Part B – Health Facility Briefing & Design

55 Coronary Care Unit

International Health Facility Guidelines

2025

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55 Coronary Care Unit

1 Executive Summary

The Coronary Care Unit is a Critical Care Unit for the support, monitoring and treatment of patients with cardiac conditions which are life threatening or potentially life-threatening. The CCU accommodates adult patients that may be of all ages, acuity and levels of disability.

In smaller hospitals with a lower Role Delineation Level the CCU may be combined with other Critical Care Units such as High Dependency Unit or Intensive Care Unit. In tertiary facilities, the CCU may be a comprehensive Unit receiving referrals from other cardiac centres.

The CCU is arranged in Functional Zones that include Entry/ Reception, Patient Areas, Support Areas and Staff Areas. The Reception is the receiving hub and may be used to control access to the Unit. Waiting Areas may be shared with adjacent Units. Patient Zones including Bedrooms, Procedure Rooms and Meeting Rooms should be configured with telemetry monitoring. Staff Areas should include access to facilities for education and meetings.

The Functional Zones and Functional Relationship Diagrams provided indicate the ideal External Relationships with other key departments and hospital services. For CCU this includes a relationship with Cardiac Diagnostic Units such as Cath Labs and Cardiac Rehabilitation Services. Optimum Internal Relationships are demonstrated in the diagram according to the Functional Zones whilst indicating the important paths of travel.

Design Considerations address a range of important issues including Finishes, Accessibility, Acoustics, Safety and Security, Building Services, and Infection Control.

The typical Schedules of Accommodation (SOA) is provided using Standard Components (typical room templates) and quantities for a typical Unit at Role Delineation Levels (RDL) 4 to 6 in 6, 8 and 12 beds unit sizes. The SOA guides the designers to create their project-specific SOA's.

For each of the nominated room types within the SOA the code link to the corresponding Room Data Sheets (RDS) and Room Layout Sheets (RLS) has been provided. Readers may use those codes to access this information on the rooms in the section titled Standard Components on the website.

Further reading material is suggested at the end of this FPU but none are mandatory.

Users who wish to propose minor deviations from these guidelines should use the Non-Compliance Report (in Part A appendices) to briefly describe and record their reasoning based on models of care and unique circumstances.

The details of this FPU follow overleaf.

2 Introduction

A Coronary Care Unit (CCU) is a specially staffed and equipped section of a healthcare facility for the support, monitoring and treatment of highly dependent patients with medical or surgical cardiac conditions which are life threatening or potentially life-threatening.

Patients in CCU will include adults of all ages, acuity, frailty and all levels of disability. The CCU is also increasingly dealing with patients who have co-morbidities such as obesity, diabetes and renal dysfunctions. Most patients will be fully aware of their surroundings but may be agitated, restless and distressed, but others may have decreased level of consciousness.

3 Operational and Planning Considerations

Operational Models

Hours of Operation

The CCU will provide services 24 hours a day, seven days a week.

The level of Coronary Care available should support the delineated role of the particular hospital. The role of a particular CCU will vary, depending on staffing, facilities and support services as well as the type and number of patients it has to manage.

Models of Care

There are several operational models applicable to Coronary Care units, including:

Secondary Operational Model of Care

In smaller healthcare facilities, the CCU may be combined with other critical care units, such as the HDU and ICU, for purposes of optimally utilising staff skills and equipment.

All secondary units will provide:

- Invasive and non-invasive monitoring
- Resuscitation and stabilisation of emergencies until transfer or retrieval to a higher-level facility can be arranged
- Telemetry for patients who do not require transfer / retrieval to a higher-level facility.
- Inpatient and outpatient counselling, information, education, prevention, rehabilitation services and programmes
- Access to a range of cardiac investigations including low risk cardiac catheterisation

Tertiary Operational Model of Care

A comprehensive service is assumed possible with a “Hub and Spoke” arrangement linking major cardiac centres with secondary units and primary care providers ensuring a continuum of patient care. Facilities may or may not be collocated depending on the overall size of the service.

The Coronary Care Unit component would:

- Be a discrete unit usually associated with a designated Cardiac Ward with step-down and telemetry beds for monitoring of patients with acute coronary disease, heart failure or life-threatening arrhythmias
- Provide the full range of invasive and non-invasive monitoring for cardiac patients, with access to the full range of cardiac investigations and 24 hour on call echocardiography, angiography, angioplasty and permanent pacemaker services
- Have an inpatient and outpatient cardiac rehabilitation programme
- Provide Hospital in the Home, outreach and remote monitoring services

Depending on the model of care, cardiac surgery inpatient beds may be collocated with acute cardiac beds with which it may share facilities.

Bed Numbers

Coronary care bed numbers may vary from 4 to 8 in small facilities to 20 or more in large centres. These numbers will need to be determined at the service planning stage of the project.

