption and internal consumption (Stage 3) and assignment (Stage 5). - Maintain version control and a documented audit trail.
Purpose	Create a complete and auditable cost ledger that links GL expenses to cost objects for consistent clinical costing and comparability for allocation/assignment (Stage 5) and assurance (Stage 6).
Objectives	- Ensure 100% coverage: all GL cost centers → Final CC or Overhead CC; all GL accounts → Line Items. - Preserve lineage from GL → CC → (where applicable) intermediate outputs → final outputs. - Apply the agreed CC categorization (Direct/Indirect/Overhead) with Direct split into patient final / patient intermediate / non-patient. - Integrate third-party and internal-trading usage. - Run data-quality checks and retain evidence for Stage 6.
Definitions	Cost Ledger Cost Centre (Final CC) list — the reference list to which all GL cost centers must be mapped (providers may add local granularity beneath). (Annex C – CL Final Cost Centers) Overhead Cost Centre List — the reference list to which all GL cost centers must be mapped (providers may add local granularity beneath). (Annex E – CL Indirect & Overhead Cost Centers) Patient intermediate CCs — RVU-source centers whose outputs are allocated to other centers (e.g., Imaging, Pathology, Pharmacy manufacturing/dispensing, OR/ICU where used as RVU sources).

	• Medical Intermediate CCs (local) — locally created CCs used only to split medical pay across sub-functions (OR, ward rounds, OP clinics, ED, admin, research, teaching, etc.) not part of the Final CC list. • Line Items — Normalized expense groupings for costing (Annex A – Line Item Definitions). • Intermediate outputs — RVU-based measures generated by patient intermediate CCs (and by Medical Intermediate CCs solely for splitting medical pay).
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The GL is organized for financial reporting. Costing requires a **cost-sensitive structure** that separates production from overhead, and differentiates **Final** and **Intermediate** production. In KSA standards, **CSEs** are restricted to RVU-based services (e.g., lab tests, imaging exams, pharmacy units). Time-based measures in theatres/ICU/wards (e.g., OR minutes, ICU hours, OBDs) are **Final allocation activity drivers**, not CSEs.

The CL applies Stage-1 decisions (e.g., third-party inclusions; offset/recovery treatments) and then structures expenses into CCs and line items consistent with guidance. The CL must reconcile to the GL (by account and total) and is frozen before Stage 3.

Guidelines

2.1A Cost-centre mapping

- Identify centers and classify as **Direct (patient final / patient intermediate / non-patient), Indirect, Overhead**.
- **CC Classification:** Each CC must be classified as **Final, Intermediate, or Overhead**.
 - **Intermediate CCs** are only those that generate RVU-based **CSEs** (pathology, imaging, pharmacy compounding/dispensing, and any regulator-approved equivalents).
 - **Medical Intermediate CCs (local)** may be used solely to fraction **medical pay** into sub-functions (e.g., OR cover, ward rounds, clinics, ED, admin, research, teaching) that create **local medical CSEs** for onward assignment in Stage 5.
- Consult production experts, operational managers, and finance/reporting to confirm design.
- Map **final** centers to **Attachment C —Final Cost Centers**.
- If a production unit (e.g., **transplantation**) lacks a GL center, **create** a final center in the cost ledger and transfer the appropriate share of expenses (see **2.1C Output Fractions**).

2.1B Account code / Line Item mapping

- Source expenses from **GL** and permitted third-party sources (Standard 1.1).
- Map GL accounts to **Line Items** (Attachment A).
- Where GL is overly granular/inconsistent, roll up to Line Items that **meaningfully describe the expense type consumed** in generating outputs.
- Where GL is not sufficiently granular/inconsistent, disaggregate Items that **meaningfully describe the expense type consumed** in generating outputs.

2.1C Output Fractions (for example medical sub-functions)

Medical staff typically perform a wide range of distinct activities across the organization, each with different patterns of patient interaction and resource use.

To reflect the consumption of medical effort, the associated salaries should be apportioned over relevant sub functions based upon the activities that drive their efforts. This approach ensures that the cost of Medical Staff are attributed proportionately to the Reportable Outputs based upon the best available information, supporting fairness, transparency and causal costing.

Usually medical pay costs sit in a single center but staff work across multiple sub-functions, this expenditure should be **split** using **best available** evidence:

- **Operating Room (OR/theatres):** theatre list plans, **OR minutes per case**, anesthesia time, consultant/assistant presence.
- **Ward rounds / inpatient care:** documented round time, **patient-days**, team census, handover duration.
- **Outpatient clinics (OP):** clinic templates/sessions, **encounter counts**, acuity/complexity weights.
- **Emergency Department (ED) cover:** rosters/hours, triage streams, presentations.
- **Administrative duties:** job plans, meeting logs, rostered admin sessions.
- **Research:** time logs, **grant-funded FTE**, protocol workload.

- **Teaching & training:** scheduled **teaching sessions**, supervised lists/clinics, trainee numbers. This is specifically dedicated teaching sessions – and would typically exclude ward rounds conducted with trainees.

Choice of basis (select the most defensible locally):

- **Time-based:** % contracted hours / session minutes per sub-function.
- **Activity-based:** counts (encounters, procedures, tests) with/without **relative weights**.
- **Mixed:** time plus weighted activity where intensity differs.

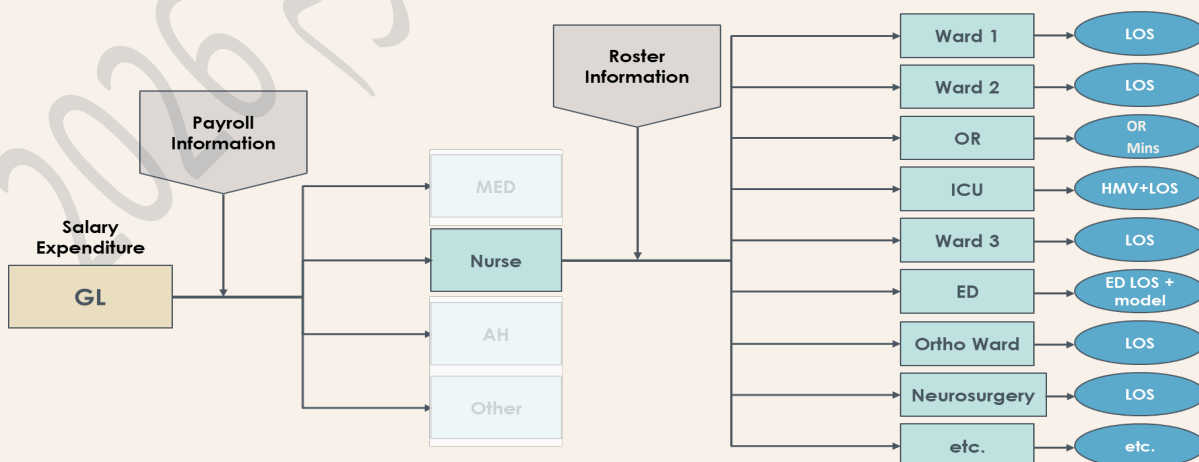
! Caution:

If a calculation base is used (e.g. minutes per OP visit/ OR time / Ward Round) you **MUST** balance this calculation to ensure that elements that may not be captured (e.a. FD consultations) are reflected in the final allocation.

2.1C1 Output Fractions (Nursing)

When medical pay costs sit in a single center but staff work across multiple sub-functions, **split costs** using best available evidence – this will typically be the nurse **rosters**.

The roster data should be used as the fractioning mechanism to allocate central nursing into the final nursing cost centers as shown in the flow diagram below:



Validation & maintenance — test fractions with clinical leads, **document** sources/methods/approvals, and **review** each cycle.

2.1C Implementation Steps

1. Extract the payroll and rote data for the medical/nursing intermediate cost centers and profile time by sub-function (medical) and ward/department for nursing for the period.
2. Compute the fractions that result from the profile and present them to clinical leads for validation and sign-off.
3. Apply the fractions to the intermediate pools and create medical CSEs for operating-room cover, ward rounds, outpatient clinics, emergency department cover and administration or teaching.
4. Apply the fractions to the intermediate pools and create nursing CSEs for individual wards, clinics, departments or OR/SPS.
5. Publish the fraction tables with the effective dates and store the evidence with the approvals.

2.1C Worked Example

A. Fractioning the Intermediate Medical Cost Centre (IMCC)

The example below illustrates the fractioning of General Surgery medical intermediate cost centre. This is one approach – however all approaches listed in section 2.1C Output Fractions (for example medical sub-functions) are valid.

The total expenditure is SAR 1,300,000. The table below illustrates an example approach to fractioning

Sub-function (CSE)	Fraction %	IMCC pool (SAR)	Cost by sub-function (SAR)
OR cover	45%	1,300,000	585,000
Ward rounds	25%	1,300,000	325,000
Outpatient clinics	20%	1,300,000	260,000
ED cover	5%	1,300,000	65,000
Admin/Teaching	5%	1,300,000	65,000
Total	100%	1,300,000	1,300,000

B. Unit costs for each Medical CSE

Sub-function (CSE)	Period units	Unit description	Cost per unit (SAR)
OR cover	95,000	OR minutes	6.1579
Ward rounds	12,000	Ward occupied bed-days	27.0833
Outpatient clinics	40,000	Clinic minutes	6.5000
ED cover	13,000	ED Consults	5.0000

C. Patient-level illustration

Patient	Driver (CSE)	Patient units	Unit cost (SAR)	Assigned cost (SAR)
Patient X	OR minutes	150	6.1579	923.68
Patient X	Ward OBDs – Medical Consultant Component	5.34	27.0833	144.62

2.1D Non-patient outputs

- Identify non-patient centers (e.g., **teaching & training, research, funded mandates**)
- Confirm where expenses sit; allocate appropriate **overheads** (cleaning, security, corporate).
- Record explicitly to support **financial reconciliation**.

2.1E Governance, freeze & capital

Once clusters/ACO's have implemented soft/hard close the following steps should be followed:

- Build to a **run calendar; freeze** the ledger; use **change control** for post-freeze corrections (new Version ID).
- (KSA optional) If capital is included, retain policy notes (thresholds, useful lives, revaluation/IFRS-16 treatment); if excluded, include a **Capital Exclusion** statement.

2.1G Data quality & evidence

- Run DQ tests (completeness, uniqueness, valid dimensions, sign/thresholds, mapping coverage, GL tie-out) and retain evidence for Stage 6.

Standard 2.2 — Matching Cost Objects and Expenses

This standard sets the order of preference and the methods for matching expenses to cost objects, distinguishing direct matching from allocation. It ensures consistent, causal, and auditable rules that connect fully absorbed CC costs to patient-level outputs in Stage 5, and defines how CSEs (from Intermediate CCs) are matched to patient encounters.

Name	Matching Cost Objects and Expenses
Standard	Expenses will be matched to cost objects using a hierarchy of evidence that reflects cause-and-effect: • Direct matching to the output (RO/CSE) where value and allocation are clear and logical; • Proportional allocation using Measures/RVUs indicating causality (e.g., OR minutes, ICU hours, weighted exam counts); • Systematic/consistent allocations using objective statistics where direct/RVU bases do not exist (e.g., floor area, FTEs, metered use) Partial-direct expenses will be split accordingly; methods must be credible to operational managers and reconcilable to local systems.
Purpose	Achieve accurate, consistent, and auditable attribution of expenses to cost objects.
Objectives	1. Apply the hierarchy Direct → RVU (only for patient intermediate CCs and medical pay) → Consistent statistics. 2. Split expenses that are direct in part only. 3. Use evidence-based output fractions for medical sub-functions (OR, ward rounds, OP clinics, ED, admin, research, teaching) when needed. 4. Select allocation statistics that are valid, reliable, and feasible. 5. Document methods/assumptions and reconcile to local systems (Stage 6).
Definitions	• Direct matching — clear, economical link to a specific output (e.g., implant at price paid to the case). • Relative Value Units (RVUs) — proportional weights reflecting causality (e.g., OR minutes, ICU hours, modality-weighted imaging exams, complexity weights). • Systematic allocation — rules-based allocation using objective statistics (e.g., area, metered consumption, FTEs). • Partial direct expense — one GL line containing a direct portion plus residual indirect/overhead that must be split.

The Cost Ledger is arranged by cost centers that reflect operational accountability and allow accurate matching between activity and resources.

The structure must be:

- **Complete** — all GL accounts must map to a CC
- **Consistent** —parent → local child hierarchy
- **Stable but version-controlled** — changes documented with rationale

Final CCs interface with Reportable Outputs but **do not contain clinical event detail**; instead, RO identities come from HIS/PAS/ED/OP sources.

Intermediate CCs include:

- Production CCs such as Imaging, Pathology, Pharmacy
- **Medical intermediate CCs**, which subdivide medical pay into functions such as:
 - OR cover
 - Ward rounds
 - OP clinics
 - ED cover
 - Admin
 - Teaching
 - Research

These IMCCs are used only to create CSEs to permit onward allocation.

Overhead CCs must be fully absorbed and allocated to IMCCs and Final CCs before assignment.

Guidance (Business Rules)

3.1A Build & maintain the Final CC Master

Each General Ledger (GL) cost center must be mapped to the Cost Centre Framework to ensure that all expenditure is placed in an appropriate structure for costing. Where required, organizations may create additional local cost centers to obtain finer granularity for internal management — but these must still roll up into the structure.

Business Rules

1. Mandatory mapping

- Every GL cost center must map to exactly CC one category:
 - Final CC (patient-facing)
 - Final CC (non-patient)
 - Intermediate CC (only where needed — e.g., medical sub-functions)
 - Overhead CC
- Many-to-one mapping is permitted (e.g., multiple GL CCs → single CC).
- Local child CCs may be created to add detail, but must roll up clearly to a CC.

2. Minimum CC attributes

Each CC should record the following attributes to ensure clarity and governance:

- CC name / CC ID
- Parent CC
- Category (Direct / Indirect / Overhead)
- Final CCs may be patient-facing or non-patient
- Setting (inpatient / ED / OP / ICU / etc.)
- Associated specialty or service area
- Facility / geographic location (where applicable)
- Effective dates (start / end)
- CC owner / manager
- Notes / description

Note:

The level of detail recorded should be enough to support clear cost allocation and governance, without requiring unnecessary or unavailable clinical data at the CC level.

3. Governance & freeze

- The Final CC Master must be version-controlled.
- At cycle close, the list should be frozen, archived, and stored with a Version ID and change log.
- Changes require documented approval.

Worked Example

Local CC ID	Local CC Name	Parent CC	Category	Setting	Service Line	Facility	Owner	Notes
2110	General Surgery Ward A	Surgical Ward	Final (patient)	Inpatient	General Surgery	Site A	Nurse Manager	30 beds
2112	General Surgery Ward B	Surgical Ward	Final (patient)	Inpatient	General Surgery	Site B	Nurse Manager	24 beds
3201	Medical Imaging Dept	Radiology	Intermediate	All patient settings	Radiology	All sites	Radiology Chief	CSE RVUs applied
4501	Executive Admin	Executive Services	Overhead	N/A	Admin	Corporate	COO	Allocated via FTE
5601	Facilities & Maintenance	Facilities Mgmt	Overhead	N/A	Support	Site A	Facilities Manager	Allocated via m ²

3.1B Mapping rules by care area

- **Inpatient wards:** create separate Final CCs where care type/bed type differs (e.g., **ICU vs HDU vs ward; acute vs rehab**). Avoid mixing fundamentally different patient groups in one CC.
- **Theatres/OR :** treat as **patient final CCs**
- **Emergency Department:** Final CCs by **functional stream** if materially different (e.g., fast track vs acute) where supported by drivers and reporting.
- **Outpatients/Non-admitted:** Final CCs by **clinic grouping** or **specialty**
- **Allied Health:** Final CCs by professional group **if** they deliver final outputs; where they primarily supply to other centers via measurable units, configure as **patient intermediate CCs** with RVUs.

- **Pharmacy:** distinguish **manufacturing/compounding/dispensing** (often **patient intermediate**) from ward-stock and direct patient supply flows per local practice.
- **Imaging & Pathology:** **patient intermediate CCs** producing RVUs (exam/tests) to be consumed by final CCs.
- **Teaching/Research/Boarders/Commercial:** **non-patient CCs** (direct: non-patient); ensure they absorb appropriate overheads and are reportable for reconciliation.

