

DHA Health Facility Guidelines 2019

Part B – Health Facility Briefing & Design

80 – Coronary Care Unit



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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.

The Schedules of Accommodation are provided using Standard Components (typical room templates) and quantities for a typical Unit at Role Delineation Levels (RDL) 3 to 6 in 6, 8 and 12 beds.

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 (Appendix 4 in Part A)** to briefly describe and record their reasoning based on models of care and unique circumstances.

The details of this FPU follow overleaf.



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80. Coronary Care Unit

1 Introduction

A Coronary Care Unit (CCU) is a critical care unit within 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. CCU is also increasingly dealing with patients with 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.

2 Functional & Planning Considerations

2.1 Operational Models

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.

2.2 Models of Care

There are a number of models applicable to Coronary Care units described here. Note that Primary cardiac services are generally provided in a rural or outpatient setting; more complex cases are referred to Secondary and Tertiary level facilities.

2.2.1 Secondary Operational Model of Care

In smaller healthcare facilities, the CCU may be combined with other critical care units such as 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

2.2.2 Tertiary Operational Model of Care

A comprehensive service is assumed possibly 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 Inpatient Unit 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, 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.

2.2.3 Day Procedure Holding / Recovery Beds

Unless beds in the Catheter Laboratory, Day Procedures Unit or 24 Hour Unit are utilised, the CCU or the acute Cardiac Inpatient Unit may cater for the recovery of patients following cardiac procedures such as echocardiography, cardiac angiography, transoesophageal echo (TOE), percutaneous coronary intervention and temporary and permanent pacemaker insertion.

2.3 Bed Numbers and Complement

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. For each Cath Lab, 2 ICU or CCU rooms to be provided- these need not be segregated from other CCU or ICU rooms.

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.

All single bedrooms can accommodate patients requiring standard contact isolation, but in large centres, at least one negative pressure single bedroom with anteroom should be considered for isolation purposes.

3 Unit Planning Models

The CCU should be located in a quiet zone 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.)



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

3.1.1 Functional Zones

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

- Entry/ Reception and Waiting, which may be shared with an adjoining unit
- Patient areas with:
 - a mix of single and 2 bed rooms
 - nominated bariatric room(s) with ceiling mounted patient lifter as required by the Service Plan
 - Ensuites
- Support areas consisting of:
 - Staff Station
 - Clean and Dirty Utility Rooms
 - Medication room - a secure, alarmed room with visibility into the unit
 - Bays for linen, resuscitation trolley
 - Store Rooms and Equipment Bays
 - Visitor Lounge and / or Distressed Relatives Room
- Staff Areas including:
 - Offices
 - Staff Room
 - Toilets and Locker areas

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

The above zones are briefly described below.



3.1.2 Entry/ Reception Area

The Reception is the receiving hub of the unit and may be used to control the security of the Unit.

Optionally, gender separated waiting areas for visitors may be provided either immediately outside or immediately inside the unit. Waiting areas may be shared between adjacent Units. This area needs access to separate male/female toilet facilities and prayer rooms.

3.1.3 Patient Areas

In most respects, an acute cardiac and cardiac surgery Inpatient Unit will be the same as a general medical or surgical Inpatient Unit with the following modifications or additions:

- Bedrooms will generally be provided as Single or Private rooms
- Ensuites – each Ensuite includes a toilet, shower and wash basin. Provision of individual Ensuite showers / toilets to Coronary Care bedrooms should carefully consider the following issues:
 - 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
 - Ensuites increase the overall size of the unit and subsequent capital costs.
- Procedure Room with access for a bed and image intensifier 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.

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

3.1.4 Support Areas



Support Areas will include Bays for linen, resuscitation trolley, mobile equipment, Cleaners Room, Clean and Dirty Utilities, Disposal Room, Staff Station and Store Rooms for consumable stock, sterile stock and equipment.

3.1.5 Staff Areas

Offices and workstations will be required for administrative as well as clinical functions for the Unit Manager and senior clinical and administrative staff.

Staff Areas, particularly Staff Rooms, Toilets, Showers and Lockers may be shared with adjacent Units as far as possible.

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. This room may be used by the multidisciplinary team.