In smaller units there may be a need to provide swing beds (for example with adjacent ICU or HDU) to allow for expansion as the need arises.

Bed Mix

Beds may be a mix of single or 2 bedrooms. The latter may be particularly appropriate for patients who are only in the unit for short periods for post-procedure recovery.

Acute cardiac and cardiac surgery beds may be a mix of single and two bed rooms and may also include a cardiac surgery high dependency unit. Refer to FPU –High Dependency Unit in Part B of these guidelines.

Isolation Room Requirements

For each CCU pod (12 beds plus/minus 2), at least two negative pressure isolation CCU rooms with ante room should be provided. These isolation rooms will be regarded as part of the total bed count in the pod. For each CCU pod up to 6 beds a single negative pressure CCU room with ante room should be provided. Positive pressure Isolation rooms provision will be subject to the clinical services plan of the hospital and the management policy of the facility.

Planning Models

The CCU should be in a quiet location that avoids or minimises:

- Disturbing sounds (ambulances, traffic, sirens)
- Disturbing sights (morgue, cemeteries etc.)
- Problems associated with prevailing weather conditions (excessive wind, sun exposure etc.)
- Location should enable expansion if additional beds are required in the future.

In the ideal configuration of a Coronary Care Unit, all coronary care beds should be visible from the Staff Station. In larger units where this cannot be achieved, consideration may be given to providing decentralised staff / work stations with computer support.

If the CCU adjoins another unit, appropriate sharing of facilities should be maximised.

Functional Areas

The Coronary Care Unit will consist of the following Functional Areas:

- Inpatient areas and dedicated clinical support areas
- Staff offices and amenities

Some of the Functional Areas will be CCU-specific and some may be shared with the adjoining or co-located Unit.

Inpatient and Clinical Support Areas

Inpatient accommodation in the CCU will comprise the following rooms:

- A mix of single and 2 bedrooms
- Nominated bariatric room(s) with ceiling mounted patient lifter as required by the Service Plan
- Showers and toilets
- Staff station
- Clean utility room
- Medication room; a secure and alarm monitored room with visibility into the unit
- Equipment bay
- Linen trolley bay/s
- Storage
- Visitor lounge and / or distressed relatives room

CCU Bedroom

Patient Bed Bays, Enclosed Rooms and Isolation Rooms shall be provided according to the numbers in the Service Plan.

Provide cardiac protection and electrical installations to comply with local standards.

All Patient areas are to comply with Standard Components included in these Guidelines.

Ensuite Showers and Toilets

Provision of individual ensuite showers / toilets to patient bedrooms should be carefully considered for the following reasons:

- Many patients are transferred out of the unit as soon as they are past the critical phase and are ambulant
- Patients may only be in the unit for a few hours recovering from a procedure but may require access to a toilet and shower before discharge
- En suites increase the overall size of the unit and subsequent capital costs
- Private ensuites for each CCU room are highly recommended, although not mandatory. As a minimum ensuites should be provided at the rate of 1 per 4 CCU rooms.

Shared Areas

The extent of room/s spaces that may be shared between CCU and an adjoining Inpatient Unit or ICU will be determined by the size of the overall CCU itself. Large units may be entirely self-contained with regards to clinical spaces but may still share some staff amenities and teaching spaces.

However, the following should be considered with regards to potential for sharing:

- Clean and dirty utility rooms
- Central equipment storage
- Beverage pantry / kitchen
- Reception / ward clerk
- Cleaner's room
- Disposal room
- Visitor waiting
- Public toilets
- Staff education / training room
- Staff amenities (shower, toilets, locker room and rest area)

Acute Cardiac and Cardiac Surgery Inpatient Unit

In aspects, an acute cardiac and cardiac surgery inpatient unit will be the same as a general medical or surgical inpatient unit with the following additions:

- Procedure Room with access for a bed and C-arm if required; this room is optional
- Telemetry equipment and antenna with monitoring at a Staff Station that may be in the CCU or in the main ward staff station
- Patient education facilities
- Optional acute rehabilitation gym

Day Procedure Holding / Recovery Beds

Unless beds in the Catheter Laboratory, Day Procedure or 24 hour unit are utilised, the CCU or the acute ward may cater to the recovery of patients following cardiac procedures such as echocardiography, cardiac angiography, transoesophageal echo (TOE), percutaneous coronary intervention and temporary and permanent pacemaker insertion.

Staff Offices and Amenities

Staff offices and amenities will be dictated by staff establishment and may include:

- Offices
- Workstations

- Meeting / teaching room/s
- Staff room with beverage bay
- Showers and toilets
- Property storage

In large centres, there should be access to adequate facilities for staff education and meetings. Teaching facilities should allow staff to access simulation training and competency assessment within the unit. These rooms may be used by the multidisciplinary team.