3.1C Medical Intermediate CCs (local) for medical pay

- Create a mechanism to split **medical remuneration** across sub-functions: **OR, ward rounds, OP clinics, ED, administration, research, teaching.**
- Use evidence-based fractions (see Stage 2, 2.1C) to derive **intermediate outputs** that then flow to **final outputs (ROs).**
- These CCs are **not** part of the Final CC list; maintain a clear mapping and disclose their use in the submission notes.

3.1D Hygiene & integrity

1. Aim for **one dominant purpose per CC**; avoid mixing unrelated services.
2. Where GL centers are mixed, **split** into appropriate Final CCs using agreed bases; document method and approvals.
3. Maintain **active/inactive** flags and retire obsolete CCs cleanly (no live postings).

Standard 3.2 — Allocation of Expenses in Overhead Cost Centres

Name	Allocation of Expenses in Overhead Cost Centers
Standard	The organization shall fully allocate overhead cost centers by using the reciprocal/simultaneous method and it shall use objective drivers while recognizing overhead-to-overhead consumption before allocation costs to consuming cost centers.
Purpose	To prescribe an order-independent, reproducible method for allocating overhead costs that recognizes mutual consumption between overhead functions, and produces results that are consistent and comparable at a level for reporting and benchmarking.
Objectives	Drivers Register (mandatory). Maintain a Drivers Register for all overhead cost centers that shall include coverage thresholds, specified fallbacks, and documented approvals. Driver selection shall align to Annex E – CL Overhead Cost Centers, which lists each overhead cost center and a ranked preference order of three cost drivers. Order-independent allocation (mandatory). Apply a reciprocal (simultaneous) overhead allocation that shall produce identical results irrespective of processing order, with documented parameters (e.g., convergence tolerance, iteration limits). Evidence pack (recommended; minimum content). Providers should maintain an evidence pack that demonstrates that overhead cost centers have been fully allocated (“emptied out”) to intermediate and/or production cost centers, with no residual balance remaining in any overhead cost center. At minimum, this includes pre- and post-allocation balances by cost center showing zero residuals and a simple allocation lineage. Detailed configuration snapshots are optional where the allocation is subsequently scored during audit using the CCST (Clinical Costing Scoring Tool). Quality scoring and comparability (mandatory). The CCST shall compute a driver quality score for each overhead cost center based on adherence to Annex E: using the 1st-preference driver scores highest, the 2nd and 3rd preferences score progressively lower, and use of a fallback or imputed driver is penalized. Any deviation from the ranked preference order shall be justified in the exception log and approved per governance.
Definitions	Overhead Cost Centre (OCC): A non-patient-facing center whose resources support other cost centers. Intermediate Cost Centre (ICC): A support/feeder center that accumulates costs before reallocation to production (clinical) centers.

	• Production Cost Centre (PCC): A patient-facing center (clinical activity) that receives allocated overheads and ultimately feeds patient-level costs. • Reciprocal (Simultaneous) Allocation: An allocation method that resolves mutual services exchanged among overhead cost centers, typically via simultaneous equations or iterative methods. • Order-independent: Allocation results are invariant to the sequence in which overhead cost centers are processed (within defined tolerance). • Drivers Register: Governing register listing, per OCC, the accepted cost drivers, preference order, coverage thresholds, fallbacks, and approvals. • Coverage Threshold: Minimum proportion/quality of measured driver data required for acceptance before a fallback is invoked. • Fallback Driver: Lower-preference driver used when coverage/quality thresholds for a higher-preference driver are not met. • Preference Order: The ranked sequence (1st/2nd/3rd) of acceptable drivers per OCC defined in Annex E. • “Emptied Out” (Fully Allocated): Post-allocation state where all OCC balances equal zero, with all amounts transferred to ICCs and/or PCCs. • CCST (Clinical Costing Scoring Tool): The tool used to validate allocation completeness and score driver quality in accordance with Annex E. • Exception Log: Record of deviations from Annex E (or standard practice), including rationale and approval reference.
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Guidance (Business Rules)

3.2A Hotel Services

Scope

This Business Rule specifies that expenses accumulated in hotel-service overhead cost centers are allocated to final cost centers.

Objective

- Ensure all hotel-service overhead expenses are allocated to final cost centers and remain visible after allocation.
- Support **consistency and comparability** for reporting and benchmarking.

Business Rules

- Hotel-service expenses are generally recorded in overhead cost centers (OCCs).
- Cost centers and line items **shall** be defined and mapped per **Standard 2.1 Cost Ledger Framework**.
- Allocation statistics (drivers) **should** be selected with operational teams and aligned to **Annex E – CL Overhead Cost Centers** (ranked 1st/2nd/3rd preference) to maximize CCST quality scores.
- Apply the allocation method in **Standard 3.2 Allocation of Expenses in Overhead Cost Centers** to allocate hotel-service overheads to final cost centers.
- Where consumption is directly attributable to activity, **directly allocate** to final products using utilization data (e.g., patient meal ordering integrated with HIS/ERP → allocate per meal type/quantity to ward/patient).
- Where hotel services operate as commercial activities, match expenses to activity (e.g., reorganize expenses or map intermediate products) and include them in relevant cost products. Where appropriate, use **output fractions** (see **Business Rule 2.1C Output Fractions**).
- Do **not** exclude commercial hotel-service activities from overhead absorption; ensure they absorb relevant overheads commensurate with service production.
- If services are removed from specific study outputs, disclose **total costs** including both overhead and final costs.
- Report hotel-service expenses under the **Hotel** line item at the final cost center level per **Standard 2.1**.
- For reconciliation, specify hotel-service expenses per **Standard 6.2 Reconciliation to Source Data**.
- **Evidence (lightweight):** Providers **should** maintain an evidence pack showing that hotel-service OCCs are **fully allocated (“emptied out”)** to intermediate/production cost centers (zero residuals). Allocation completeness and driver quality will be **scored during audit using the CCST**.

3.2B Depreciation (Optional)

Scope

This optional Business Rule sets out how depreciation recorded in overhead or other cost centers may be allocated to final cost centers and remain visible after allocation.

Objective

Where adopted, ensure depreciation is allocated to production/final cost centers and reported transparently.

Support **national-level comparability** while allowing local policy choices (SOCPA/IPSAS/IFRS-aligned).

Business Rules (apply only if depreciation allocation is adopted)

- Depreciation (non-cash) is **in scope** for patient-level costing when included by policy.
- Treat depreciation as an overhead for allocation purposes and report under the **Depreciation** line item at the final cost center level per **Standard 2.1**.
- Map to appropriate ledger line items (e.g., buildings, equipment, right-of-use assets) and reclassify mixed codes so the depreciation component is visible. If depreciation is embedded in an indivisible cross-charge/fee-for-service, avoid double counting—leave it within that charge and follow that service's allocation.
- Confirm ledger handling with Finance (e.g., capital/holding centers, central depreciation CC).
- **Identifying and assigning:** Assign depreciation to relevant OCCs or directly to final centers (via GL or allocation statistic). Transfer items parked in asset/holding centers to a central depreciation CC before allocation.
- **Shared assets:** Where assets are used across settings, choose a driver reflecting **relative use** (aligned to **Annex E** where applicable) and document rationale.
- **Allocate OCC depreciation:** Allocate to final cost centers using the **same statistics** as other costs within that OCC (consistency principle).
- **Allocate to patients:** From final centers, allocate depreciation to patients using suitable drivers (e.g., ICU ward days, hours of mechanical ventilation, code-based identification).

- For reconciliation, specify depreciation per **Standard 6.2**.
- **Evidence (lightweight):** Providers **should** maintain an evidence pack showing depreciation-bearing OCCs are **fully allocated (“emptied out”)** with zero residuals; completeness and driver quality will be **scored during audit using the CCST**.
- **Note:** If local policy treats certain assets as **direct** to a clinical center (e.g., ICU-owned ventilators), recognize depreciation as **direct** in that center and allocate to patients accordingly; the optional OCC allocation above would not apply for those items.

3.2C Corporate Overhead

Scope

This Business Rule defines corporate overheads and specifies that such expenses, when accumulated in overhead cost centers, are allocated to final cost centers.

Objective

Ensure corporate overheads are allocated to production cost centers **prior** to patient-level costing.

Ensure **consistent treatment across KSA providers** (e.g., hospital, Health Cluster/shared-service entities) to support benchmarking.

Business Rules

- Identify corporate arrangements (e.g., Health Cluster shared services, hospital group services) that give rise to corporate overheads relevant to the provider.
- Corporate overhead **should not** extend beyond **one level above hospital management**. Day-to-day management of the hospital or the managing cluster entity is **in scope**; Ministry-level policy/strategy functions are **out of scope**.
- Scope covers functions that would otherwise sit at hospital level to produce final hospital products (e.g., cluster-level finance providing hospital financial management; central PLICS/costing services for member hospitals).
- Where central services are provided, assess them against this scope principle for inclusion.

- Determine the provider's **share** of in-scope corporate overheads and bring them into operating expenses (via GL charge, journal to hospital GL, or transfer into the costing ledger).
- Map corporate overheads per **Standard 2.1 Cost Ledger Framework** to the appropriate operating line item(s) (e.g., **All Other Goods and Services**) using **derived account codes** where needed to isolate corporate portions.
- Reclassify specific components within corporate overhead (e.g., depreciation, leases) to their correct line items where separate allocation is required.
- Allocate corporate overheads to final cost centers using **usual overhead allocation statistics**, aligned to **Annex E** driver preferences where relevant, and record approvals in the **Drivers Register**.
- For reconciliation, specify corporate overhead per **Standard 6.2**.
- **Evidence (lightweight):** Providers **should** maintain an evidence pack demonstrating that corporate-overhead OCCs are **fully allocated ("emptied out")** to intermediate/production cost centers (zero residuals). Allocation completeness and driver quality will be **scored during audit using the CCST**.

Standard 3.3 — Internal Consumption Matrix

Name	Internal Consumption Matrix
Standard	The organization will maintain an Internal Consumption Matrix that identifies provider centers that supply services internally (e.g., Imaging, Pathology, Pharmacy manufacture/ dispensing, Catering, Linen, Portering/Couriers where in scope), the consumer centers that receive them, and the usage measure (e.g., CSE counts/weights, minutes, hours, portions, kilos). The matrix must be complete for the period , align to the Final CC Master , and be frozen and version-controlled each cycle.
Purpose	Represent internal flows of services so that costs can be allocated to where resources are consumed , avoiding double counting and enabling defensible assignment.
Objectives	1. Identify provider CCs and their consumer CCs; define a usage measure and data source for each flow. 2. Prefer observed usage (actual counts/time) over proxies; where proxies are used, document rationale. 3. Ensure internal trading flows are recorded once, with clear provider → consumer direction to avoid duplication. 4. Where transfer prices exist internally, retain for management reporting but use cost-based allocation for clinical costing unless otherwise mandated. 5. Reconcile provider totals to GL/ledger and consumer totals to assigned costs (Stage 6).
Definitions	• Provider center: CC that supplies services (e.g., Imaging exams, Pathology tests, compounded meds, catering portions). • Consumer center: CC that receives/uses services (e.g., wards, ED, clinics). • Usage measure: the CSE count/weight or other objective statistic used for allocation (e.g., OR minutes, ICU hours, trays/portions, kilos, moves). • Transfer price: internal charge used for managerial purposes (not required for clinical costing unless mandated).

Guidance (Business Rules)

3.2A Identify provider CCs & services

- Typical **provider CCs** (not exhaustive): **Imaging, Pathology, Pharmacy manufacturing/dispensing, OR** (when used as RVU source), **ICU** (when used as RVU source), **Catering, Linen, Portering/Courier** services, **CSSD** (instrument sets/turns) where treated as internal services.

3.2B Define usage measures & sources

- For each provider service, define the **usage unit** and **source system**:
 - Imaging: **exam counts/weighted modalities** from RIS/PACS.
 - Pathology: **test/battery counts/weights** from LIS.
 - Pharmacy manuf./dispense: **preps/doses/weights** from pharmacy systems.
 - OR: **OR minutes** (wheels-in to wheels-out) from theatre system.
 - ICU: **ICU hours**; if acting as RVU source, ensure non-overlap with ward days.
 - Catering/Linen/CSSD/Portering: **portions/kilos/sets/turns/moves** from FM/logistics systems.
- Validate period coverage and **consumer attribution** (patient, ward, clinic, theatre, etc.).

3.2C Build & freeze the matrix

- Construct the **provider** → **consumer table** with: provider CC, consumer CC, usage unit, period volume, data source, lineage IDs, notes.
- Freeze** with the same Version ID as the Final CC Master.

3.2D Allocation

- Perform **activity-based allocation** using the usage measures unless a rule specifies otherwise.

3.2E Cross-site/Inter-entity flows

- Record flows across **sites/entities** within the to ensure that all resources consumed in the care of a patient are reflected.
- External purchases (true third-party) are handled under Stage **1.2**.

3.2F Data quality & reconciliation

- Reconcile provider volumes to source systems and GL/ledger totals; investigate missing/zero/negative usage.

Maintain a **DQ log** and remediation status; unresolved material issues require **governance sign-off** before Freeze

Cross-stage references

- **Stage 2:** ensures complete mapping (GL → **Final/Overhead CCs**; **GL accounts** → **Line Items**) and sets the fractioning approach for **medical pay**.
- **Stages 4–5:** use the Final CC Master and the Trading/Consumption Matrix to **measure** and **assign** costs to **outputs**.
- **Stage 6:** reconciles totals, documents assumptions, and provides assurance artefacts (frozen masters, DQ logs, change control).

4 Stage 4 - Identify Outputs

Stage 4 identifies and classifies all costed activity for the period.

It defines how **Reportable Outputs (ROs)** and intermediate activity (e.g., RVU-based services) are listed, measured, and sourced from clinical systems.

This stage also establishes the registers and reference lists required for costing in Stage 5, and ensures activity can be reconciled in Stage 6.

⚠ Important Notes:

- Use the KSA Minimum Data Set (MDS) specifications for activity definitions and data items.
- Final outputs (ROs) include admitted episodes, ED presentations, and non-admitted encounters; non-patient outputs include teaching/training, research, boarders, and other non-patient services.
- CSEs are only used where services act as RVU sources (e.g., Imaging exams,

Standard 4.1 — Output Types & Scope

Name	Output Types & Scope
Standard	The organization will identify all outputs within the reporting period and classify them into final outputs (ROs) , intermediate outputs (CSEs) (only where required for RVU-based allocation), and non-patient outputs , consistent with definitions and the KSA MDS . The classification must align with the Final Cost Centre list and the Final CC Master from Stage 3.
Purpose	Create a complete, consistent classification of outputs to support correct measurement, allocation, and reconciliation.
Objectives	1. Identify all outputs for the period across all sites/entities in scope. 2. Classify outputs as ROs, CSEs (where needed), or non-patient outputs using definitions.

	- Align output classification with Final CC categories (patient final / patient intermediate / non-patient) from Stage 3. - Ensure no activity gaps: every recorded service is either an RO, a CSE (where required), or a non-patient output.
Definitions	Final outputs (ROs): cost objects that end the costing chain (e.g., admitted episode, ED presentation, non-admitted encounter, non-patient outputs). Intermediate outputs (CSEs): measurable units used as RVUs to allocate costs from patient intermediate CCs (e.g., Imaging exam, Pathology test, Pharmacy compounding/dispense unit, OR minute, ICU hour). Intermediate CCs (local): local CCs used to split cost centers that are inconsistent with allocation to patients such as medical pay or centralized nursing pay. To be suitable for allocation to patients these costs need to be divided by sub-function (e.g. OR, ward rounds, OP clinics, ED, admin, research, teaching for medical pay) into CSEs that then allocate to ROs.

Guidance (Business Rules)

4.1A —Data Sets

Intent

Ensure output types and their counting rules are consistent with KSA definitions so that results are comparable across providers and periods.

Requirements

- Use definitions: Apply KSA MDS definitions for admitted episodes, ED presentations, non-admitted encounters, maternity/newborn, mental health, and boarders.
- Map service catalogues: For intermediate outputs (CSEs), maintain catalogues for imaging (modality and weight), pathology (tests, batteries, and expansion rules), pharmacy (compounding and high-cost dispensing), operating rooms (minute definitions), and ICU (hours).
- Apply consistent counting rules: Where RVU schedules exist (e.g., modality weights), adopt them; where they do not, document and govern local definitions with sign-off.
- Classify by use:
 - If an activity is primarily consumed by other centers and measurable in RVU-like units, classify it as a CSE.
 - If an activity directly represents patient care that concludes a care event, classify it as a final output (RO).