3.1.6 Shared Areas

Like elsewhere in the facility, sharing space, equipment and staffing should be promoted, both within the Unit and with other units. Where spaces are shared, the size should be modified proportionally to suit the combined function or number of occupants.

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 regard to clinical spaces but may still share some staff amenities and teaching spaces.

Shared Areas may include:

- Reception
- Patient Bathroom



- Treatment/ Procedure Room
- Support rooms including Equipment Stores, Cleaners Room, Disposal Room and Pantry
- Public Toilets
- Gender Segregated Visitor Lounge
- Family Visiting Room
- Some of the Staff Areas

4 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. Correct functional relationships are identified below.

4.1 External Relationships

Principal relationships with other Units or services include:

- Cardiac Investigations 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

Principal relationships with public areas include:

- Easy access from the Main Entrance of a facility
- Easy access to public amenities
- Easy access to parking for visitors

Principal relationships with Staff Areas

- Ready access to staff amenities which may be centrally located

4.2 Internal Relationships

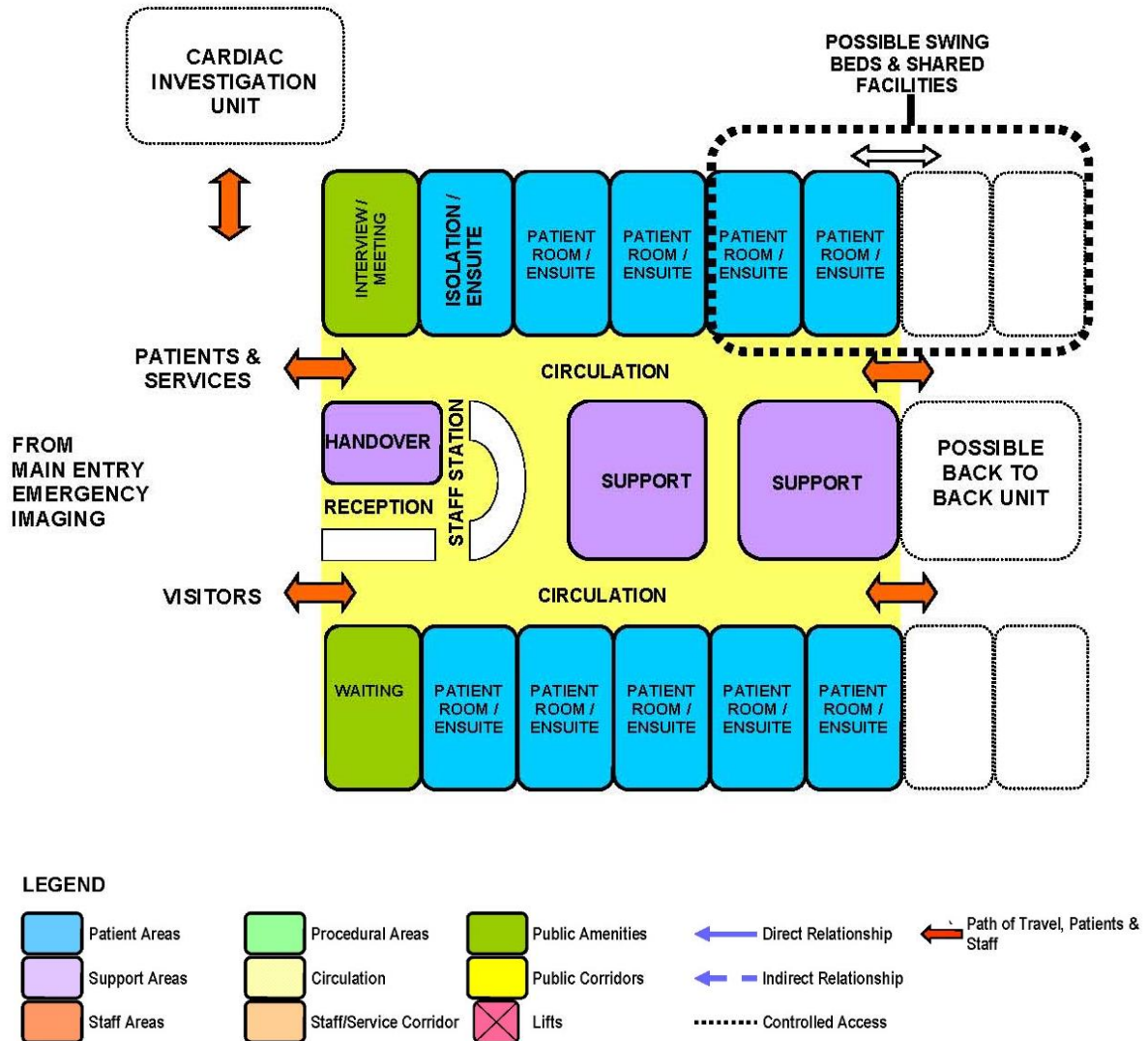
Optimum internal relationships include:

- Patient occupied areas as the core of the unit
- The Staff Station and associated areas need direct access and observation of Patient Area corridors
- Utility and storage areas need ready access to both patient and staff work areas
- Public Areas should be on the outer edge of the Unit
- Shared Areas should be easily accessible from the Units served without going through one unit to reach the other



4.3 Functional Relationships Diagram

The functional relationships of a typical Coronary Care Unit are demonstrated in the diagram below.



Important and desirable external relationships outlined in the diagram include:

- Clear Goods/Service/Staff Entrance
 - Access to/ from key clinical units associated with patient arrivals/ transfers via service corridor
 - Access to/ from key diagnostic facilities via service corridor
 - Entry for staff via the public or service corridor
 - Access to shared staff break and property areas via service corridor
 - Access to/ from Materials, Catering and Housekeeping Units via service corridor



- Clear Public Entrance
 - Entry for ambulant patients and visitors directly from dedicated lift and public corridor
 - Access to / from key public areas, such as the main entrance, parking and cafeteria from the public corridor and lift

Important and desirable internal relationships outlined in the diagram include:

- Bed Room(s) on the perimeter arranged in a racetrack model (although other models are also suitable)
- Staff Station is centralised for maximum patient visibility and access
- Clinical support areas located close to Staff Station(s) and centralised for ease of staff access
- Administrative areas located at the Unit entry and adjacent to Staff Station
- Reception located at Unit entry for control over entry corridor

5 Design Considerations

5.1 Patient Treatment Areas

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

Patients must be situated so that healthcare providers have direct or indirect visualization 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 increase access to the room in emergency situations.



5.1.1 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 at a glance. This goal can be achieved either by a central monitoring 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.

5.1.2 Renal Dialysis Facilities

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 isolation room. RO water may be provided via portable dialysis units. Refer to Part E - Engineering Services for details.

5.2 Environmental Considerations

5.2.1 Acoustics

The Coronary Care Unit should be designed to minimise 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

Refer also to **Part C - Access, Mobility and OH&S** of these Guidelines.

5.2.2 Natural Light

The use of natural light should be maximised throughout the Unit. Windows are an important aspect of sensory orientation and psychological well-being of patients. A window in patient rooms is required. Natural light must be available in all bedrooms and is desirable in other patient areas such as lounge rooms. An open and pleasant outlook, preferably to a landscaped area is highly desirable.



5.2.3 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, 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

5.3 Space Standards and Components

5.3.1 Bed Spacing / Clearances

Bed dimensions become a critical consideration in ascertaining final room sizes. The dimensions noted in these Guidelines are intended as 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 critical care bedrooms a minimum of 1200mm clearance around both sides and the foot of the bed is recommended. At the head of the bed, a minimum of 300mm clearance should be allowed between the bed and any fixed obstruction or wall.



5.4 Accessibility

One Bedroom and Ensuite should comply with accessibility requirements. Accessible bedrooms and ensuites should enable normal activity for wheelchair dependant patients, as opposed to patients who are in a wheelchair as a result of their hospitalisation.

5.5 Doors

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

5.6 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 critical care unit should not exceed 12 beds.

5.7 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.



5.8 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 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 utilised.

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

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

Medication Room must have space for parking a medication trolley.

5.9 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



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.

5.10 Curtains / Blinds

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

5.11 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.

5.11.1 Information and Communication Technology

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
- 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

5.11.2 Staff 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.

5.11.3 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)

5.11.4 Heating Ventilation and Air-conditioning (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 Standard Components and

Part E – Engineering Services.