Teaching and Clinical Research

A central monitor connected to patient cardiac monitors is usually located at the central staff station. Easy viewing of cardiac rhythms of all patients will encourage discussion between staff and assist with in-house education. In larger Units, simulation training and competency assessment facilities may also be provided.

Research associated with the provision of all cardiac services for CCU and cardiac inpatient units may be undertaken. Spatial provision for research may be justified by service needs and role delineation.

The following facilities may be required for clinical trials:

- Shared offices for senior coordinator/s and research fellow/s
- Shared offices / workstations for other clinical trial research staff
- Shared offices / workstations for registrars and research assistants
- Patient consulting room/s (if the unit is accessed by patient)
- Drug monitor room
- Drugs and research files storage
- Research laboratories.

Functional Relationships

A Functional Relationship can be defined as the correlation between various areas of activity whose services work together closely to promote the delivery of services that are efficient in terms of management, cost and human resources.

External

The CCU will have working relationships with many other units & services including:

- Cardiac Investigation and Cardiac Catheterisation Unit
- Cardiac Rehabilitation services
- Emergency Unit
- Nuclear Medicine / PET
- Intensive Care Unit
- Operating Suite Unit
- Medical Imaging
- Pathology
- Biomedical Engineering
- Cardiac Surgery: Linkages occur at several levels including clinical decision making about patients requiring cardiac surgery, joint research projects and joint management of patients in the post-operative phase, including rehabilitation. The Units need to be well-linked, but not necessarily co-located.
- Hospital in the Home services for chronic cardiac disease such as heart failure

Internal

Optimal internal relationships to be achieved include those between:

- Patient occupied areas forming the core of the unit
- Staff station(s) and associated areas that need direct access and observation of patient areas
- Utility and storage areas that need to be readily accessible to both patient and staff work areas
- Public areas located on the perimeter of the unit
- Shared areas that should be easily accessible from the units served

Access

External

The Unit should be located where the emergency medical team can respond rapidly and efficiently to emergency calls with minimum travel time. Through traffic to other parts of the healthcare facility should be avoided for efficient access of emergency team and equipment and to maintain patient privacy.

Ideally there should be a separate and discrete entry or entries for staff, goods and supplies with swipe card or similar electronic access to authorised personnel. Discrete entry for patients on beds or trolleys may also be considered as this should provide:

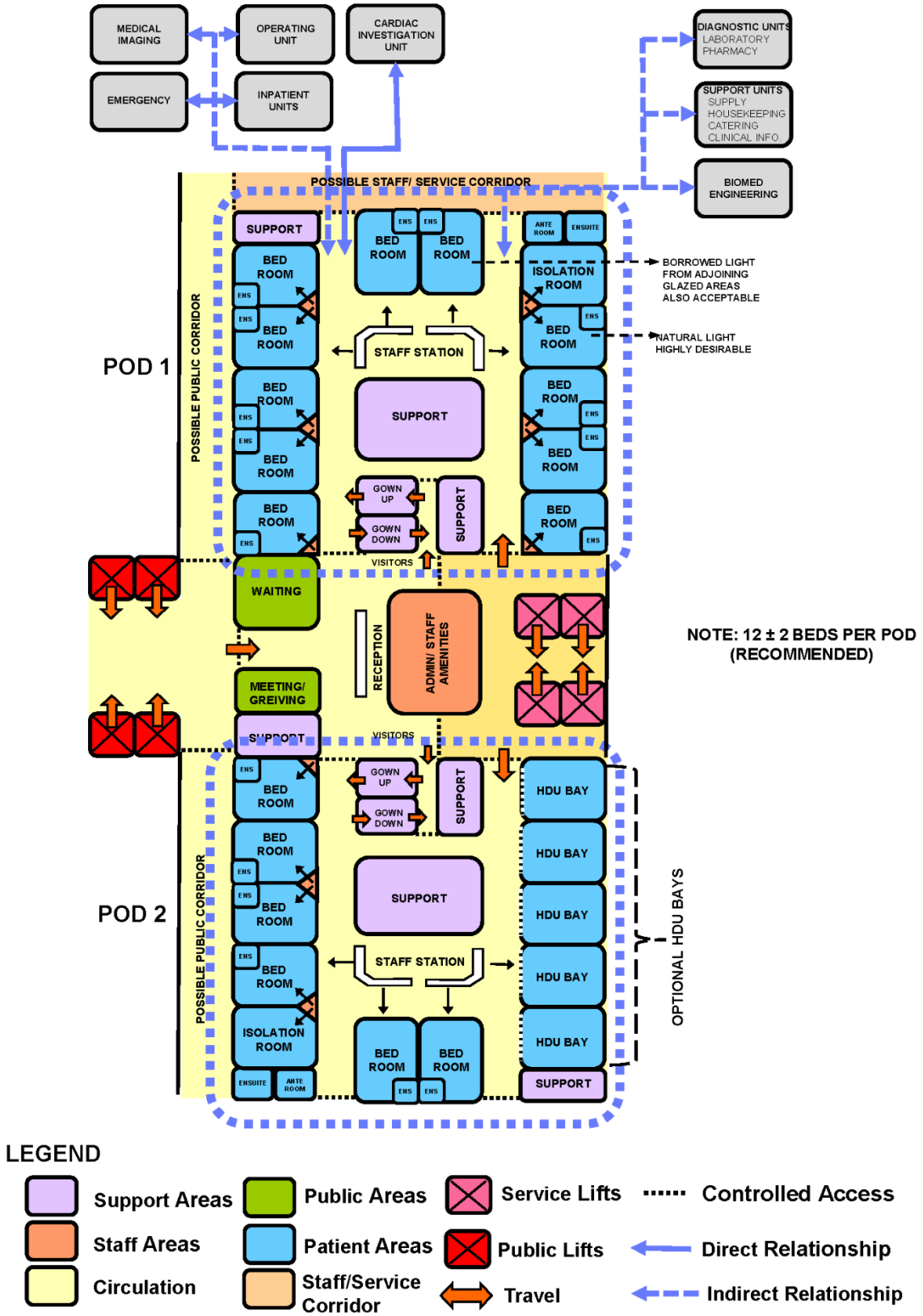
- Easy access from lifts from the Emergency Unit and Chest Pain Assessment Unit
- Ready access to and from the Cardiac Catheter Laboratory