- Activities that are not patient care are non-patient outputs and must absorb a fair share of overhead.
5. Medical pay handling: Medical expenditure should be split into sub-functions (OR cover, ward rounds, clinics, ED cover, administration, research, teaching). Use these only to allocate medical costs onward to ROs.
 6. Third-party services: Classify off-site/contracted imaging, laboratory, or other services as CSEs when their activity is consumed by ROs; ensure patient-level detail or a defensible crosswalk (see 4.2C).

Worked example (classification)

- **Imaging CT:** measured in modality-weighted exams; consumed by inpatient, ED, and outpatient ROs ⇒ CSE.
- **Teaching session: no patient;** recognized obligation under cluster policy ⇒ non-patient output with overhead absorption.

Standard 4.2 — Information Requirements

Name	Output Types & Scope
Standard	The organization will maintain complete, reliable information inputs that allow costs to be matched to outputs. This includes (a) Overhead Allocation Statistics , (b) Final Allocation Activity Drivers , and (c) Feeder Data and Matching from authoritative clinical/administrative systems, all conforming to KSA MDS definitions and period cut-offs.
Purpose	Ensure all data required to allocate and assign costs is available, valid, reconciled, and auditable.
Objectives	1. Define and govern the Overhead Allocation Statistics used to release overhead to production areas. 2. Define and govern the Final Allocation Activity Drivers used to assign production costs to outputs (ROs) and to create/consume CSEs. 3. Establish robust Feeder Data and Matching rules from authoritative systems, including third-party services, with clear identifiers, timeline integrity, and reconciliation to operational totals.
Definitions	1. Overhead Allocation Statistics: Non-patient operational measures used to release overhead (e.g., serviced square meters, FTE, total expenditure, transaction counts). 2. Final Allocation Activity Drivers: Output-facing measures used in matching and assigning production costs (e.g., operating room minutes, ICU minutes, ward occupied bed-days with/without acuity, clinic minutes, ED resource intensity units, imaging RVUs, pathology RVUs, pharmacy units, allied health minutes). 3. Feeder: An extract or interface from an authoritative system of record (for example, HIS/EHR, RIS/PACS, LIS, theatre management, ICU, pharmacy, scheduling). 4. Authoritative source: The system of record for a given activity type (e.g., admissions/discharges in the HIS; imaging exams in RIS/PACS).

Guidance (Business Rules)

4.2A — Overhead Allocation Statistics

Intent

Provide auditable, transparent statistics for releasing overhead to production cost centers before patient-facing assignment occurs.

Minimum content and governance

1. **Driver inventory:** Maintain a controlled register listing, for each overhead pool, the **primary driver**, the **fallback driver**, **owner**, **frequency**, **coverage threshold**, and **validation tests**.
2. **Accepted drivers (illustrative)** See Annex E – CL Indirect & Overhead Cost Centers for full coverage:
 - **Cleaning Services:** serviced square meters (weighted by risk/frequency).
 - **Information Technology:** supported device endpoints/PCs; active users.
 - **Finance:** transactions processed or cost-center expenditure.
 - **Human Resources:** Headcount or FTEs
 - **Board/Corporate Governance:** Total Expenditure or Headcount.
3. must be **fully** allocated to **Final and Intermediate Cost Centers**, using approved allocation statistics (Annex E – CL Indirect & Overhead Cost Centers) that demonstrably reflect consumption.
4. **Time alignment:** The measurement period of the statistics must align with the costing period or be adjusted with documented methodology.
5. **Audit trail:** Retain source reports, data lineage, and change logs in the audit file.

4.2B — Final Allocation Activity Drivers

Intent

Provide the operational statistics used to assign production costs to ROs and to create/consume CSEs, ensuring cause-and-effect and internal consistency.

Minimum content and governance

1. **Statistics register:** For each production cost center, define the **primary assignment measure** and **fallback(s)**, ownership, calculation method, frequency, and QA rules.
2. **Accepted measures (illustrative):**
 - **Operating rooms:** wheels-in to wheels-out minutes/Knife-to-skin; fallback booked minutes after excluding cancellations.

- **ICU:** ICU minutes or hours; optional acuity weights with documented governance.
 - **Wards:** occupied bed-days (counted in minutes) (optionally acuity-weighted); ensure alignment to transfer rules.
 - **ED:** resource intensity classifications based on CTAS or clinician time; fallback total ED time.
 - **Outpatients:** clinic minutes or visit-level duration; fallback weighted attended visits.
 - **Imaging/Pathology:** RVUs per locally approved schedules per exam/test.
 - **Pharmacy:** preparation/dispense units and high-cost items at actual patient-level cost.
 - **Allied Health:** treatment minutes or weighted contacts.
3. **Precedence and fallbacks:** Define where direct assignment at actuals overrides averages (e.g., implants, high-cost drugs). Document fallback order and when it may be invoked.
4. **Consistency checks & QA:**
- a) **Coverage levels:** Record actual coverage for key timestamps/measures (e.g., OR wheels-in/out, ICU hours, ward OBDs, ED time, clinic minutes). Do **not** set a fixed % target here; instead **report the observed coverage** and any gaps, with remediation status.
 - b) **Outlier detection:** Scan and investigate **negative or impossible durations** - , extreme percentiles (e.g., above operationally plausible limits), or timestamp inversions.
 - c) **Time alignment:** Confirm that assignment measures are within the reporting period (or properly adjusted) and align to transfer/episode rules.
5. **Medical IMCC fractions:** Establish sub-function fractions (OR cover, ward rounds, clinics, ED cover, administration, research, teaching). Create **local medical CSEs** and consume them into ROs using validated usage.

Worked examples

- **OR nursing pool SAR 65.0m over 1.55m OR minutes ⇒ SAR 41.94/min.**
A 150-minute case attracts **SAR 6,291** (plus any patient-level implants at actuals).
- **ICU pool SAR 28.0m over 6,600k hours ⇒ SAR 4.2424/minute.**
A 36-hour stay (2,160 minutes) attracts **SAR 9,163.60** before other CSEs.

4.2C — Feeder Data and Matching

Intent

Strive to ensure all activity used for costing is sourced from authoritative systems with reliable identifiers and timestamps, can be matched to the correct encounters, and reconciles to operational totals.

Feeder scope and artefacts

1. **Feeder catalogue:** Maintain a catalogue of feeds from HIS/EHR, RIS/PACS, LIS, theatre, ICU, pharmacy, scheduling, facilities/logistics, and any **third-party providers** (e.g., contracted MRI).
2. **Authoritative system designation:** Identify the system of record for each activity type and document lineage (query/specification, extract schedule, owner).
3. **Output registers produced by this Standard:**
 - **RO Register (final outputs):** The master list of admitted episodes, ED presentations, and non-admitted encounters with identifiers, dates/times, care type, facility/site, and **Final Cost Centre** link from Stage 3.
 - **CSE Catalogue (intermediate outputs):** The master list of CSE definitions with unit and weighting logic; **Provider Cost Centre** → **Consumer Cost Centre** mapping consistent with the Stage-3 Trading Matrix; and linkage fields to patient encounters where applicable.

Identity, linkage, and periodization

1. **Identifiers:** Use enterprise **MPI (Master Patient Index)** where available. Minimum keys include patient ID, **encounter/episode ID**, facility/site ID, and timestamps; CSEs also require provider cost-center ID and unit/weight fields. **The encounter/episode ID should be the primary mapping key used for matching.**
2. **Timeline integrity:** Enforce valid ranges (e.g., discharge after admission; non-negative durations). Define standard period cut-offs (e.g., discharge date for episodes; service completion time for CSEs).
3. **Transfers and splits:** Adhere to rules for ward/service/facility transfers so that statistics and outputs remain consistent.
4. **Third-party activity:** Prefer **patient-level** feeds with identifiers and service timestamps. If only aggregate totals exist, construct a **defensible crosswalk** (e.g., proportional by case-mix/volume), clearly mark as **imputed**, and obtain governance sign-off.

Quality assurance and reconciliation

1. **DQ rules:** Define pass/fail thresholds for completeness, duplicate detection, and referential integrity (e.g., **orphaned CSEs** with no consuming RO). Record remediation or accepted exceptions before Freeze.

2. **Reconciliation:** Reconcile RO and CSE totals by site/service to operational reports and to any external statistics. Document variances, late activity handling, and known gaps in the period evidence pack for Stage 6.

Worked examples

- **Contracted MRI:** Patient-identified invoices (1,200 cases) feed the CSE Catalogue directly; each case carries patient ID, date/time, and modality weight; costs flow to the relevant ROs through the Trading Matrix.
- **Imaging modality weights:** Chest CT weight = 3; Abdominal MRI weight = 6. With a cost per RVU of SAR 118, a CT study costs **SAR 354**, an MRI study **SAR 708**.
- **Medical IMCC split:** A general surgery medical pool of **SAR 1.30m** is fractioned to OR cover **45%**, ward rounds **25%**, clinics **20%**, ED cover **5%**, admin/teaching **5%**. Local medical CSEs are created and consumed by ROs using OR minutes, OBDs, clinic minutes, ED arrivals, and admin rules respectively.

Cross-stage references

- **Stage 2:** Establishes the cost-center categories and medical fractioning (IMCCs) that give rise to local medical CSEs only where needed.
- **Stage 3:** Provides the **Final Cost Centre Master** and the **Consumption Matrix** that all RO and CSE attribution must follow.
- **Stage 5:** Uses the RO Register and CSE Catalogue with the 4.2A/4.2B statistics to assign expenses to ROs.
- **Stage 6:** Reconciles output totals, statistics, and cost results to source systems and financial statements (with negative-cost checks and assumptions register).

Rules for Specific Output Types

Name	Rules for Specific Output Types
Standard	The organization will apply consistent rules (KSA MDS) for constructing and counting each output type listed below; local variants must be documented and justified.
Purpose	Ensure outputs are comparable and auditable across providers and periods.
Objectives	1. Apply consistent counting rules for each output type. 2. Maintain edge-case rules (transfers, leave, boarders, newborns, same-day returns). 3. Document any local adaptations and obtain governance sign-off.
Definitions	• Episode of care: continuous period of admitted care under one provider, with start/end per admission/discharge policy. • Encounter (non-admitted): a contact or visit where care is provided without admission. • ED presentation: arrival for emergency care, from triage to departure. • Boarder: a person who receives accommodation but is not admitted. • Transfer: change of ward/service/facility with rules on episode continuity.

Guidance (Business Rules)

4.3A Admitted episodes

- Count **one episode** per admission → discharge; split rules for planned separations/returns; handle **leave days** per policy; newborns/maternity per MDS definitions.

4.3B Emergency

- Presentation is a single RO; streaming rules (fast track vs acute) apply to CC attribution, not to splitting the RO.

4.3C Non-admitted

- One encounter per scheduled/attended service; same-day multiple clinics are separate encounters if delivered by distinct services and documented.

4.3D Patient intermediate (CSEs)

- **Imaging/Pathology/Pharmacy/OR/ICU:** use endorsed unit/weighting definitions; ensure **no double counting** between CSEs and ROs.

4.3E Non-patient outputs

- Teaching/training measured by scheduled sessions, supervised lists/clinics, trainees; research by time logs/FTEs/protocol workload; boarders by **boarder days**.

5 Stage 5 - Assign Expenses

Stage 5 describes how organizations assign fully absorbed costs from Final and Intermediate Cost Centers to **Reportable Outputs (ROs)**.

This stage links financial cost structures developed earlier (Stages 1–3) and output activity structures (Stage 4) to produce a **patient-level cost file** by applying valid drivers, weights, and matching logic.

Cost assignment must reflect **cause-and-effect** and use the **best available evidence**.

Assignment occurs only after:

- Overheads are fully absorbed
- Final + IMCCs are defined
- Output & CSE structures are established
- Valid allocation statistics are available

All expenses accumulated in **final cost centers** must be matched to the organization's **Reportable Outputs (ROs)** using causal, auditable methods. **Costed Service Events (CSEs)** (e.g., imaging, pathology, pharmacy compounding/dispensing, OR minutes, ICU hours) first receive costs within **intermediate** cost centers and are then **linked to the ROs** they support. CSE costs that occurred before the start of the period are included so the **full cost of each RO** is represented. Read Stage 5 together with Stage 2 (Cost Ledger) and Stage 6 (Review & Reconcile).

Standard 5.1 — Reportable Outputs

All Final and Intermediate Cost Centre costs must be assigned to Reportable Outputs using valid allocation measures that reflect resource consumption and comply with rules.

Name	Assignment Hierarchy & General Rules
Standard	All expenses collected in final cost centers will be matched to Reportable Outputs (ROs) identified in Stage 4. ROs include those completed in the reporting period and those partially completed in accordance with 5.3 Work in Progress . Where relevant, expenses are first matched to CSEs in line with 5.2 , then linked onward to the relevant ROs. Allocation methods must follow Standard 2.2 (Matching Cost Objects and Expenses) , and all decisions must be documented for Standard 6.2 (Reconciliation to Source Data) .
Purpose	Ensure every expense in a final cost center is assigned to the correct RO in a way that reflects causality and is auditable.

Objectives	1. Match all final cost-center expenses to ROs in the reporting period or to WIP per 5.3. 2. Where feasible, first match expenses to CSEs and then link those to the relevant ROs. 3. Apply Standard 2.2 methods; retain complete evidence for Standard 6.2. 4. Maintain alignment across financial, operational, and clinical datasets. 5. Produce a traceable patient-level record.
Definitions	• Reportable Output (RO): The end cost object for patient care (e.g., admitted episode, ED presentation, non-admitted encounter) per Stage 4. • Traceable charges: Costs whose actual value is known and traceable to a specific patient/service (e.g., high-cost drugs dispensed to a patient, prostheses, outsourced diagnostics).

Assignment converts Final + IMCC pools into **RO-level costs**, using activity drivers such as:

- Ward minutes per ward for each ward
- ICU minutes for ICU
- Theatre minutes
- RVU-weighted units (e.g., pathology)

Guidance (Business Rules)

5.1A Traceable charges & partial-direct handling

1. Identify traceable in feeders (pharmacy dispenses/compounding, implants, outsourced diagnostics) and assign directly to the patient's RO whenever appropriate.
2. If a cost line mixes traceable and non-traceable elements (e.g., ward imprest), separate the traceable portion for direct assignment and allocate the residual using an appropriate driver under Standard 2.2.
3. Where feeder totals differ from GL timing but data quality is sound, you may use feeder cost as the RVU base (e.g., contracted imaging). Document rationale.
4. Avoid negative costs: if direct assignment risks over-drawing related pools, assign an agreed percentage as direct and allocate the remainder using RVUs/statistics. Record method and finance sign-off.

5. Maintain an Assignment Method Register within the audit file stating: driver, data source, rationale, effective dates, and owner.

Worked example — Traceable implant + pharmacy

- Prosthesis invoice SAR 12,000 is linked to Patient A's episode → assign directly to Patient A's RO.
- Pharmacy shows SAR 1,850 (patient-dispensed) + SAR 400 (ward issues): assign SAR 1,850 directly; allocate SAR 400 across the ward's patients using a consistent basis (e.g., administrations or patient-days), per Standard 2.2.

Standard 5.2 — Intermediate (Costed Service Events)

Name	Drivers & RVUs (Patient Intermediate CCs)
Standard	Expenses will be allocated to Costed Service Events (CSEs) based on feeder volumes or relative value units (RVUs) , independent of the ROs that will later consume them. Allocation follows Standard 2.2 . CSEs are then linked to the relevant ROs using causal matching rules (service point and timestamps). All allocation and matching decisions must be documented for Standard 6.2 .
Purpose	Recognize goods/services provided by one production area to another and ensure their costs follow measured utilization to the ROs .
Objectives	1. Use unitized counts and RVUs from authoritative systems (RIS/PACS, LIS, Theatre, ICU, Pharmacy) to assign intermediate costs to CSEs. 2. Maintain service-point matching (or approved fallbacks) to link CSEs to the correct ROs. 3. Obtain operational/clinical sign-off for RVU schedules and review them each cycle.
Definitions	• Costed Service Event (CSE): A measurable unit used for allocation (e.g., imaging exam with weight, pathology test/battery, pharmacy compounding/dispense unit, OR minute, ICU hour). • Intermediate cost centers: Patient-intermediate centers (e.g., imaging, pathology, pharmacy, OR, ICU) and Medical Intermediate Cost Centers (IMCCs) used to split medical remuneration by sub-function. • RVU: A relative weight representing resource consumption for a unit/service; may be differentiated by labor/non-labor and must reflect current practice.