5.11.5 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.

5.11.6 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.

5.11.7 Hydraulics

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.

5.12 Infection Control

5.12.1 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.

At least one handwashing bay is to be conveniently accessible to the Staff Station. Hand basins are to comply with **Standard Components - Bay - Hand-washing** and **Part D - Infection Control**.



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 ensuite hand wash basin.

5.12.2 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 are to comply with **Part D - Infection Control**, in these guidelines.

Antiseptic Hand Rubs, although very useful and welcome, cannot fully replace Hand Wash Bays.

5.12.3 Isolation Rooms

Coronary Care Single (1 bed) patient rooms with an adjoining Ensuite are regarded as Class S isolation. The Coronary Care Unit may include one 'Class N - Negative Pressure' Isolation Room depending on the service plan and operational policy of the unit.

For further information on Isolation Rooms refer to **Part D – Infection Control** in these Guidelines.

6 Standard Components of the Unit

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
2	Provided by the Client and installed by the builder
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 Coronary Care Unit will consist 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.

6.1 Non-Standard Rooms

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. These are identified in the Schedules of Accommodation as NS.

6.1.1 Bay - Pneumatic Tube

The Bay - Pneumatic Tube should be located at the Staff Station/s under the direct supervision of staff for urgent arrivals. The location should not be accessible by external staff or visitors.

Requirements include:

- The bay should not impede access within staff station areas
- Racks should be provided for pneumatic tube canisters
- Wall protection should be installed to prevent wall damage from canisters



7 Schedule of Accommodation

The Schedule of Accommodation (SOA) provided below represents generic requirements for this Unit. It identifies the rooms required along with the room quantities and the recommended room areas. The sum of the room areas is shown as the Sub Total as the Net Area. The Total area is the Sub Total plus the circulation percentage. The circulation percentage represents the minimum recommended target area for corridors within the Unit in an efficient and appropriate design.

Within the SOA, room sizes are indicated for typical units and are organised into the functional zones. Not all rooms identified are mandatory therefore, optional rooms are indicated in the Remarks. These guidelines do not dictate the size of the facilities, therefore, the SOA provided represents a limited sample based on assumed unit sizes. The actual size of the facilities is determined by Service Planning or Feasibility Studies. Quantities of rooms need to be proportionally adjusted to suit the desired unit size and service needs

The Schedule of Accommodation are developed for particular levels of services known as Role Delineation Level (RDL) and numbered from 1 to 6. Refer to the full **Role Delineation Framework (Part A - Appendix 6)** in these guidelines for a full description of RDL's.

The table below shows a typical Units with 6, 8 and 12 beds at RDL 3 to 6.

Any proposed deviations from the mandatory requirements, justified by innovative and alternative operational models may be proposed and record in the **Non-Compliance Report** (refer to **Part A - Appendix 4**) with any departure from the Guidelines for consideration by the DHA for approval.