Internal

There should be only one point of public entry overseen by a ward clerk / receptionist during extended daytime hours to:

- Monitor and / or prevent access by visitors depending on the patient's condition
- Advise visitors if patients have been moved or are out of the unit for any reason
- Monitor visiting staff and direct them to the appropriate staff member or patient
- Monitor patient movements in and out of the unit

Functional Relationships Diagrams



4 Design Considerations

General

Patient Treatment Areas

The Coronary Care Unit should be designed to accommodate a variety of patients of varying mobility and dependence that may include bariatric patients.

Patients should be situated so that healthcare providers have direct or indirect visualisation, with cardiac monitoring at all times. This approach permits the monitoring of patient status under both routine and emergency circumstances. The preferred design is to allow a direct line of vision between the patient and the central Staff Station. In CCUs with a modular design, patients should be visible from their respective nursing substations.

Sliding glass doors and partitions facilitate this arrangement and provide speedy access to the room in emergency situations.

Renal Dialysis

Dialysis machines including provision for reverse osmosis water and drainage should be provided to patient bedrooms according to the Unit's Operational Policy. As a minimum, dialysis facilities should be provided in each and every Isolation Room/s, plus one per pod outside of the isolation room. RO water may be provided via portable dialysis units. Refer to Part E-Engineering Services for details.

Environmental Considerations

Acoustics

The Coronary Care Unit should be designed to minimize the ambient noise level within the unit and transmission of sound between patient areas, staff areas and public areas. Consideration should be given to the location of noisy areas or activity, preferably placing them away from quiet areas, including patient bedrooms.

Signals from patient call systems, alarms from monitoring equipment, and telephones add to the sensory overload in critical care units. Without reducing their importance or sense of urgency, such signals should be modulated to a level that will alert staff members yet be rendered less intrusive.

For these reasons, floor coverings that absorb sound should be used while keeping infection control, maintenance, and equipment movement needs under consideration. Walls and ceilings should be constructed of materials with high sound absorption capabilities. Ceiling soffits and baffles help reduce echoed sounds. Doorways should be offset, rather than being placed in symmetrically opposed positions, to reduce sound transmission. Counters, partitions, and glass doors are also effective in reducing noise levels.

Acoustic treatment will be required to the following:

- Patient bedrooms
- Interview and meeting rooms
- Treatment rooms
- Staff rooms
- Toilets and showers.

Natural Light

Natural light and views should be available from the Unit for the benefit of staff and patients. Natural light to all bedrooms by means of a window is essential and desirable in staff rooms. Windows are an important aspect of sensory orientation and psychological well-being of patients. An open and pleasant outlook, preferably to a landscaped area, is highly desirable.

Privacy

The design of the Coronary Care Unit needs to consider the contradictory requirement for staff visibility of patients while maintaining patient privacy. Unit design and location of staff stations will offer varying degrees of visibility and privacy.

Each bed shall be provided with bed screens to ensure privacy of patients undergoing treatment in the room. Refer to the Standard Components for examples.