Guidance (Business Rules)

5.2A RVUs (derivation, governance, use)

1. Adopt **schedules** where issued by HHC or Regulator; where absent, derive local RVUs with clinical involvement.
2. Typical derivation: gather prior-period activity and resource data; separate labor vs. materials; quantify time/effort by role; compute RVUs; validate against observed utilization; and **version-control** the weight table.
3. Obtain **service-manager sign-off**; review RVUs at least annually or upon material service change.

5.2B Matching point (linking CSE → RO)

Order of preference for linking:

1. **Service point** (ward/clinic/ED/theatre) with patient/episode ID;
 2. **Encounter/Episode ID**;
 3. **Timestamp within episode window**;
 4. **Order/request point** as last resort.
- Test matching, report unmatched items, and refine feeder design as needed. Document any **imputations** and **exclusions**.

5.2C Medical Intermediate Cost Centers (IMCCs)

- Where medical remuneration must be apportioned across sub-functions, route costs through **IMCCs** to generate **local CSEs** for: OR cover, ward rounds, outpatient clinics, ED cover, administration, research, and teaching.
- Use validated fractions (e.g., job plans, direct interviews, rota hours, session counts) to build the local CSEs, then **allocate to ROs** with the same precedence rules as other CSEs.
- Prevent overlap with patient-intermediate RVUs (no double-count).

Worked example — Imaging RVU and matching

- **Provider cost center:** Radiology; **expenses:** SAR 9.0m (labor 6.0; non-labor 3.0).
- **Activity & weights:** MRI 1.8, CT 1.0, X-ray 0.2. Period volumes: 12k MRI, 24k CT, 80k X-ray → **61.6k weighted RVUs**.
- **Unit costs:** Labor 6.0m / 61.6k = SAR 97.4 per RVU; Non-labor 3.0m / 61.6k = SAR 48.7 per RVU.
- Allocate to consumer wards/clinics/ED and **ROs** via **service-point match** from RIS to encounter/episode; where an ID is missing, use **timestamp within admission window**; document exceptions.

Standard 5.3 — Work in Progress

Name	Work in Progress
Standard	This Standard covers partially completed ROs at the start or end of a period. Allocate expenses to WIP cost objects in line with Standard 2.2 . Report the full cost of a WIP RO in the period it ends , including prior-period CSE costs linked to that RO. If it remains WIP at period end, carry forward the associated costs. WIP carried forward is additional to Standard 1.1 expenses and must be separately identified and reconciled to the audited financial statements under Standard 6.2 .
Purpose	Ensure partially completed care at period boundaries is measured fairly and reconciles to total expenses.
Objectives	1. Identify opening and closing WIP for admitted episodes and any multi-visit care models where required. 2. Carry CSE costs with the episode until completion; recognize them in the period the RO ends. 3. Reconcile WIP components to the GL; disclose distinctly in the reconciliation pack.
Definitions	• Opening WIP: Care started before the period that continues into the current period. • Closing WIP: Care started in the current period that continues beyond period end.

Guidance (Business Rules)

- Flag WIP at the **episode/RO level** (start/end timestamps). Allocate period expenses to WIP using the same drivers used for completed ROs (per **Standard 2.2**).
- **Carry forward CSE** costs attached to an RO that is still in WIP at period end; recognize them when the RO ends.
- In reconciliation, show: opening WIP brought in; current-period additions; transfers to completed ROs; closing WIP carried forward; ties to GL (per **Standard 6.2**).

Worked example

Costing / Reporting Period				
	31Dec	1 Jan	31 Dec	01 Jan
Encounter type:				
1 - Encounter started and finished in the costing period (NWIP)		start	End	
2 - Encounter started in a previous costing period and is still ongoing or ended in next period	start			End
3 - Encounter started in a previous costing period and finished in the current costing period	start	End		
4 - Encounter started in the current costing period and is still ongoing." or ended in next period			start	End

Note 2 , 3 and 4 are considered as work in progress

6 Stage 6 – Review & Reconcile

This stage provides the **assurance layer** for the costing cycle. It reconciles:

1. **The activity** used for costing (Reportable Outputs and any RVU-based intermediate activity) is complete and consistent with authoritative clinical/operational systems, and
2. **Costs** to the **cost ledger/GL**, including third-party inclusions, offsets/recoveries, allocations, internal trading, and imputation.

Once the cost collection is mandated the process will conclude with a **frozen submission pack** and auditable documentation of all assumptions.

Standard 6.1 — Reconciliation of Activity and Cost Results

Name	Reconciliation of Activity and Cost Results
Standard	The organization will reconcile final output (RO) counts and intermediate output (CSE) volumes to authoritative source systems and confirm that assigned costs (by Final CC, Line Item, RO/CSE) are complete, reasonable, internally balanced (provider → consumer), and free of negative totals after processing. The organization must reconcile final output (RO) counts and intermediate activity volumes to authoritative source systems and confirm that assigned costs (by Final/Intermediate Cost Centre, Line Item, and RO/CSE) are complete, reasonable, internally balanced via the internal consumption matrix (provider → consumer), and contain no negative totals after processing.
Purpose	Provide end-to-end assurance that the activity used for costing and the resulting costs are accurate, consistent, and reproducible .
Objectives	1. Reconcile RO counts and CSE volumes to operational reports (EHR/PAS, RIS/PACS, LIS, Theatre, ICU, Pharmacy, FM/logistics). 2. Validate Internal Trading: provider totals = sum of consumer usage (after exclusions/cut-offs). 3. Confirm assigned costs tie back to the cost ledger totals (post-allocations). 4. Detect and remediate negative costs, zeros where not permitted, and material outliers. 5. Produce a signed Activity & Cost Reconciliation Statement before Freeze.

Definitions	• Provider/Consumer balance: For each patient intermediate CC, total issued CSE value equals total received value by consumers (after periodization). • Outlier screening: Statistical tests (e.g., IQR/z-score) and operational benchmarks to flag unusual unit costs or volumes. • Negative costs: Net negative totals at CC/Line Item/RO/CSE level after all processing.
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Guidance (Business Rules)

6.1A.1 Activity reconciliation

- **ROs:** reconcile by setting (inpatient/ED/non-admitted) and care type (acute/sub-acute/mental health/maternity/newborn); explain variances (e.g., late discharges, data cut-off).
- **CSEs:** reconcile counts/weights to RIS/PACS, LIS, Theatre, ICU, Pharmacy; ensure eligibility and de-duplication rules applied.

6.1A.2 Internal consumption checks

- Build a provider → consumer pivot: for each provider CC/service, confirm **volume** and **allocated cost** equal across sides; investigate unmatched records/consumers.

6.1A.3 Cost Assignment Reconciliation

- The total value of costs assigned to ROs (and CSEs where applicable) must **reconcile** to the post-allocation Cost Ledger totals. Any variance must be:
 - **quantified**,
 - **explained** (e.g., timing/rounding)

6.1A.4 Reasonableness & outliers

- Review unusually high or low encounter costs (for example >SAR 250,000 or <SAR25)
- Check **all** negative costs
- Review **unit cost** distributions (e.g., cost per episode, cost per OR minute, cost per imaging exam).
- Compare to prior cycle and peer services; document drivers for change (mix, price, policy).

6.1A.5 Zero & missing scans

- Scan for **zero-volume** CCs with non-zero cost (and vice-versa) where not expected; resolve or document.

6.1A.6 Negative cost remediation (required)

Ensure negative expenses and negative product costs are identified, investigated, and resolved so that individual cost objects are not negative.

Why this matters

Cost collections do not permit **negative product costs**. Negative values usually indicate an error, timing issue, or data quality problem (e.g., accrual reversals, feeder errors, misclassified recoveries, or an allocation statistic that produced an invalid distribution).

What must happen

1. **Identify** negative values at CC/Line Item and RO/CSE levels.
2. **Investigate** root cause with Finance (GL) or feeder owners (systems).
3. **Correct at source** where feasible (preferred).
4. Apply an **interim remediation** only with documented approval if source correction would unreasonably delay the cycle.
5. Ensure **no negative totals remain** in the submitted cost outputs.

Acceptable remediation (mapped to your standards)

- If the expense relates to a **prior period** production cost, it is **out of scope** for current-period production and must be reclassified/excluded from the current pool.
- If it is a **recovery/contra**, treat per Stage 1.3 Offsets & Recoveries (and ensure it does not drive a negative pool or product).
- If the **allocation base** created a negative outcome, correct the base or use the next valid fallback, with governance approval.
- **Feeder negatives** (quantity/price < 0): correct in the feeder and re-extract; if delayed, apply approved interim fixes and document.

Worked Example (simplified, standards-aligned)

- **Finding.** Surgical Ward CC shows **SAR -40,000** for “medical on-costs”.
- **Investigation.** Finance confirms it is a reversal of a prior-period accrual posted this period; it does **not** relate to current production.

- **Treatment.** Reclassify the **-40,000** to a prior-period adjustment/non-patient holding, **exclude** from the current production pool.
- **Outcome.** The Surgical Ward pool returns to a non-negative balance before assignment; no negative RO costs arise.
- **Record.** Add the case to the **Negative Cost Register** (location, cause, finance confirmation, action, approval), and include it in the **Assurance Pack**.

6.1A.7 Freeze

- Upon successful checks, freeze **Activity & Cost** results with a **Version ID** matching ledger/trading/outputs; archive the reconciliation pack.

Standard 6.2 Reconciliation to Source Data

Name	Reconciliation to Source Data
Standard	The organization will reconcile the costing build to source financial and operational data , documenting policies, inclusions/exclusions, offsets, third-party treatments, imputations, fractions, drivers, and (KSA) capital inclusion/exclusion .
Purpose	Ensure the costing results are traceable to sources, compliant, and ready for internal and external use .
Objectives	1. Confirm GL reconciliation: cost ledger totals (after reclassifications and step-downs) reconcile to audited financials within tolerance. 2. Evidence complete mappings: 100% GL cost centers → Final/Overhead CC, 100% GL accounts → Line Items. 3. Verify third-party inclusions and the basis for imputations; disclose exclusions. 4. Document offsets/recoveries and ensure compliance with Stage 1.3. 5. Compile, sign, and freeze the Submission Pack per future specification.
Definitions	• Submission Pack: Frozen artefacts required for any future submission and audit. This is not currently mandated. • Assumptions Register: Controlled log of methods, parameters, fractions, imputations, and exceptions used in the period.

Guidance (Business Rules)

6.1A.1 GL & mapping reconciliation

- **GL totals** → cost ledger → post-allocation assigned totals; provide a **bridging schedule** (reclasses, exclusions, step-downs).
- Export **Mapping Coverage Reports**:
 - **GL CCs** → **Final/Overhead CC** (with any local child CCs), and
 - **GL accounts** → **Line Items** (100% coverage required).

6.1A.2 Third-party & imputation evidence

- Maintain a **Third-Party schedule** including service description, value, period, source extract, linkage method, and—if applicable—**imputation method** and reference basis.

- **Exclude** where no reliable method exists; record in the **Exclusions List** with rationale.

6.1A.3 Offsets & recoveries

- Provide an **Offsets Register**: type (error correction/rebate/recovery), value, GL account(s), treatment, and confirmation that no negative totals remain.

6.1A.4 Fractions & drivers

- Maintain a **Fractions Register** (especially for **Medical Intermediate CCs**): sub-functions, measurement bases (time/activity/mixed), data sources, validation sign-off.
- Maintain a **Drivers & RVUs Register**: provider service, unit/weight, source, consumer mapping, effective dates.

6.1A.5 Capital policy (KSA)

- **If included**: disclose capital policy (thresholds, useful lives, revaluation/IFRS-16 treatment), classes, allocation drivers.
- **If excluded**: include a **Capital Exclusion Statement** quantifying the excluded amounts where practicable.

6.1A.6 Data Quality Statements (DQS)

- Summarize material DQ issues, residual risks, mitigations, and governance approvals.
- Include cycle **variance analysis** vs prior period (activity and cost) with commentary.

6.1A.7 Retention & reproducibility

- Retain all artefacts, source extracts, and code/configuration sufficient to **reproduce** the cycle; record **Version IDs** across components.

Cross-stage references

- **Stage 1**: inclusion boundary, third-party rules, offsets/recoveries.
- **Stage 2**: complete mappings and fractioning principles.
- **Stage 3**: Final CC Master and Trading Matrix used in reconciliation.
- **Stage 4**: RO/CSE registers and counting rules reconciled here.
- **Stage 5**: assignment hierarchy, drivers, and preferred methods—validated here.

نسخة استطلاع مديريات العموم 2026

Annex A – Line Item Definitions

A.1 Scope

A.1.1 This Annex defines the mapping of account codes in the general ledger to line-item categories that should be used in all costing implementations.

A.2 Objective

A.2.1 To ensure consistent reporting of defined account-code categories to support pricing development, funding analysis, and benchmarking.

A.3 Standard

A.3.1 Expenses are grouped into the following broad categories:

- Cost Of Labor
- Pathology
- Imaging
- Pharmacy
- Prostheses And Implantable Medical Devices
- Blood Products and Services
- Other Medical and Surgical Supplies
- Hotel (Non-Clinical Support Services)
- Other Goods and Services
- Lease Costs
- Depreciation And Amortization
- Patient Transport.
- Oncosts

Salaries and Wages

A.3.2 Salaries and wages are payments made to an employee as remuneration for services under an employment contract.

A.3.3 Salaries and wages include ordinary hours, penalty rates, overtime, leave loading, professional development, and allowances (e.g., accommodation, travel, on-call, remote, living-out, uniform and laundry). On-costs (e.g. GOSI) are excluded and should be included under the Oncosts line item.

A.3.4 All salaries and wages shall be allocated to one of the following four categories:

Nursing salaries and wages, including:

- Enrolled nurses
- Student/trainee nurses (establishment-based)
- Registered nurses.

Medical salaries and wages, including:

- Interns
- Residents
- Registrars
- Specialists/consultants and general practice medical officers
- Visiting/locum medical officers.

Allied health salaries and wages, including (non-exhaustive):

- audiology
- chiropractic
- dietetics
- exercise physiology
- occupational therapy
- optometry
- oral health
- orthoptics
- orthotics and prosthetics
- osteopathy
- paramedicine
- physiotherapy
- podiatry
- psychology
- social work
- speech pathology

Other staff, including:

- Personal care/health-care assistants primarily providing patient care and not classified under nursing or allied health and not treated as overheads (e.g., attendants, assistants, ward helpers/assistants)
- Administrative, maintenance and clerical staff (e.g., ward clerks, health information staff, administrative officers).

Exclude: staff whose costs are reported within pathology/imaging/pharmacy line items, and hotel services staff where these are reported under "Hotel".

Pathology

A.3.5 Pathology costs are goods and services used in the provision of pathology services and associated consumables (e.g., reagents, stains, calibration products), or the actual cost billed by an external provider. Where pathology is performed in-house, salaries and wages for pathology staff are

recorded under **Cost of Labor** and mapped to the **Pathology** cost bucket (see Annex D – Cost Bucket Matrix) to ensure neutrality between in-house and purchased services.

Imaging

A.3.6 Imaging costs are goods and services used in the provision of imaging services (e.g., film, contrast media) or the actual cost billed by an external provider. Where imaging is performed in-house, salaries and wages for imaging staff are recorded under **Cost of Labor** and mapped to the **Imaging** cost bucket (see Annex D) to ensure neutrality between in-house and purchased services.

Pharmacy

A.3.7 Pharmacy costs are goods and services used in the provision of pharmaceutical services (including purchase, production/compounding, distribution, supply and storage of medicines, and clinical pharmacy services), or the actual cost billed by an external provider. In-house pharmacy staff costs are recorded under **Cost of Labor** and mapped to the **Pharmacy** cost bucket (see Annex D).

Prostheses and Implantable Medical Devices

A.3.8 Costs include goods and services used to implant prostheses, human tissue items, and other implantable medical devices.

Blood Products and Services

A.3.10 Blood products and services are defined per blood-supply arrangements (e.g., Ministry of Health/ Blood Service policies and contracts).

Other Medical and Surgical Supplies

A.3.12 Goods and services used in the provision of medical/surgical care excluding items classified under **Prostheses and Implantable Medical Devices**.

Hotel (Non-clinical Support Services)

A.3.13 Includes:

- Cleaning products and services
- Linen and laundry services
- Food services (patients)
- General hotel services.

Include associated staff where treated as hotel services within the chart of accounts.

Other Goods and Services

A.3.14 Goods and services not specified elsewhere.

Lease Costs

A.3.15 Lease costs include expenses incurred by the lessee in relation to lease arrangements recognized under IFRS/IPSAS-compliant policies, including:

- expense relating to leases with entirely variable payments
- expense relating to low value leases

- expense relating to short-term leases
- interest expense relating to lease liabilities.

Exclude depreciation donated assets (reported under **Depreciation and Amortization**).

Depreciation and Amortization (Optional)

A.3.16 Systematic allocation of the depreciable amount of tangible and right-of-use assets over their useful lives in line with IFRS/IPSAS-compliant accounting policies.

Building depreciation includes fixed fit-out (e.g., lighting, partitions).

Equipment depreciation includes movable fit-out (e.g., theatre tables, furniture, chemotherapy chairs).

Right-of-use asset depreciation reflects the reduction in the right to use an underlying leased asset over the lease term.

Patient Transport

A.3.17 Goods and services used to transport patients (and, where policy permits, carers/escorts) for non-emergency purposes, including road transport, commercial flights, and taxis/ride-hail. Include staff costs where recorded in the hospital's general ledger. Exclude ambulance services or other transport where no hospital cost is incurred.

A.3.18 Patient transport costs that are hospital-funded are in scope and should be submitted under the **Patient Transport (in-scope)** cost line item.

A.3.19 Patient transport costs recorded in the general ledger but funded partially/fully by external schemes (e.g., government patient-travel programs, contracted air services) are in scope for reporting and should be submitted using the **Patient Transport – Externally Funded** cost line item.

Annex B – Cost Centre Group Definitions

B.1 Scope

B.1.1 This Annex provides definitions for the cost center groups to be used within costing models.

B.2 Objective

B.2.1 To provide a consistent link between a general-ledger cost center and the final production-center function reported in costing, grouping cost centers by common functions to support pricing and benchmarking.

B.2.2 Some functions are restricted to designated locations (e.g., operating room), while others may be delivered in multiple settings (e.g., imaging).

B.3 Standard

B.3.1 NHCC Functions are grouped into the following broad service categories:

- Allied Health
- Clinical
- Critical Care
- Emergency
- Imaging
- Operating Room
- Pathology
- Specialist Procedure Suite
- Other Non-Clinical.

Clinical

B.3.2 Clinical services are related to the observation, assessment or treatment of a patient within a healthcare setting, spanning medicine, surgery, emergency, maternity and high-dependency/non-critical care. Ancillary services that are highly resource-intensive are categorized separately below.

Critical Care

B.3.3 Critical care services require invasive life support, continuous medical and nursing supervision, and complex equipment, provided in a designated intensive care unit (ICU) or equivalent high-acuity unit formally recognized by the hospital and regulator. Coronary care/high-dependency units should be classified as critical care only where they meet the defined criteria; otherwise, classify under clinical services.

Operating Room

B.3.4 Operating room services are delivered in dedicated, controlled theatre suites where anesthesia induction, invasive surgical procedures and immediate post-anesthesia recovery occur. Due to safety and infrastructure requirements, these functions are restricted to designated areas.

Specialist Procedure Suite

B.3.5 Specialist procedure suites are dedicated suites for defined invasive or non-invasive procedures (typically day-case), usually comprising procedure rooms and Stage-1 recovery. Functions are restricted to the suite location.

B.3.6 most specialist procedure suites are day procedure centers, and the patient is usually discharged on the same day. The list of specialist procedure suites is listed below:

- Hyperbaric chambers – which may include some invasive and non-invasive procedures.
- Angiography – an imaging technique requiring invasive monitoring. Special suites are dedicated to this technique, and it can lead to angioplasty where a stent is inserted to widen any narrowing in the blockage in the heart.
- Cardiac catheter suites – includes a range of procedures, primarily to insert a catheter into a heart vessel. It may also lead to treatments such as angioplasty (depending on the chamber that is affected).
- Electroconvulsive therapy (ECT) suites – performed by a psychiatrist, anesthetist, nurses in a special procedure suite.
- Endoscopic suites – a camera is inserted into an opening of the body without invasive procedures to investigate any abnormality.
- Lithotripsy suites – lithotripsy is a medical procedure involving the physical destruction of hardened masses like kidney stones, bezoars, or gallstones.
- Lung function labs – pulmonary function testing (PFT) is a complete evaluation of the respiratory system including patient history, physical examinations, chest x- ray examinations, arterial blood gas analysis and tests of pulmonary function.
- Non-invasive cardiac labs – non-invasive diagnostic tests for the heart rhythm and heart function are performed in the laboratory. The non-invasive cardiac laboratory has two sections:
 - Electrocardiography, which performs electrocardiograms, tilt table studies, Holter monitoring, event monitoring, ambulatory blood pressure monitoring, pacemaker follow-up clinic, implantable cardiac defibrillator follow-up clinic tilt table studies and cardioversions.
 - Echocardiography, which performs echocardiograms including 2D or doppler, transesophageal echocardiograms, exercise stress echocardiograms, pacing echocardiograms and dobutamine echocardiograms.
- Physiology labs – monitoring physiological changes during stress testing.
- Radiotherapy suites – radiation oncology is the medical specialty concerned with prescribing radiation, and is distinct from radiology, the use of radiation in medical imaging and diagnosis. Radiation may be prescribed by a radiation oncologist with intent to cure ('curative') or for adjuvant therapy.
- Respiratory labs and sleep labs – sleep studies are tests that record the body activity during sleep. It may include some invasive monitoring.
- General procedure suites.

Emergency

B.3.7 Emergency services provide unscheduled care across triage categories and are not limited to a single department configuration. Patients are treated according to clinical urgency.

B.3.8 For this Standard, admitted short-stay units that routinely provide care under an admission (e.g., clinical decision units designated as admitted care) are classified under **Clinical** rather than **Emergency**.

Allied Health

B.3.9 Allied health services are delivered by registered/licensed dental and allied health professionals under the licensing authority. Departments may be centralized but services are commonly provided across multiple clinical areas based on patient need. Disciplines include, but are not limited to:

- art/music therapy
- audiology
- chiropractic services
- clinical psychology
- dentistry
- diabetes education
- dietetics/nutrition
- interpreter services
- occupational therapy
- optometry
- orthoptic services
- orthotic/prosthetic services
- osteopathy
- physiotherapy
- podiatry
- social work
- speech pathology
- other and general allied health services.

Imaging

B.3.10 Imaging uses techniques that generate visual representations for diagnosis or guidance. Modalities include non-invasive radiology, invasive radiology, and nuclear medicine.

B.3.11 Imaging may be provided in dedicated departments or via mobile units at the point of care.

B.3.12 Non-invasive radiology modalities include:

- Computed Tomography (CT)

- Endoscopy
- Elastography
- Fluoroscopy
- Functional Near Infrared Spectroscopy
- Mammography
- Medical Photography
- Medical Resonance Imaging (MRI)
- Tactile Imaging
- Thermography
- Ultrasound
- X-Ray Radiography.

B.3.13 Invasive radiology includes angiography and other interventional radiology techniques.

B.3.14 Nuclear medicine includes:

- Positron Emission Tomography (PET)
- Single Photon Emission Computed Tomography (SPECT).

B.3.15 When interventional services are operationally part of the imaging department, classify them as **Imaging**; when delivered in separate suites, classify under **Specialist Procedure Suite**.

Pathology Services

B.3.16 Pathology comprises diagnostic and related functions delivered in laboratories and at the bedside/clinic. Functions include (non-exhaustive):

- Anatomical Pathology
 - Surgical Pathology
 - Histopathology
 - Cytopathology – Cytology, Cytogenetics
 - Forensic Pathology – Autopsy, Mortuary
- Clinical Pathology
 - Clinical Chemistry
 - Immunology – Diagnostic
 - Hematology – Diagnostic
 - Clinical Biochemistry

- General Pathology
 - Animal House / Testing
 - Specimen Collection Services
- Genetics
- Molecular Pathology
- Pharmacology – General And Clinical
- Toxicology
- Transfusion Services.

Pharmacy

B.3.17 Pharmacy includes procurement/compounding, storage and distribution of medicines and clinical pharmacy services.

Other Non-clinical

B.3.18 Any functions not specified above that support clinical service delivery but are not direct clinical functions.

Annex C – CL Final Cost Centers

Output Types	Services	Specialty	Modality	Cost Group	Cost Centre Code
Non-patient	Other - Nonpatient	Other - Nonpatient	Other Services	Otherserv	Otherserv
Non-patient	Research	Research	Clinical Care Trials	Otherserv	Clintrial
Non-patient	Research	Research	Research	Otherserv	Research
Non-patient	Teaching	Teaching	Teaching	Otherserv	Teaching
Non-patient	Funded Mandates	Anti-smoking programs	Anti-smoking programs	FMServ	FM-Smoke
Non-patient	Funded Mandates	Clinical Education	Clinical Education	FMServ	FM-ClinEd
Non-patient	Funded Mandates	Disease Vectors and Communicable Diseases	Disease Vectors and Communicable Diseases	FMServ	FM-DVCD
Non-patient	Funded Mandates	Emergency Preparedness	Emergency Preparedness	FMServ	FM-EmergPrep
Non-patient	Funded Mandates	Environmental Health	Environmental Health	FMServ	FM-EnvHlth
Non-patient	Funded Mandates	Field Epidemiology	Field Epidemiology	FMServ	FM-Epi
Non-patient	Funded Mandates	Hajj and Umrah	Hajj and Umrah	FMServ	FM-Hajj
Non-patient	Funded Mandates	Health Programs and Chronic diseases	Health Programs and Chronic diseases	FMServ	FM-HPCD
Non-patient	Funded Mandates	Infectious Disease Control	Infectious Disease Control	FMServ	FM-InfectDis
Non-patient	Funded Mandates	Mass Gathering Medicine	Mass Gathering Medicine	FMServ	FM-Mass
Non-patient	Funded Mandates	Public Health	Public Health	FMServ	FM-PH
Non-patient	Funded Mandates	Radiation Control	Radiation Control	FMServ	FM-RadProtect
Non-patient	Funded Mandates	School Health	School Health	FMServ	FM-School
Patient - Final	Therapy	Audiology	Audiology	Allied	Audio
Patient - Final	Therapy	Diabetes Educator	Diabetes Educator	Allied	Diab
Patient - Final	Therapy	General Allied Health	General Allied Health	Allied	Genallied
Patient - Final	Therapy	Nutrition / Dietetics	Dietetics	Allied	Dietetics
Patient - Final	Therapy	Occupational Therapy	Occupational Therapy	Allied	Occupatther
Patient - Final	Therapy	Optometry	Optometry	Allied	Optometry
Patient - Final	Therapy	Orthoptics	Orthoptics	Allied	Orthoptics
Patient - Final	Therapy	Orthotics	Orthotics	Allied	Orthotics
Patient - Final	Therapy	Other Allied Health	Other Allied Health (Please Specify)	Allied	Otherallied
Patient - Final	Therapy	Physiotherapy	Acupuncture	Allied	Acup
Patient - Final	Therapy	Physiotherapy	Falls Clinic	Allied	Falls
Patient - Final	Therapy	Physiotherapy	Orthopedic Appliances	Allied	Orthapp
Patient - Final	Therapy	Physiotherapy	Physiotherapy	Allied	Physiotherap y
Patient - Final	Therapy	Podiatry	Podiatry	Allied	Podiatry
Patient - Final	Therapy	Prosthetics	Prosthetics	Allied	Orthotics
Patient - Final	Therapy	Psychology	Psychology	Allied	Psychology
Patient - Final	Therapy	Social Work	Social Work	Allied	Socialwork
Patient - Final	Therapy	Speech Pathology	Speech Pathology	Allied	Speech

Patient - Final	Mental Health and Drug and Alcohol Services	Transitional Space	Mental Health Transitional Behavioral Assessment and Intervention Service for Older People	Clinical	Mhcomtbao
Patient - Final	Aged Care Services	Geriatric Medicine	Dementia	Clinical	Dementia
Patient - Final	Aged Care Services	Geriatric Medicine	Geriatrics	Clinical	Geriatrics
Patient - Final	Ambulatory And Community Services	Community Medicine	Community Medicine	Clinical	Commmed
Patient - Final	Ambulatory And Community Services	Community Medicine	Non-admitted Patients (Other)	Clinical	Outpatother
Patient - Final	Ambulatory And Community Services	Hospital In The Home	Hospital In The Home	Clinical	Hith
Patient - Final	Ambulatory And Community Services	Occupational Medicine	Occupational Medicine	Clinical	Occupatme d
Patient - Final	Ambulatory And Community Services	Outreach/Community	Outreach/Community	Clinical	Outcomm
Patient - Final	Child And Family Health Services	Child And Family Health	Family Planning	Clinical	Famplan
Patient - Final	Child And Family Health Services	Maternity	Assisted Reproduction Technology	Clinical	Asstech
Patient - Final	Child And Family Health Services	Maternity	Birthing Centre	Clinical	Birthcentre
Patient - Final	Child And Family Health Services	Maternity	Delivery Ward	Clinical	Delivward
Patient - Final	Child And Family Health Services	Maternity	Maternal Foetal Monitoring	Clinical	Matmon
Patient - Final	Child And Family Health Services	Maternity	Midwifery (Incl. Breast Feeding Support)	Clinical	Midwif
Patient - Final	Child And Family Health Services	Maternity	Obstetrics	Clinical	Obstet
Patient - Final	Child And Family Health Services	Maternity	Obstetrics, Gynecology - General	Clinical	Obsgynaeg en
Patient - Final	Child And Family Health Services	Neonatal	Neonatology	Clinical	Neonat
Patient - Final	Child And Family Health Services	Paediatric Medicine	Early Intervention	Clinical	Mhcomei
Patient - Final	Child And Family Health Services	Paediatric Medicine	Gait Laboratory - Paediatric	Clinical	Gaitlab
Patient - Final	Child And Family Health Services	Paediatric Medicine	Paediatric General	Clinical	Paedgen
Patient - Final	Child And Family Health Services	Paediatric Medicine	Paediatric General Medicine	Clinical	Paedgenme d
Patient - Final	Child And Family Health Services	Paediatric Medicine	Paediatric General Surgery	Clinical	Paedgensur
Patient - Final	Child And Family Health Services	Special Care Nursery (Not Attached To NICU)	Special Care Nursery (Not Attached To Neonatal ICU)	Clinical	SpecCN
Patient - Final	Child And Family Health Services	Youth Health	Adolescent Medicine	Clinical	Adolmed