Other factors for consideration include:

- Use of windows in internal walls and/or doors, with provision of privacy blinds
- Location of sanitary facilities to provide privacy for patients while not preventing observation by staff
- Location of external, courtyard or atrium facing bedroom windows to prevent others from looking into bedrooms.

Interior Decor

Interior decor includes furnishings, style, colour, textures and ambience, influenced by perception and culture. This can help prevent an institutional atmosphere. However, cleaning, infection control, fire safety, patient care and the patients' perceptions of a professional environment should always be considered.

Some colours, particularly the bold primaries and green should be avoided in areas where clinical observation occurs such as bedrooms, treatment areas and corridors. Such colours may prevent the accurate assessment of skin tones e.g. yellow / jaundice, blue / cyanosis, red / flushing.

Space Standards and Components

Accessibility

One Bedroom and Ensuite should comply with accessibility requirements in accordance with the applicable Local Authority standards. Accessibility bedrooms and ensuites should enable normal activity for wheelchair dependent patients, as opposed to patients who are in a wheelchair as a result of their hospitalisation.

Doors

Door openings to coronary care bedrooms shall have a minimum of 1400 mm clear opening to allow for easy movement of beds and equipment.

Ergonomics/ OH&S

The coronary Care Unit should be designed with consideration to ergonomics to ensure an optimal working environment. Design and dimensions of Staff Stations and work areas must ensure privacy and security for patients, visitors and staff.

Refer also to Part C of these Guidelines.

Size of the Unit

The number of beds will be determined by the facility’s service plan. The recommended maximum number of beds visible from a single central staff station in a coronary care unit should not exceed 12 beds (± 2).

Bed Spacing / Clearances

Bed dimensions become a critical consideration in ascertaining final room sizes. The dimensions noted in these Guidelines are minimums and do not prohibit the use of larger rooms where required.

All patient beds must comply with standard components for fittings, furniture, mechanical and electrical services and nurse call systems, including the clearances that they imply.

In coronary care bedrooms a minimum of 1200 mm clearance around both sides and the foot of the bed is recommended. At the head of the bed, a minimum of 300 mm clearance should be allowed between the bed and any fixed obstruction or wall.

Drug Storage

Drugs prescribed at the hospital should not be stored in the patient bedrooms. All drugs should be managed by the responsible nurses via a Medication Room.

Optionally the Medication Room may be combined with a Clean Utility room as long as the requirements of both functions are accommodated.

Medication may be manually stored and managed, or alternatively automated Medication Management systems may be utilized.

Controlled or dangerous drugs must be kept in a secure cabinet within the Medication Room with a monitored alarm.

A refrigerator, as required; to store restricted substances, must be lockable or housed within a lockable storage area.

The Medication Room must have space for parking a medication trolley.

Safety and Security

The Coronary Care Unit shall provide a safe and secure environment for patients, staff and visitors, while remaining a non-threatening and supportive atmosphere conducive to recovery.

The facility, furniture, fittings and equipment must be designed and constructed in such a way that all users of the facility are not exposed to avoidable risks of injury.

Security issues are important due to the increasing prevalence of violence and theft in health care facilities.

The arrangement of spaces and zones shall offer a high standard of security through the grouping of like functions, control over access and egress from the Unit and the provision of optimum observation for staff. The level of observation and visibility has security implications.

Finishes

Finishes including fabrics, floor, wall and ceiling finishes, should be inviting and non-institutional as far as possible. The following additional factors should be considered in the selection of finishes:

- Acoustic properties
- Durability
- Ease of cleaning
- Infection control
- Fire safety
- Movement of equipment; floor finishes should be resistant to marring and shearing by wheeled equipment

In areas where clinical observation is critical such as bedrooms and treatment areas, lighting and colour selected must not impede the accurate assessment of skin tones.

Walls shall be painted with lead free paint.

Fixtures, Fittings and Equipment

Window Treatments

Each room shall have partial blackout facilities (blinds or lined curtains) to allow patients to rest during the daytime.

Privacy bed screens must be washable, fireproof and cleanly maintained at all times. Disposable bed screens may also be considered.

If blinds are to be used instead of curtains, the following will apply:

- Vertical blinds and Holland blinds are preferred over horizontal blinds as they do not provide numerous surfaces for collecting dust.
- Horizontal blinds may be used within a double-glazed window assembly with a knob control on the bedroom side.

Window treatments should be durable and easy to clean. Consideration may be given to use of double glazing with integral blinds, tinted glass, reflective glass, exterior overhangs or louvers to control the level of lighting. Rooms may require complete darkness to enable cardiac ultrasound being undertaken.

Bedside Monitoring

Each coronary care bed should have the capacity for individual monitoring. Bedside monitoring equipment should be located to permit ease of access and viewing, but should not interfere with the visualisation of, or access to the patient. The bedside nurse and/or monitor technician should be able

to observe the monitored status of each patient briefly. This goal can be achieved either by a central monitor at staff stations, or by bedside monitors that permit the observation of more than one patient simultaneously. Neither of these methods is intended to replace bedside observation.