Patient - Final	Child And Family Health Services	Youth Health	Dev Disorders Service	Clinical	Devdisser
Patient - Final	Clinical Investigations	Clinical Measurement	Clinical Measurement	Clinical	Clinmeas
Patient - Final	High Dependency Services	High Dependency	High Dependency Unit	Clinical	HDU
Patient - Final	High Dependency Services	High Dependency	Surgical High Dependency Unit	Clinical	SurgicalHDU
Patient - Final	Medical Treatment/Services	Cardiology And Interventional Cardiology	Anti – Coagulant Service	Clinical	Antico
Patient - Final	Medical Treatment/Services	Cardiology And Interventional Cardiology	Cardiology	Clinical	Cardio
Patient - Final	Medical Treatment/Services	Cardiology And Interventional Cardiology	Heart And Chest	Clinical	Heachest
Patient - Final	Medical Treatment/Services	Cardiology And Interventional Cardiology	Hypertension	Clinical	Hypertension
Patient - Final	Medical Treatment/Services	Clinical Genetics	Genetics	Clinical	Clingen
Patient - Final	Medical Treatment/Services	Continance	Continance	Clinical	Cont
Patient - Final	Medical Treatment/Services	Dermatology	Dermatology	Clinical	Dermat
Patient - Final	Medical Treatment/Services	Endocrinology	Diabetes	Clinical	Diabetes
Patient - Final	Medical Treatment/Services	Endocrinology	Endocrinology	Clinical	Endocrin
Patient - Final	Medical Treatment/Services	Endocrinology	Metabolic Bone	Clinical	Metbone
Patient - Final	Medical Treatment/Services	Gastroenterology	Colorectal	Clinical	Colorectal
Patient - Final	Medical Treatment/Services	Gastroenterology	Hepatobiliary	Clinical	Gastro
Patient - Final	Medical Treatment/Services	General And Acute Medicine	General And Acute Medicine	Clinical	Genmed
Patient - Final	Medical Treatment/Services	General And Acute Medicine	General Ward	Clinical	Genward
Patient - Final	Medical Treatment/Services	Hematology	Clinical Hematology	Clinical	Clinhaem
Patient - Final	Medical Treatment/Services	Immunology	Allergy	Clinical	Allergy
Patient - Final	Medical Treatment/Services	Immunology	Clinical Immunology & Allergy	Clinical	Clinimmun
Patient - Final	Medical Treatment/Services	Infectious Diseases	Infectious Diseases	Clinical	Infectious
Patient - Final	Medical Treatment/Services	Neurology	Craniofacial	Clinical	Craniofacial
Patient - Final	Medical Treatment/Services	Neurology	Electrodiagnosis - Neurology	Clinical	Elecneur
Patient - Final	Medical Treatment/Services	Neurology	Epilepsy	Clinical	Epilepsy
Patient - Final	Medical Treatment/Services	Neurology	Neurology / Stroke	Clinical	Neurostroke
Patient - Final	Medical Treatment/Services	Oncology	Oncology	Clinical	Oncology
Patient - Final	Medical Treatment/Services	Oncology – Medical	Medical Oncology	Clinical	Medoncology



Patient - Final	Medical Treatment/Services	Oncology – Radiation	Radiation Oncology	Clinical	Radonc
Patient - Final	Medical Treatment/Services	Other Clinical Services	Other Clinical Services NOS	Clinical	Otherclinser v
Patient - Final	Medical Treatment/Services	Paediatric Medicine	Developmental Disability	Clinical	Devdisser
Patient - Final	Medical Treatment/Services	Pain Management	Pain Management	Clinical	Painmgt
Patient - Final	Medical Treatment/Services	Palliative Care	Palliative Care	Clinical	Palcare
Patient - Final	Medical Treatment/Services	Rehabilitation Medicine	Rehabilitation	Clinical	Rehab
Patient - Final	Medical Treatment/Services	Rehabilitation Medicine	Spinal Injury	Clinical	Spinal
Patient - Final	Medical Treatment/Services	Renal Medicine	Lithotripsy	Clinical	Litho
Patient - Final	Medical Treatment/Services	Renal Medicine	Nephrology	Clinical	Nephrology
Patient - Final	Medical Treatment/Services	Renal Medicine	Renal Dialysis	Clinical	Renal
Patient - Final	Medical Treatment/Services	Respiratory and Sleep Medicine	Asthma Service	Clinical	Asthma
Patient - Final	Medical Treatment/Services	Respiratory and Sleep Medicine	Respiratory Medicine	Clinical	Pulmmed
Patient - Final	Medical Treatment/Services	Rheumatology	Rheumatology	Clinical	Rheumat
Patient - Final	Medical Treatment/Services	Sexual Health	Sexual Health	Clinical	Sexhealth
Patient - Final	Medical Treatment/Services	Special Medicine NOS	Medicine NOS	Clinical	Specmed
Patient - Final	Medical Treatment/Services	Specialty Ward	Specialty Ward	Clinical	Specialty
Patient - Final	Medical Treatment/Services	Wound Management	Wound Management	Clinical	Wound
Patient - Final	Mental Health and Drug and Alcohol Services	Adult Mental Health Inpatient	Mental Health Forensic Inpatient Unit	Clinical	Mhinpfr
Patient - Final	Mental Health and Drug and Alcohol Services	Adult Mental Health Inpatient	Mental Health Inpatient - Peri-natal Unit	Clinical	Mhinppn
Patient - Final	Mental Health and Drug and Alcohol Services	Adult Mental Health Inpatient	Mental Health Inpatient Acute - Adult/General	Clinical	Mhinpagen
Patient - Final	Mental Health and Drug and Alcohol Services	Adult Mental Health Inpatient	Mental Health Inpatient Sub -Acute - Adult/General	Clinical	Mhinpsagen
Patient - Final	Mental Health and Drug and Alcohol Services	Adult Mental Health Outreach/Community	Assertive Outreach Team	Clinical	Mhcomaot
Patient - Final	Mental Health and Drug and Alcohol Services	Adult Mental Health Outreach/Community	Clozapine Clinic	Clinical	Mhclozclin
Patient - Final	Mental Health and Drug and Alcohol Services	Adult Mental Health Outreach/Community	Community Mental Health - Adult/General	Clinical	Mhcomage n

Patient - Final	Mental Health and Drug and Alcohol Services	Child/Adolescent Mental Health Inpatient	Community Mental Health - Child and Adolescent	Clinical	Mhcomcad
Patient - Final	Mental Health and Drug and Alcohol Services	Child/Adolescent Mental Health Inpatient	Mental Health Inpatient Acute - Child and Adolescent	Clinical	Mhinpcad
Patient - Final	Mental Health and Drug and Alcohol Services	Child/Adolescent Mental Health Inpatient	Mental Health Inpatient Sub-acute - Child and Adolescent	Clinical	Mhinpscad
Patient - Final	Mental Health and Drug and Alcohol Services	Drug and Alcohol Services	Drug & Alcohol Service	Clinical	Drugalch
Patient - Final	Mental Health and Drug and Alcohol Services	Drug and Alcohol Services	Mental Health Day Program	Clinical	Mhdaypg
Patient - Final	Mental Health and Drug and Alcohol Services	Mental Health Community Residential	Mental Health Community Residential - Adult/General	Clinical	Mhcomresa gen
Patient - Final	Mental Health and Drug and Alcohol Services	Mental Health Community Residential	Mental Health Community Residential - Child and Adolescent	Clinical	Mhcomresc ad
Patient - Final	Mental Health and Drug and Alcohol Services	Older Person Mental Health Inpatient	Mental Health Inpatient Acute - Older Person	Clinical	Mhinpop
Patient - Final	Mental Health and Drug and Alcohol Services	Older Person Mental Health Inpatient	Mental Health Inpatient Sub-acute - Older Person	Clinical	Mhinpsop
Patient - Final	Mental Health and Drug and Alcohol Services	Older Person Mental Health Outreach/Community	Community Mental Health - Older Person	Clinical	Mhcomop
Patient - Final	Mental Health and Drug and Alcohol Services	Older Person Mental Health Residential	Mental Health Community Residential - Older Person	Clinical	Mhcomreso p
Patient - Final	Mental Health and Drug and Alcohol Services	Psychiatry	Psychiatry	Clinical	Psychiatry
Patient - Final	Other - Nonpatient	Other Non Admitted Patient Services	Other Non Admitted Patient Services	Clinical	Outpat
Patient - Final	Outpatients	Outpatients	Outpatients	Clinical	Outpat
Patient - Final	Public Health	Public Health	Public Health	Clinical	Pubhlth
Patient - Final	Short Stay Assessment	Medical Observation	Observation Bed	Clinical	Obsbed
Patient - Final	Short Stay Assessment	Short Stay Assessment (Attached To ED)	Clinical Decision Units	Clinical	Clindec
Patient - Final	Short Stay Assessment	Short Stay Assessment (Attached To ED)	Emergency Management Units	Clinical	Edmu
Patient - Final	Short Stay Assessment	Short Stay Assessment (Attached To ED)	Short Stay Assessment	Clinical	Essu
Patient - Final	Surgical Services	Burns	Burns	Clinical	Burns
Patient - Final	Surgical Services	Cardiothoracic Surgery	Cardio-thoracic Surgery	Clinical	Cardiothor
Patient - Final	Surgical Services	Cardiothoracic Surgery	Thoracic Medicine	Clinical	Thoracicme d
Patient - Final	Surgical Services	Cardiothoracic Surgery	Thoracic Surgery	Clinical	Thoracicsur
Patient - Final	Surgical Services	Ear, Nose and Throat Surgery	ENT Services	Clinical	ENT

Patient - Final	Surgical Services	General Surgery	Breast Services	Clinical	Breast
Patient - Final	Surgical Services	General Surgery	Cardiac Surgery	Clinical	Cardiosurg
Patient - Final	Surgical Services	General Surgery	Day Surgery Ward	Clinical	Daysurgwar d
Patient - Final	Surgical Services	General Surgery	Gastroenterology	Clinical	Gastro
Patient - Final	Surgical Services	General Surgery	General Surgery	Clinical	Gensurg
Patient - Final	Surgical Services	General Surgery	Pre-Admission Service	Clinical	Preadmit
Patient - Final	Surgical Services	General Surgery	Stomal Therapy	Clinical	Stomther
Patient - Final	Surgical Services	Gynaecology	Gynaecology	Clinical	Gynaecolog y
Patient - Final	Surgical Services	Neurosurgery	Head Injury	Clinical	Headinjury
Patient - Final	Surgical Services	Neurosurgery	Neurosurgery	Clinical	Neurosurg
Patient - Final	Surgical Services	Ophthalmology	Ophthalmology	Clinical	Ophthalm
Patient - Final	Surgical Services	Oral Health	Dental	Clinical	Dental
Patient - Final	Surgical Services	Oral Health	Oralmaxillofacial Surgery	Clinical	Oralmaxillof ac
Patient - Final	Surgical Services	Orthopaedic Surgery	Fracture Service	Clinical	Fracture
Patient - Final	Surgical Services	Orthopaedic Surgery	Orthopaedics	Clinical	Orthpaed
Patient - Final	Surgical Services	Plastic Surgery	Plastic Surgery	Clinical	Plasticsurg
Patient - Final	Surgical Services	Preoperative	Pre-Anaesthesia Service	Clinical	Preanaes
Patient - Final	Surgical Services	Special Procedure Suites	Other Procedure Suite	Clinical	Othprocsuite
Patient - Final	Surgical Services	Special Surgery NOS	Specialty NOS	Clinical	Specialty
Patient - Final	Surgical Services	Surgical Services	Surgery NOS	Clinical	Specsurg
Patient - Final	Surgical Services	Transplants	Bone Marrow Transplant	Clinical	Bonemar
Patient - Final	Surgical Services	Transplants	Heart Transplant Services	Clinical	Hearttrans
Patient - Final	Surgical Services	Transplants	Liver Transplant	Clinical	Livertrans
Patient - Final	Surgical Services	Transplants	Lung Transplant	Clinical	Lungtrans
Patient - Final	Surgical Services	Transplants	Renal Transplant	Clinical	Renaltransp
Patient - Final	Surgical Services	Transplants	Transplants	Clinical	Transplant
Patient - Final	Surgical Services	Urology	Urology	Clinical	Urology
Patient - Final	Surgical Services	Vascular Surgery	Vascular Surgery	Clinical	Vascular
Patient - Final	Intensive Care Service	Intensive Care Service	Adult Intensive Care Unit	Critical	AICU
Patient - Final	Intensive Care Service	Intensive Care Service	Cardiothoracic Intensive Care	Critical	CTICU
Patient - Final	Intensive Care Service	Intensive Care Service	Coronary Care Units	Critical	CCU
Patient - Final	Intensive Care Service	Intensive Care Service	General Critical Care	Critical	Gencritcare
Patient - Final	Intensive Care Service	Intensive Care Service	High Dependency Unit (Attached To ICU)	Critical	HDICU
Patient - Final	Intensive Care Service	Intensive Care Service	Neonatal Intensive Care Units	Critical	NICU
Patient - Final	Intensive Care Service	Intensive Care Service	Other Critical Care (Please Specify)	Critical	Othercritcar e
Patient - Final	Intensive Care Service	Intensive Care Service	Paediatric Intensive Care Units	Critical	PaedICU
Patient - Final	Intensive Care Service	Intensive Care Service	Psychiatric Intensive Care	Critical	PsychICU

Patient - Final	Intensive Care Service	Intensive Care Service	Special Care Nursery (Attached To NICU)	Critical	SCNICU
Patient - Final	Emergency Medicine	Emergency Medicine	Accident And Emergency	ED	Emergaccident
Patient - Final	Emergency Medicine	Emergency Medicine	Emergency Department / Emergency Medicine	ED	Emergmed
Patient - Final	Emergency Medicine	Emergency Medicine	Emergency Ward	ED	Emergward
Patient - Final	Emergency Medicine	Emergency Medicine	Observations Beds	ED	Obsbed
Patient - Final	Emergency Medicine	Emergency Medicine	Other Emergency Departments (Please Specify)	ED	Otheremed
Patient - Final	Other Emergency Medicine (Attached): Psychiatric Emergency	Mental Health and Drug and Alcohol Services	Psychiatric Emergency Care Centre PECC	ED	Mhemerpec
Patient - Final	Other Emergency Medicine (Attached): Trauma	Emergency Medicine	Trauma	ED	Emergtrauma
Patient - Final	Surgical Services	Trauma Centre	Trauma Service	ED	Traumserv
Patient - Final	Surgical Procedures	Induction / Anaesthesia	Anaesthesia	OR	Anaesth
Patient - Final	Surgical Procedures	Induction / Anaesthesia	Patient Induction / Anaesthesia Area	OR	Anaesthesia area
Patient - Final	Surgical Procedures	Operating Suite	General Day Surgery Suite	OR	Daysurg
Patient - Final	Surgical Procedures	Operating Suite	General Operating Rooms	OR	Genor
Patient - Final	Surgical Procedures	Operating Suite	Operating Suite	OR	OR
Patient - Final	Surgical Procedures	Operating Suite	Other Operating Rooms (Please Specify)	OR	Otheror
Patient - Final	Surgical Procedures	Recovery	Recovery Rooms	OR	Recoverrooms
Patient - Final	Clinical Accommodation	Medihotel	Medihotel	Overhead	Medhot
Patient - Final	Clinical Accommodation	Respite Services	Respite Services	Overhead	Resser
Patient - Final	Clinical Accommodation	Transit Lounge	Transit Lounge	Overhead	Tranloun
Patient - Final	Prostheses	Prostheses	Prostheses	Pros	Pros
Patient - Final	Clinical Investigations	Clinical Services - Surgery	Other Procedure Suites (Please Specify)	SPS	Otherprocsuit
Patient - Final	Clinical Investigations	Clinical Services - Surgery	Radiotherapy Suites	SPS	Radiotherapy
Patient - Final	Clinical Investigations	Lung Function Laboratories - SPS	Lung Function Laboratories	SPS	Lungfunc
Patient - Final	Clinical Investigations	Mental Health And Drug And Alcohol Services	ECT Suites	SPS	ECT
Patient - Final	Clinical Investigations	Physiology Laboratories - SPS	Physiology Laboratories	SPS	Physiolabs
Patient - Final	Clinical Investigations	Respiratory Laboratories - SPS	Respiratory Laboratories	SPS	Respiratlabs

Patient - Final	Clinical Investigations	Sleep Laboratories - SPS	Sleep Laboratories	SPS	Sleeplabs
Patient - Final	Medical Treatment/Services	Clinical Services - Medicine	Hyperbaric Chamber	SPS	Hyperbaric
Patient - Final	Medical Treatment/Services	Clinical Services - Medicine	Non-invasive Cardiac Laboratories (E.G.Echo Labs)	SPS	Noninvasive car
Patient - Final	Surgical Procedures	Cardiology and Interventional Cardiology	Angiography	SPS	Angio
Patient - Final	Surgical Procedures	Cardiology and Interventional Cardiology	Cardiac Catheter Suites	SPS	Cardcath
Patient - Final	Surgical Procedures	Clinical Services - Surgery	General Procedure Suites	SPS	Genprocsuit es
Patient - Final	Surgical Procedures	Gastroenterology	Endoscopic Suites	SPS	Endoscopic
Patient - Final	Therapeutic Radiology	Radiology	Lithotripsy Suites	SPS	Lithotrip
Patient - Final	Therapy	Orthotics and prosthetics	Orthotics and prosthetics	Allied	Orthotics
Patient - Intermediate	Medical Treatment/Services	Oncology – Radiation	Radiation Medicine	Clinical	Radmed
Patient - Intermediate	Diagnostic	Invasive Radiology	Angiography	Imag	Angioimag
Patient - Intermediate	Diagnostic	Non-invasive Radiology	Computed Tomography (CT)	Imag	CT
Patient - Intermediate	Diagnostic	Non-invasive Radiology	Magnetic Resonance Imaging (MRI)	Imag	MRI
Patient - Intermediate	Diagnostic	Non-invasive Radiology	Mammography	Imag	Mammo
Patient - Intermediate	Diagnostic	Non-invasive Radiology	Ultrasound	Imag	Ultrasound
Patient - Intermediate	Diagnostic	Nuclear Medicine	Nuclear Medicine	Imag	Nuclmed
Patient - Intermediate	Diagnostic	Nuclear Medicine	Positron Emission Tomography (PET)	Imag	PET
Patient - Intermediate	Diagnostic	Radiography	Echo Cardiogram	Imag	Echocardio
Patient - Intermediate	Diagnostic	Radiography	General Imaging	Imag	Genimag
Patient - Intermediate	Diagnostic	Radiography	Medical Illustration (Including Medical Photography)	Imag	Medill
Patient - Intermediate	Diagnostic	Radiography	Other Imaging (Please Specify)	Imag	Otherimag
Patient - Intermediate	Diagnostic	Radiography	Plain Radiology	Imag	Plainrad
Patient - Intermediate	Diagnostic	General Pathology	Animal House	Otherserv	Animhou
Patient - Intermediate	Anatomical Pathology	Cytopathology	Cytogenetics	Path	Cytogen
Patient - Intermediate	Anatomical Pathology	Cytopathology	Cytology	Path	Cytology
Patient - Intermediate	Anatomical Pathology	Forensic Pathology	Autopsy	Path	Autopsy
Patient - Intermediate	Anatomical Pathology	Forensic Pathology	Forensic	Path	Forensic
Patient - Intermediate	Anatomical Pathology	Forensic Pathology	Mortuary	Path	Morgue

Patient - Intermediate	Anatomical Pathology	Histopathology	Histopathology	Path	Histopath
Patient - Intermediate	Blood Products	Blood Products	Blood Products	Path	Blood
Patient - Intermediate	Blood Products	Blood Products	Transfusion Services (Incl. Blood Bank / Autologist Services)	Path	Transfusion
Patient - Intermediate	Diagnostic	Clinical Pathology	Clinical Biochemistry	Path	Clinbio
Patient - Intermediate	Diagnostic	Clinical Pathology	Clinical Chemistry	Path	Clinchem
Patient - Intermediate	Diagnostic	Clinical Pathology	Haematology (Laboratory)	Path	Haemat
Patient - Intermediate	Diagnostic	Clinical Pathology	Immunology (Laboratory)	Path	Immunology
Patient - Intermediate	Diagnostic	General Pathology	General Pathology	Path	Genpath
Patient - Intermediate	Diagnostic	General Pathology	Other Pathology (Please Specify)	Path	Otherpath
Patient - Intermediate	Diagnostic	General Pathology	Specimen Collection Services	Path	Specimen
Patient - Intermediate	Diagnostic	Genetics	Genetics	Path	Genet
Patient - Intermediate	Diagnostic	Molecular Pathology	Microbiology	Path	Microbio
Patient - Intermediate	Management Of Adverse Drug Reactions	Pharmacology	Clinical Pharmacology	Path	Clinpharm
Patient - Intermediate	Management Of Adverse Drug Reactions	Pharmacology	Pharmacology	Path	Pharmac
Patient - Intermediate	Management Of Adverse Drug Reactions	Toxicology	Toxicology	Path	Toxic
Patient - Intermediate	Manufacturing	Medicines	Manufacturing	Pharm	Mfeddrugs
Patient - Intermediate	Manufacturing	Other	Parenteral / Enteral Nutrition (Goods & Services Only)	Pharm	TPN
Patient - Intermediate	Pharmacy General	Drug Costs	Cytotoxic Drugs	Pharm	Cytotoxic
Patient - Intermediate	Pharmacy General	Drug Costs	General Pharmacy	Pharm	Genpharm
Patient - Intermediate	Pharmacy General	Drug Costs	Other Pharmacy (Please Specify)	Pharm	Otherpharm
Patient - Intermediate	Pharmacy General	Drug Product Supply: Dispensing	Dispensing Costs of Drugs	Pharm	Dispense
Patient - Intermediate	Pharmacy General	High-Cost Drugs	High-Cost Drugs	Pharm	Highdrugs
Patient - Intermediate	Pharmacy General	Imprest	Imprest (Ward)	Pharm	Imprest

Annex D – Cost Bucket Matrix

Cost Centre Group	SW Nurs	SW AH	SW Other	SW Med	SW VM O	GS	MS	Corp	Path	Blood	Phrm	Imag	Oncsts	Pros	Hotel	Dprc B/E/R oU	Lease
Allied	Allied								Path	Phrm	Imag	Oncsts	Pros	Hotel	Dprc		
Clinical	Ward	Allied	Non Clncl	Ward Med	Ward Clinical Spls												



Annex E – CL Indirect & Overhead Cost Centres

Department	CC Type	CostCentre Code	1st Driver	2nd Driver	3rd Driver
Indirect					
Allied Health Administration	Indirect	AlliedAdmin	FTECountAH	SWAH	Allpat
Food Services (patients)	Indirect	PatFood	ActualPatUnits	OBD	ActualCostCentreUnits
Clinical Coding	Indirect	Coding	InpatAll		

Cental Sterilisation and Supply Department (CSSD)	Indirect	CSSD	ItemsSterlised	InpatSS (surgical activity)	Allpats
Nursing Management & Admin	Indirect	NurseAdmin	HeadCountNurs	Ftenurs	ExpSalwageNurs
Medical Management & Admin.	Indirect	MedAdmin	HeadCountMed	Ftemed	ExpSalwageMed
Medical Records	Indirect	MedRecord	Allpat	InpatAll	ObdEquiv
Mortuary & Bereavement Services	Indirect	Mortuary	Deaths	InpatAll	OBD
Departmental Admin*	Indirect	XXXAdmin	FTECountXXX	SWXXX	AllpatXXX

*Departmental Admin should be allocated only to relevant cost centres that it services (denoted by XXX) for example OR admin should only be allocated to OR cost centres

Overhead

Biomedical Engineering	OtherOhd s	BiomedEng	MedAss	Totass	ObdEquiv
Board & Corporate Governance / Secretariat	OtherOhd s	BoardGov	ExpAll	FteTotalAll	HeadCountAll
Business Continuity & Disaster Management	OtherOhd s	BCP	HeadCountAll	FteTotalAll	ExpAll
Business Intelligence / Data Governance	OtherOhd s	DataGov	HeadCountAll	FteTotalAll	ExpAll
Cleaning Services	HotelOhd s	Cleaning	FloorFrq	Floor	FteTotalAll
Compliance, Accreditation & Regulatory Affairs	OtherOhd s	Compliance	HeadCountAll	FteTotalAll	ExpAll
Computing	OtherOhd s	Comp	NoPC/Endpoints	No.Users	HeadCountAll
Corporate Management Fees	OtherOhd s	CorpFee	ExpAll	FteTotalAll	HeadCountAll
Cybersecurity & Information Security	OtherOhd s	InfoSec	NoPC	No.Users	FteTotalAll
Data Centre / Cloud Hosting	OtherOhd s	CloudHost	NoPC	No.Users	HeadCountAll
Depreciation & Amortisation (incl. ROU)	OtherOhd s	DeprAmort	Totass	ExpG&S	ExpAll
Document Transmission & Storage	OtherOhd s	DocXmit	ExpAll	ExpSalwageAll	FteTotalAll
EHR & Clinical Applications	OtherOhd s	EHRAppl	NoPC	FteTotalAll	HeadCountAll
Electricity Supplies	OtherOhd s	ElecSupp	Volume	Floor	ExpAll
Epidemiology	OtherOhd s	Epidemiology	Allpat	InpatAll	ExpAll
Executive Services (Management)	OtherOhd s	ExecServ	ExpAll	FteTotalAll	HeadCountAll

Financial Administration	OtherOhd s	FinAdmin	TransGL	ExpAll	FteTotalAll
Financing Costs–Interest	OtherOhd s	FinCosts	ExpAll	Totass	ExpG&S
Fire Safety & Civil Defense	HotelOhd s	FireSafety	Floor	HeadCountAll	ExpAll
Fleet Management (non-patient vehicles)	OtherOhd s	Fleet	HeadCountAll	FteTotalAll	ExpSalwageAll
Fringe Benefits Tax	OtherOhd s	FBT	ExpSalwageAll	FteTotalAll	HeadCountAll
Gas, Coal, Oil and Fuel supplies	OtherOhd s	GasCoalOilFuel	Volume	Floor	ExpAll
General Hotel Services	HotelOhd s	GenHotel	ObdEquiv	InpatAll	Floor
Grounds and Gardens	OtherOhd s	Grounds	ExpSalwageAll	HeadCountAll	ExpAll
Hospital Management & Administration	OtherOhd s	HospAdmin	HeadCountAll	FteTotalAll	ExpAll
Hospital Specific Service Management & Administration	OtherOhd s	HospSvcAdmin	HeadCountAll	FteTotalAll	ExpAll
Hospital Staff Catering	OtherOhd s	StaffCater	HeadCountAll	FteTotalAll	ExpSalwageAll
Human Resource Management	OtherOhd s	HRM	HeadCountAll	FteTotalAll	ExpSalwageAll
Infectious Control	OtherOhd s	InfectCtrl	Ftemed&nurs	Ftenurs	ObdEquiv
Informatics	OtherOhd s	Info	Allpat	InpatAll	ExpG&S
Insurance	OtherOhd s	Insur	Totass	ExpG&S	ExpAll
Insurance – Professional Indemnity	OtherOhd s	InsurPI	FteMed	ExpSalwageMed	ExpAll
Insurance - Property	OtherOhd s	InsurProp	Totass	ExpG&S	ExpAll
Interpreter Services	OtherOhd s	Interp	ActualPatUnits	ActualCostCentreUnits	ObdEquiv
Legal Services	OtherOhd s	Legal	InpatAll	HeadCountAll	FteTotalAll
Library Services	OtherOhd s	Library	HeadCountAll	FteTotalAll	ExpSalwageAll
Linen & Laundry Services	Indirect	Linen	ActualCostCentreUnits	ObdEquiv	Obd
Maintenance, Engineering & Repairs	OtherOhd s	MaintEngReprs	Totass	MedAss	Floor
Medical Gases Plant	HotelOhd s	MedGasPlant	OBD	ObdEquiv	InpatAll
Medical Staff Office / Credentialing	OtherOhd s	MedStaff	HeadCountMed	Ftemed	ExpSalwageMed
Occupational Health and Safety	OtherOhd s	OHS	HeadCountAll	FteTotalAll	ExpSalwageAll

Other Administrative Services	OtherOhd s	OtherAdmin	HeadCountAll	FteTotalAll	ExpSalwageAll
Other Overhead services	OtherOhd s	OtherOhds	ExpAll	Allpat	ExpSalwageAll
Parking & Car Parks	HotelOhd s	Parking	HeadCountAll	FteTotalAll	ExpAll
Patient Administration	OtherOhd s	PatAdmin	Allpat	InpatAll	ObdEquiv
Patient Experience / Complaints	OtherOhd s	PatientExp	Allpat	InpatAll	ObdEquiv
Patient Residential Accommodation	HotelOhd s	PatientResi	OBD	InpatAll	ExpAll
Patient Transport - Admitted	OtherOhd s	PatTransport_Admit	InpatAll	Allpats	OBD
Patient Transport – Non Admitted	OtherOhd s	PatTransport_NonAdm it	Nonadmt	Allpat	ObdEqiv
Payroll Services	OtherOhd s	Payroll	HeadCountAll	FteTotalAll	ExpSalwageAll
Pest Control	HotelOhd s	PestCtrl	Floor	HeadCountAll	ExpAll
Plant Operations / Boilers & Chillers	HotelOhd s	PlantOps	Volume	Floor	ExpAll
Porters & Orderlies	HotelOhd s	PortOrd	ObdEqiv	OBD	Allpats
Printing, Postage and Stationary	OtherOhd s	PrintPost	ExpAll	ExpSalwageAll	ObdEquiv
Procurement & Contracts Management	OtherOhd s	Procure	ExpG&S	ExpAll	FteTotalAll
Property / Space Management & Rents/Leases	OtherOhd s	Property	Floor	HeadCountAll	ExpAll
Property Services	HotelOhd s	PropertyServ	Floor	HeadCountAll	ExpAll
Public Relations & Marketing	OtherOhd s	PubRel	InpatAll	Allpat	ObdEquiv
Quality Assurance	OtherOhd s	QualAssur	InpatAll	ExpAll	ExpSalwageAll
Redundancy Payments	OtherOhd s	Redundancy	ExpSalwageAll	FteTotalAll	HeadCountAll
Religious and Voluntary Services	OtherOhd s	RegVol	Allpats	InpatAll	ObdEquiv
Research Administration & Ethics	OtherOhd s	ResGovern	HeadCountAll	FteTotalAll	ExpAll
Revenue Cycle / Billing & Claims	OtherOhd s	RevCycle	TransGL	ExpAll	FteTotalAll
Risk Management & Internal Audit	OtherOhd s	RiskAudit	HeadCountAll	FteTotalAll	ExpAll
Sales Tax	OtherOhd s	SalesTax	ExpG&S	ExpAll	FteTotalAll
Security	OtherOhd s	Security	HeadCountAll	FteTotalAll	ExpG&S
Security - Patient	OtherOhd s	SecurityPat	InpatAll	Obd	ObdEqiv

Staff Accommodation	OtherOhd s	StaffAccom	HeadCountAll	FteTotalAll	ExpSalwageAll
Staff Development	OtherOhd s	StaffDev	HeadCountAll	FteTotalAll	ExpSalwageAll
Stores / Supplies & Transport costs	OtherOhd s	Stores	Stores	ExpG&S	ExpAll
Strategy & Planning / PMO	OtherOhd s	Strategy	HeadCountAll	FteTotalAll	ExpAll
Switchboard & Call Centre	HotelOhd s	Switchbd	Phones	HeadCountAll	FteTotalAll
Telecommunication s	OtherOhd s	Telecommun	Phones	HeadCountAll	FteTotalAll
Transport of Personnel	OtherOhd s	StaffTransport	HeadCountAll	FteTotalAll	ExpSalwageAll
Volunteer Services	OtherOhd s	Volunteer	ObdEquiv	Allpat	ExpAll
Waste Management – Clinical/Biohazard	HotelOhd s	WasteClin	ObdEquiv	OBD	InpatAll
Waste Management – General	HotelOhd s	WasteGen	Floor	HeadCountAll	ExpAll
Water Supplies	OtherOhd s	Water	Floor	ExpAll	ExpSalwageAll

Annex F – CL Indirect & Overhead Cost Drivers

Code for Statistic	Description of statistic
ActualPatsCost	Actual cost of service directly allocated to a patient either externally or internally billed e.g. patient meals, transport cost.
ActualCostCentreCost	Actual cost of service directly allocated to a cost centre either externally or internally billed (e.g. biomedical service, payroll services, CSSD).
ActualPatUnits	Actual units of service directly allocated to a patient either externally or internally billed e.g. patient meals, transport, interpreter services.
ActualCostCentreUnits	Actual units of service directly allocated to a cost centre either externally or internally billed e.g. patient meals.
Allpats	All episodes (admitted and weighted non-admitted).
ExpAll	General ledger total expenses for total hospital or specific service e.g. medical.
ExpG&S	Goods and services expenses from general ledger for total hospital or specific service e.g. surgical.
ExpSalwageAll	Salary and wages per cost area for all staff applied to the total hospital or a specific service.
ExpSalwageMed	Salary and wages per cost area for medical staff applied to the total hospital or a specific service.
ExpSalwageNurs	Salary and wages per cost area for nursing staff applied to the total hospital or a specific service.
Floor	Floor space (sq. metres).
Floorfrq	Floor space * frequency of cleaning.
FteTotalALL	Full time equivalents for all staff applied across the total hospital or a specific service.