Weight-bearing surfaces that support the monitoring equipment should be sturdy enough to withstand high levels of strain over time. It should be assumed that monitoring equipment will increase in volume over time. Therefore, space and electrical facilities should be designed accordingly.

Bedside Storage

Each patient bed space shall include storage and writing provision for staff use.

Clocks

A clock shall be provided and conveniently located for easy reference from all bed positions and the Staff Station.

Patient Entertainment systems

Patients may be provided with the following entertainment/ communications systems according to the Operational Policy of the facility:

- Television
- Telephone
- Radio
- Internet (through Wi-Fi).

Patient Lifting Hoist

Allowance for ceiling mounted patient lifters should be provided to a nominated number of beds for lifting bariatric CCU patients who have to be kept in supine position or complete bed rest. The hoist is also beneficial for repositioning bariatric patients who are connected to multiple medical equipment including a balloon pump and a haemodialysis machine.

Building Services Requirements

This section identifies unit specific services briefing requirements only and must be read in conjunction with Part E - Engineering Services for the detailed parameters and standards applicable.

Mechanical Services (HVAC)

The Unit should be air-conditioned with adjustable temperature and humidity for patient comfort.

All HVAC units and systems are to comply with services identified in the Standard Components and Part E – Engineering Services.

Medical Gases

Medical gas is that which is intended for administration to a patient in anaesthesia, therapy, or diagnosis. Medical gases shall be installed and readily available in each patient bay.

Medical gases will be provided for each bed according to the quantities noted in the Standard Components Room Data Sheets.

Hydraulics/ Water Treatment

Warm water must be supplied to all areas accessed by patients within the Coronary Care Unit. This requirement includes all staff handwash basins and sinks located within patient accessible areas.

Information Technology (IT) and Communications

Unit design should address the following Information Technology/ Communications issues:

- Electronic Health Records (EHR) which may form part of the Health Information System (HIS)
- Hand-held tablets and other smart devices
- Picture Archiving Communication System (PACS)
- Paging and personal telephones replacing some aspects of call systems/ DECT
- Data entry including scripts and investigation requests

- Bar coding for supplies and X-rays / Records
- Data and communication outlets, servers and communication room requirements
- Optional availability of Wi-Fi for staff and patients
- Central cardiac monitoring
- Closed Circuit Television (CCTV) may be required to ensure staff can oversee entry and egress points

A ceiling mounted TV should be provided in patient bedrooms for education, therapy and relaxation purposes.

A decision about the need for other Telehealth technology, such as access to digital radiology or pathology systems, should be made early in the planning process.

Nurse / Emergency Call

Hospitals must provide an electronic call system next to each inpatient bed to allow for patients to alert staff in a discreet manner at all times.

Patient calls are to be registered at the Staff Stations and must be audible within the service areas of the Unit including Clean Utilities and Dirty Utilities. If calls are not answered the call system should escalate the alert accordingly. The Nurse Call system may also use mobile paging systems or SMS to notify staff of a call.

Pneumatic Tube Systems

The Coronary Care Unit may include a pneumatic tube station, as determined by the facility Operational Policy. If provided, the station should be located in close proximity to the Staff Station or under direct staff supervision.

Infection Control

The infectious status of many patients accessing or admitted to the CCU may be unknown. All body fluids should be treated as potentially infectious and standard precautions should be taken as a minimum. Refer to Part D of these Guidelines – Infection Prevention and Control - for further information.

Hand Basins

Handwashing facilities shall be required in the corridors, patient bedrooms and other rooms as specified by the Standard Components.

Hand-washing facilities shall not impact on minimum clear corridor widths.

Hand Basins in patient bedrooms should be used solely for infection control purposes and utilised only by staff. Patients should use hand basins provided in bathrooms for personal purposes. Staff may not use the patient ensuites hand wash basin.

Antiseptic Hand Rubs

Antiseptic hand rubs should be located so they are readily available for use at points of care, at the end of patient beds and in high traffic areas.

The placement of antiseptic hand rubs should be consistent and reliable throughout facilities.

Antiseptic Hand Rubs, although very useful and welcome, cannot fully replace hand wash bays.

Isolation Rooms

Refer to the section under Functional Planning and Considerations above for the minimum number of negative pressure isolation rooms.

Entry to each Isolation room shall be through an airlock (or anteroom). Clinical hand-washing, gown and mask storage, and waste disposal shall be provided within the airlock.

The pressurisation of the isolation CCU room and the airlock must be monitored and displayed on a device on the corridor side. The monitor must have audible and visible alarm.