Ftemed	Total full-time equivalent for medical staff applied across the total hospital or a specific service.
Ftenurs	Total full-time equivalent for nursing staff applied across the total hospital or a specific service.
HeadCountAll	Total staff head count applied across the total hospital or a specific service.
HeadCountMed	Medical staff head count applied across the total hospital or a specific service.
HeadCountNurs	Nursing staff head count applied across the total hospital or a specific service.
InpatAll	Number of inpatient discharges or admissions.
InpatSS	Number of inpatient separations or admissions for a specific service
MedAss	Medical equipment assets.
Medrec	Time taken to code medical record (admitted and non-admitted).
Nopc	Number of computers.
Obd	Occupied bed days (admitted).
ObdEquiv	Occupied bed day equivalents (i.e. use of an equivalence ratio between admitted and non-admitted service to produce overall service volume).
OutpatOcc	Outpatient occasion of service.
Phones	Number of telephone lines connected.
Stores	Stores issued.
Totass	Total assets.
TransGL	Total number of transactions by Cost Centre.
WardAdm	Ward admissions to take account for ward transfers.

Annex G - Final Cost Allocation Methods

Line Item/Point of Delivery	Options	Admitted patients			ED	Non-Admitted
		Wards/Medical Units	Critical Care	Theatre and Procedure Suites		
Medical Salaries & Wages (Both VMO and salaried medical officers)	Alternatives	1.	Actual time	Actual time	Actual time	Actual time
		2.	Planned/rostered time	Planned/rostered time	Planned/rostered time by procedure	Planned/rostered time
		3.	Internally derived RVUs	Internally derived RVUs	Internally derived RVUs by patient service event	Internally derived RVUs by patient service event
		4.	Externally derived RVUs	Externally derived RVUs	Externally derived RVUs by patient service event	Externally derived RVUs by patient service event
Nurse Salaries & Wages	Alternatives	1.	Actual time	Actual time	Actual time	Actual time
		2.	Planned/rostered time	Planned/rostered time	Planned/rostered time by procedure	Planned/rostered time
		3.	Internally derived RVUs	Internally derived RVUs	Internally derived RVUs by patient service event	Internally derived RVUs by patient service event
		4.	Externally derived RVUs	Externally derived RVUs	Externally derived RVUs by patient service event	Externally derived RVUs by patient service event
Allied Health Salaries & Wages	Alternatives	1.	Actual time	Actual time	Actual time	Actual time
		2.	Planned/rostered time	Planned/rostered time	Planned/rostered time by procedure	Planned/rostered time
		3.	Internally derived RVUs	Internally derived RVUs	Internally derived RVUs by patient service event	Internally derived RVUs by patient service event
		4.	Externally derived RVUs	Externally derived RVUs	Externally derived RVUs by patient service event	Externally derived RVUs by patient service event
Other Salaries & Wages	Alternatives	1.	Actual time	Actual time	Actual time	Actual time
		2.	Planned/rostered time	Planned/rostered time	Planned/rostered time by procedure	Planned/rostered time
		3.	Internally derived RVUs	Internally derived RVUs	Internally derived RVUs by patient service event	Internally derived RVUs by patient service event
		4.	Externally derived RVUs	Externally derived RVUs	Externally derived RVUs by patient service event	Externally derived RVUs by patient service event

					by patient service event	
Prosthetics	Alternatives	1.	Actual cost	Actual cost	Actual cost	Actual cost
		2.	Actual utilisation with internally derived RVUs	Actual utilisation with internally derived RVUs	Actual utilisation with internally derived RVUs	Actual utilisation with internally derived RVUs
		3.	Actual utilisation with externally derived RVUs	Actual utilisation with externally derived RVUs	Actual utilisation with externally derived RVUs	Actual utilisation with externally derived RVUs
		4.	Externally derived RVUs	Externally derived RVUs	Externally derived RVUs	Externally derived RVUs
Other Goods and Services	Alternatives	1.	Actual cost	Actual cost	Actual cost	Actual cost
		2.	Actual utilisation with internally derived RVUs	Actual utilisation with internally derived RVUs	Actual utilisation with internally derived RVUs	Actual utilisation with internally derived RVUs
		3.	Actual utilisation with externally derived RVUs	Actual utilisation with externally derived RVUs	Actual utilisation with externally derived RVUs	Actual utilisation with externally derived RVUs
		4.	Externally derived RVUs	Externally derived RVUs	Externally derived RVUs	Externally derived RVUs
Medical Supplies / Consumables	Alternatives	1.	Actual cost	Actual cost	Actual cost	Actual cost
		2.	Actual utilisation with internally derived RVUs	Actual utilisation with internally derived RVUs	Actual utilisation with internally derived RVUs	Actual utilisation with internally derived RVUs
		3.	Actual utilisation with externally derived RVUs	Actual utilisation with externally derived RVUs	Actual utilisation with externally derived RVUs	Actual utilisation with externally derived RVUs
		4.	Externally derived RVUs	Externally derived RVUs	Externally derived RVUs	Externally derived RVUs
Pharmacy	Alternatives	1.	Actual cost	Actual cost	Actual cost	Actual cost
		2.	Actual utilisation with internally derived RVUs	Actual utilisation with internally derived RVUs	Actual utilisation with internally derived RVUs	Actual utilisation with internally derived RVUs
		3.	Actual utilisation with externally derived RVUs	Actual utilisation with externally derived RVUs	Actual utilisation with externally derived RVUs	Actual utilisation with externally derived RVUs
		4.	Externally derived RVUs	Externally derived RVUs	Externally derived RVUs	Externally derived RVUs
Alt	Alt	1.	Actual cost	Actual cost	Actual cost	Actual cost

Pathology		2.	Actual utilisation with internally derived RVUs	Actual utilisation with internally derived RVUs	Actual utilisation with internally derived RVUs	Actual utilisation with internally derived RVUs	Actual utilisation with internally derived RVUs
		3.	Actual utilisation with externally derived RVUs	Actual utilisation with externally derived RVUs	Actual utilisation with externally derived RVUs	Actual utilisation with externally derived RVUs	Actual utilisation with externally derived RVUs
		4.	Externally derived RVUs	Externally derived RVUs	Externally derived RVUs	Externally derived RVUs	Externally derived RVUs
Imaging	Alternatives	1.	Actual cost	Actual cost	Actual cost	Actual cost	Actual cost
		2.	Actual utilisation with internally derived RVUs	Actual utilisation with internally derived RVUs	Actual utilisation with internally derived RVUs	Actual utilisation with internally derived RVUs	Actual utilisation with internally derived RVUs
		3.	Actual utilisation with externally derived RVUs	Actual utilisation with externally derived RVUs	Actual utilisation with externally derived RVUs	Actual utilisation with externally derived RVUs	Actual utilisation with externally derived RVUs
		4.	Externally derived RVUs	Externally derived RVUs	Externally derived RVUs	Externally derived RVUs	Externally derived RVUs
Oncosts		1.	As per relevant Salaries & Wages line item.	As per relevant Salaries & Wages line item.	As per relevant Salaries & Wages line item.	As per relevant Salaries & Wages line item.	As per relevant Salaries & Wages line item.
Hotel Services	Alternatives	1.	Actual cost	Actual cost	Actual cost	Actual cost	Actual cost
		2.	Actual utilisation with internally derived RVUs	Actual utilisation with internally derived RVUs	Actual utilisation with internally derived RVUs	Actual utilisation with internally derived RVUs	Actual utilisation with internally derived RVUs
		3.	Actual utilisation with externally derived RVUs	Actual utilisation with externally derived RVUs	Actual utilisation with externally derived RVUs	Actual utilisation with externally derived RVUs	Actual utilisation with externally derived RVUs
		4.	Externally derived RVUs	Externally derived RVUs	Externally derived RVUs	Externally derived RVUs	Externally derived RVUs
Depreciation	Alternatives	1.	Actual utilisation with internally derived RVUs	Actual utilisation with internally derived RVUs	Actual utilisation with internally derived RVUs	Actual utilisation with internally derived RVUs	Actual utilisation with internally derived RVUs
		2.	Actual utilisation with externally derived RVUs	Actual utilisation with externally derived RVUs	Actual utilisation with externally derived RVUs	Actual utilisation with externally derived RVUs	Actual utilisation with externally derived RVUs
		3.	Externally derived RVUs	Externally derived RVUs	Externally derived RVUs	Externally derived RVUs	Externally derived RVUs

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Annex H - Cost Collection Checklist

Check	Detail	Tick on completion
1	Total costs: The Cost Collection (CC) quantum has been fully reconciled to the signed annual accounts through completion of the reconciliation statement workbook in line with guidance. Where you were unsure of how the elements of the annual accounts link to the reconciliation, you spoke to your financial accounts department.	
2	The costs have been reviewed by relevant service managers or clinicians.	
3	Total activity: The activity information used in the MCC submission has been fully reconciled to provider activity counts and accurately reflects the activity carried out at the provider.	
4	Sense check: All relevant unit costs under SAR 25 have been reviewed and are justifiable.	
5	Sense check: All relevant unit costs over SAR 250,000 have been reviewed and are justified.	
6	Sense check: All unit cost outliers (defined as unit costs less than one10th or more than 10 times the previous year's mean average unit cost) have been reviewed and are justifiable, e.g., reviewing material cost variation at a specialty/DRG level.	
7	Benchmarking: Where possible data has been benchmarked within the cluster between providers. <i>In future years data will be published to facilitate benchmarking against data for individual unit costs and for activity volumes</i>	
8	Where possible the principles, processes and methods set out in the costing standards have been used. Any deviation has been noted and deviations and progress have been documented	
10	Data quality: The quality of data for 202x/202x has been assured.	
11	Data quality: The reliability of costing and information systems for 202x/202z has been assured.	
12	Not applicable for the first submission – however for any subsequent submission the data quality feedback from the previous cost collection has been reviewed and appropriate action taken where needed. Feedback is in the form of:	

	• PLICS data quality tool • Clinical Costing Scoring Tool • MCC data feedback report – all providers.	
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Annex I - Recommended Internal Stakeholders

- **Accountable Executive (Cluster CEO/COO/CFO)** — *Overall accountability*

- Owns compliance with the Standards; approves the reconciliation statement and submission package once the Cost Collection becomes mandated.
- **Provider/Cluster CFO (Finance GL Owner) — Financial integrity**
 - Ensures completeness/accuracy of GL and subledgers; signs off Stage 1 and Stage 6 financial reconciliation
 - Approves cost inclusion/exclusion policy as per Standards (1.1 to 1.3) and material journal adjustments impacting costs.
- **Clinical Costing Lead (Process Owner) — Method & delivery**
 - Designs/maintains the local costing method; owns Stages 2–5 and the patient-level cost file.
 - Maintains RO Register, CSE Catalogue, Assignment Ruleset, and Assumptions Log.
- **Costing Analysts — Build & operate**
 - Execute extracts, mapping, allocations, and QA checks; compile assurance pack.
 - Run sensitivity/driver reasonableness tests and prepare variance analyses.
- **Service Line / Clinical Operations Leads** (e.g., Medicine, Surgery, ICU, ED, OR) — *Driver validity & operational truth*
 - Confirm activity definitions, driver selection, and consumption relationships.
 - Validate outliers and material variances; endorse domain-specific assumptions.
- **Clinical Coding & HIM Lead — Classification & identifiers**
 - Ensures stable encounter identifiers, episode boundaries, and alignment to coding standards.
 - Advises on case-mix implications of measurement rules.
- **Diagnostics & Therapeutics Leads** (Radiology, Pathology, Pharmacy, Allied Health, Blood Bank) — *CSE stewardship*
 - Maintain local catalogs (units of measure, volumes, reportability rules).
 - Provide capacity/throughput data and verify allocation drivers.
- **Theatre/OR & Critical Care Managers — High-cost center stewardship**
 - Provide OR minutes, ICU hours, implant/device tracking, and internal trading relationships.
- **HR/Payroll Lead — Staff cost integrity**

- Supplies FTE, grade, and premium/allowance data; validates staff allocations to centers.
- **Fixed Assets & Procurement Lead — Capital & consumables**
 - Provides depreciation schedules, asset registers, and materials management extracts.
- **Data/IT & Integration Lead — Pipelines & linkage**
 - Owns ETL pipelines, keys (patient/encounter), timestamps, and data quality monitoring.
 - Maintains version-controlled extracts for GL, HIS, and subsystems.
- **Privacy/Data Governance Officer — Compliance & security**
 - Ensures lawful basis for processing; approves de-identification/pseudonymization where applicable.
- **Internal Audit / Quality — Independent assurance**
 - Tests traceability **GL → cost center → driver/CSE → RO**; reviews compliance with the Standards.
 - Reports control deficiencies and remediation status.
- **Third-Party Services Liaison — External activity integration**
 - Ensures patient-level third-party activity is provided and correctly linked or reported as stand-alone ROs.

Recommended Signoffs & segregation of duties

As with any financial process that informs funding, reimbursement, and strategic decision-making, the costing lifecycle requires clear governance, authorization trails, and separation of responsibilities. Sign-offs should be designed to ensure that no single individual is responsible for preparing, validating, and approving the same artefact. This protects the integrity of the costing process, reduces the risk of bias and error, and provides assurance to internal and external users of costing outputs.

Preparation of costing artefacts should remain the responsibility of the Costing Team (Costing Analysts and Costing Lead), with reviews undertaken by subject-matter experts including Clinical Operations, Service Line/Domain Leads, Coding/HIM, and supporting functions as relevant. Approvals generally lie with executive finance governance (e.g., CFO delegate, Finance GL Owner) and/or Accountable Executive Sponsors, ensuring organizational oversight.

A key guiding principle is that the individual developing drivers, assumptions, or allocation rules cannot be the sole approver. All financial reconciliations to the general ledger must be reviewed and confirmed by the Finance GL Owner, while internal audit or quality assurance bodies may be engaged to independently review assignment methodologies, unusual variances, and reconciliation outputs. Once approved through the internal governance chain, the reconciled submission should be formally released.

This structure safeguards the credibility and auditability of the costing dataset, ensuring proper oversight and alignment with good governance practices.

- **Stage 1 (Identify Relevant Expenses):** Prepared by Costing Lead; *Reviewed* by Costing Analysts; *Approved* by Finance GL Owner.
- **Stage 2 (Cost Ledger):** Prepared by Costing Analysts; *Reviewed* by Costing Lead; *Approved* by CFO delegate.
- **Stage 3 (Final Cost Centers & Trading Matrix):** Prepared by Costing Lead; *Consulted* Service Line/Operations; *Approved* by Accountable Executive (or CFO).
- **Stage 4 (RO Register & CSE Catalogue):** Prepared by Costing Lead; *Consulted* Coding/HIM & Domain Leads; *Approved* by Clinical Ops Governance.
- **Stage 5 (Assignment Ruleset & Patient-Level Cost File):** Prepared by Costing Lead; *Consulted* Service Line/Domain Leads; *Independent review* by Internal Audit/Quality; *Approved* by CFO.
- **Stage 6 (Reconciliation Statement & Submission):** Prepared by Costing Lead; *Approved* by Finance GL Owner and Accountable Executive.

Segregation principle: the person who designs drivers/assumptions should not be the sole approver; financial tie-out must be approved by the Finance GL Owner; Internal Audit provides independent checks.

Example RACI (Internal to ACO/Cluster)

The following matrix is a recommended approach only; each organisation may adopt their own approach based upon organisational structure or preferred methodology. The driver of this is to improve costing robustness and engagement of relevant stakeholders

Deliverable / Stage	Costing Lead	Costing Analysts	Finance GL Owner	Service Line / Clinical Ops	Coding / HIM	Diagnostics / Pharmacy / OR/ICU	Data/IT	Internal Audit	Accountable Executive
Cost Inclusion Register (S1)	A	R	A	C	I	I	C	I	I
Cost Ledger (S2)	A	R	C	I	I	I	R	I	I
Final Cost Centres & Trading Matrix (S3)	R	C	C	C	I	C	I	I	A
RO Register (S4)	R	C	I	C	C	C	I	I	A (or Clinical Gov)

CSE Catalogue (\$4)	R	C	I	C	C	C	I	I	A (or Clinical Gov)
Assignment Ruleset (\$5)	R	C	C	C	I	C	C	I	A
Patient-Level Cost File (\$5)	A	R	I	C	I	C	C	I	I
Reconciliation Statement (\$6)	R	C	A	C	I	I	C	I	A
Submission Package (\$6)	A	R	C	I	I	I	C	I	A

R = Responsible, A = Accountable, C = Consulted, I = Informed.