The pressure regime for the negative pressure isolation CCU room and airlock should be based on the following:

Corridor (N) Neutral

Airlock (-) Negative

CCU room (--) Negative

Ensuite (---) Negative

An Ensuite, directly accessible from the Isolation Room, shall be provided for every isolation room, negative or positive.

Positive Pressure isolation CCU rooms will depend on the operational policy of the facility and the clinical assessment of the patient types expected.

The pressure regime for the positive pressure isolation CCU room and airlock should be based on the following:

Corridor (N) Neutral

Airlock (+) Positive

CCU room (++) Positive

Ensuite (N) Neutral (Negative against the CCU room)

Also refer to Parts E and D of these Guidelines.

5 Components of the Unit

Standard Components

Standard Components are typical rooms within a health facility, each represented by a Room Data Sheet (RDS) and a Room Layout Sheet (RLS).

The Room Data Sheets are written descriptions representing the minimum briefing requirements of each room type, described under various categories:

- Room Primary Information; includes Briefed Area, Occupancy, Room Description and relationships, and special room requirements
- Building Fabric and Finishes; identifies the fabric and finish required for the room ceiling, floor, walls, doors, and glazing requirements
- Furniture and Fittings; lists all the fittings and furniture typically located in the room; Furniture and Fittings are identified with a group number indicating who is responsible for providing the item according to a widely accepted description as follows:

Group	Description
1	Provided and installed by the Builder/ Contractor
2	Provided by the Client and installed by the Builder/Contractor
3	Provided and installed by the Client

- Fixtures and Equipment; includes all the serviced equipment typically located in the room along with the services required such as power, data and hydraulics; Fixtures and Equipment are also identified with a group number as above indicating who is responsible for provision

Building Services; indicates the requirement for communications, power, Heating, Ventilation and Air conditioning (HVAC), medical gases, nurse/ emergency call and lighting along with quantities and types where appropriate. Provision of all services items listed is mandatory.

The Room Layout Sheets (RLS's) are indicative plan layouts and elevations illustrating an example of good design. The RLS indicated are deemed to satisfy these Guidelines. Alternative layouts and innovative planning shall be deemed to comply with these Guidelines provided that the following criteria are met:

- Compliance with the text of these Guidelines
- Minimum floor areas as shown in the schedule of accommodation
- Clearances and accessibility around various objects shown or implied
- Inclusion of all mandatory items identified in the RDS.

The Cardiac Investigation Unit consists of Standard Components to comply with details described in these Guidelines. Refer also to Standard Components Room Data Sheets (RDS) and Room Layout Sheets (RLS) separately provided.

Non-Standard Components

Non-standard rooms are rooms are those which have not yet been standardised within these guidelines. As such there are very few Non-standard rooms. Non-Standard rooms are identified in the Schedules of Accommodation as NS and are separately covered below.

6 Schedule of Equipment (SOE)

This Schedule of Equipment (SOE) below lists the major equipment required for the key rooms in this FPU.

Room Name		
1 Bed Room - Special, CCU, Room Code (1br-ccu-25-i)		
Air flowmeter	Infusion pump: syringe	Suction adapter
Bed: ICU, electric	Locker: bedside	Supply unit: ceiling (optional)
Infusion pump: enteral feeding	Monitor: physiologic, critical care	Table: overbed
Infusion pump: single channel	Oxygen flowmeter	

7 Schedule of Accommodation – Coronary Care Unit

The Coronary Care Unit may be co-located with an Inpatient Unit or ICU in order to efficiently share facilities.

Room/ Space	Standard Component Room Codes	This column is not used			RDL 4 Qty x m2 6 Rooms			RDL 5 Qty x m2 8 Rooms			RDL 6 Qty x m2 12 Rooms			Remarks
Entry/ Reception														
Reception/ Clerical	recl-10-i similar				1	x	10	1	x	10	1	x	12	May share with adjacent unit if co-located
Waiting	wait-15-i wait-20-i wait-30-i				1	x	15	1	x	20	1	x	20	1.2 m2 per person; 1.5 m2 per wheelchair May share with adjacent unit if co-located
Waiting - Family	wait-20-i wait-25-i wait-50-i				1	x	20	1	x	20	1	x	25	May share with adjacent unit if co-located
Meeting Room	meet-12-i meet-l-15-i				1	x	12	1	x	12	1	x	15	May share with adjacent unit if co-located
Toilet - Public	wcpu-3-i				2	x	3	2	x	3	2	x	3	May share public amenities if located close
Gown-up	gw-up-i				1	x	8	1	x	10	1	x	10	
Gown-down	gw-dn-i				1	x	8	1	x	10	1	x	10	
Patient Areas														
1 Bedroom - Special, CCU, 25 m²	1 br-ccu-25-i				5	x	25	6	x	25	10	x	25	Provide ceiling mounted lifter in designated bariatric room(s)
1 Bedroom - Special, CCU (Negative Pressure)	1 br-ccu-25-i similar				1	x	25	2	x	25	2	x	25	Negative pressure isolation room. locate away from Unit entrance
Anteroom	anrm-i				1	x	6	2	x	6	2	x	6	To negative pressure isolation room if provided
Ensuite - Standard	ens-st-i				6	x	5	8	x	5	12	x	5	6 m² for designated bariatric ensuite(s)
Sub Total					**265**			**340**			**470**			
Circulation %					**40%**			**40%**			**40%**			
Area Total					**371**			**476**			**658**			
Support Areas														
Bay - Beverage, Enclosed	bbev-enc-i				1	x	5	1	x	5	1	x	5	
Bay - Meal Trolley	bmt-4-i							1	x	4	1	x	4	
Bay - Handwashing, Type B	bhws-b-i				2	x	1	2	x	1	3	x	1	
Bay - Linen	blin-i				1	x	2	1	x	2	1	x	2	
Bay - Mobile Equipment	bmeq-4-i				1	x	4	1	x	4	2	x	4	For mobile patient lifter, ECG machine, mobile X-ray, etc.
Bay - Resuscitation Trolley	bres-i				1	x	2	1	x	2	1	x	2	
Bay - PTS														
Clean Utility	clur-12-i				1	x	12	1	x	12	1	x	12	
Cleaner's Room	clrm-6-i				1	x	6	1	x	6	1	x	6	May be shared with an adjacent unit in smaller CCUs
Dirty Utility	dtur-10-i				1	x	10	1	x	10	1	x	10	May be co-located with Disposal Room

Room/ Space	Standard Component Room Codes	This column is not used			RDL 4 Qty x m2 6 Rooms			RDL 5 Qty x m2 8 Rooms			RDL 6 Qty x m2 12 Rooms			Remarks
Disposal Room	disp-8-i disp-10-i				1	x	8	1	x	10	1	x	10	
Office - Clinical/ Handover	off-cln-i				1	x	15	1	x	15	1	x	15	
Reporting Station	rpst-2-i				3	x	2	4	x	2	6	x	2	
Staff Station	sstn-10-i sstn-14-i sstn-20-i				1	x	10	1	x	14	1	x	20	
Store - General	stgn-10-i similar stgn-12-i				1	x	8	1	x	10	1	x	12	
Store - Equipment					1	x	10	1	x	14	1	x	16	
Sub Total					**100**			**118**			**137**			
Circulation %					**40%**			**40%**			**40%**			
Area Total					**140**			**165**			**192**			
Staff Areas														
Meeting Room	meet-12-i meet-l-15-i				1	x	12	1	x	15	1	x	15	For Meetings, Tutorials
Office - Single Person, 9 m^2	off-s9-i				1	x	9	1	x	9	1	x	9	Unit Manager
Office - Single Person, 12 m^2	off-s12-i										1	x	12	Optional for Cardiologist
Office - 2 Person Shared	off-2p-i							1	x	12	1	x	12	Optional for Registrars
Property Bay - Staff	prop-2-i prop-3-i				1	x	2	1	x	3	1	x	3	May be shared with an adjacent unit in smaller CCUs
Staff Room	srm-15-i				1	x	15	1	x	15	1	x	15	May be shared with an adjacent unit in smaller CCUs
Toilet - Staff	wcst-i				2	x	3	2	x	3	2	x	3	
Sub Total					**44**			**48**			**48**			
Circulation %					**25%**			**25%**			**25%**			
Area Total					**55**			**60**			**60**			
Grand Total					**566**			**701**			**910**			

Please note the following:

- Areas noted in Schedules of Accommodation take precedence over all other areas noted in the FPU.
- Rooms indicated in the schedule reflect the typical arrangement according to the Role Delineation.
- Exact requirements for room quantities and sizes will reflect Key Planning Units identified in the service plan and the policies of the Unit.
- Room sizes indicated should be viewed as a minimum requirement; variations are acceptable to reflect the needs of individual Unit.
- Office areas are to be provided according to the Unit role delineation and number of endorsed full-time positions in the unit.
- Staff and support rooms may be shared between Functional Planning Units dependant on location and accessibility to each unit and may provide scope to reduce duplication of facilities.
- The above SOA assumes the Staff Areas are located separately from the rest of the Unit and subsequently have a lower circulation percentage

8 References and Further Reading

- Australasian Health Facility Guidelines., Health Planning Units, B.0260 Cardiac Care (Inpatient) Unit - CCU, 2023; refer to website www.healthfacilitydesign.com.au
- Guidelines for Design and Construction of Health Care Facilities; The Facility Guidelines Institute, 2022 Edition; refer to website www.fgiguidelines.org