ROOM/ SPACE	Standard Component Room Codes		RDL 3-6 Qty x m ² 6 Beds	RDL 3-6 Qty x m ² 8 Beds	RDL 3-6 Qty x m ² 12 Beds	Remarks
Entry/ Reception Areas						
Reception	recl-10-d similar		1 x 10	1 x 12	1 x 12	May be shared
Waiting	wait-10-d wait-20-d		1 x 10	1 x 20	1 x 20	Separate M & F; 1.2 m2 per person; 1.5 m2 per wheelchair
Waiting - Family	wait-15-d wait-20-d similar		1 x 15	1 x 20	1 x 25	May be shared
Meeting Room	meet-l-15-d similar		1 x 12	1 x 15	1 x 15	Family interviews, may share if located close
Toilet - Public	wcpu-3-d		2 x 3	2 x 3	2 x 3	May share public amenities if located close
Toilet - Accessible	wcac-d		1 x 6	1 x 6	1 x 6	May share public amenities if located close
Patient Areas						
1 Bedroom - Special, CCU	1br-sp-b-20-d		6 x 20	7 x 20	11 x 20	Provide ceiling mounted lifter in designated Bariatric Room(s)
1 Bedroom - Special, CCU (Negative Pressure)	1br-sp-b-20-ds			1 x 20	1 x 20	Optional dependent on Service Demand
Anteroom	Anrm-d			1 x 6	1 x 6	To Negative Pressure Isolation Room if provided
Ensuite - Standard	Ens-st-d		6 x 5	8 x 5	12 x 5	6 m2 for designated Bariatric Ensuite(s)
Support Areas						
Bay - Beverage, Enclosed	bbev-enc-d		1 x 5	1 x 5	1 x 5	
Bay - Handwashing, Type B	bhws-b-d		2 x 1	2 x 1	3 x 1	At Unit entry and in Corridors; refer to Part D
Bay - PPE	bppe-d		2 x 1.5	2 x 1.5	3 x 1.5	In addition to those required for isolation rooms. Refer to Part D
Bay - Linen	blin-d		1 x 2	1 x 2	1 x 2	
Bay - Meal Trolley	bmeq-4-d similar			1 x 4	1 x 4	
Bay - Mobile Equipment	bmeq-4-d		1 x 4	1 x 4	2 x 4	For Mobile Patient Lifter, ECG Machine, Mobile X-ray, etc.
Bay - Resuscitation Trolley	bres-d		1 x 1.5	1 x 1.5	1 x 1.5	
Bay - Pneumatic Tube	NS		1 x 1	1 x 1	1 x 1	Optional, may be located with Pathology Bay or Staff Station



Part B: Health Facility Briefing & Design

Coronary Care Unit

ROOM/ SPACE	Standard Component Room Codes				RDL 3-6 Qty x m ² 6 Beds			RDL 3-6 Qty x m ² 8 Beds			RDL 3-6 Qty x m ² 12 Beds			Remarks
Clean Utility	clur-12-d									1	x	12	May be Interconnected with Medication Room	
Medication Room	medr-10-d									1	x	10	May be Interconnected with Clean Utility	
Clean Utility/ Medication	clum-14-d				1	x	14	1	x	14	x	14*	*Optional if Clean Utility and Medication Room provided.	
Communications Room	comm-12-d				1	x	*	1	x	*	x	*	* Size dependant on IT equipment; area is part of engineering	
Dirty Utility	dtur-s-d dtur-12-d similar				1	x	8	1	x	10	x	12	May be collocated with Disposal Room	
Disposal Room	disp-8-d similar				1	x	6	1	x	10	x	10		
Staff Station	sstn-14-d similar sstn-20-d				1	x	10	1	x	14	x	20		
Office - Clinical/ Handover	off-cln-d				1	x	15	1	x	15	x	15		
Office - Write-up Bay	off-wi-1-d				6	x	1	8	x	1	x	1	1 per each enclosed bed room	
Store - General	stgn-8-d stgn-14-d similar				1	x	8	1	x	12	x	14		
Cleaner's Room	clrm-6-d				1	x	6	1	x	6	x	6	May be shared with an adjacent Unit in smaller CCUs	
Staff Areas														
Office - Single Person	off-s9-d				1	x	9	1	x	9	x	9	Unit Manager	
Office - Single Person	off-s12-d									1	x	12	Optional for Cardiologist	
Office - 2 Person Shared	off-2p-d							1	x	12	x	12	Optional for Registrars	
Meeting Room	meet-l-15-d similar				1	x	12	1	x	15	x	15	For Meetings, Tutorials	
Staff Room	srm-15-d				1	x	15	1	x	15	x	15	May be shared with an adjacent unit in smaller CCUs	
Property Bay - Staff	prop-3-d				1	x	3	1	x	3	x	3	May be shared with an adjacent unit in smaller CCUs	
Toilet - Staff	wcst-d				1	x	3	1	x	3	x	3		
Sub Total							332.5			441.5		604		
Circulation %							35			35		35		
Total Areas							448.9			596		815.4		

Please note the following:

- Areas noted in Schedules of Accommodation take precedence over all other areas noted in the FPU



Part B: Health Facility Briefing & Design

Coronary Care Unit

- Rooms indicated in the schedule reflect the typical arrangement according to the bed numbers at nominated RDL's.
- All the areas shown in the SOA follow the No-Gap system described elsewhere in these Guidelines
- Exact requirements for room quantities and sizes will reflect Key Planning Units (KPU) identified in the Clinical Service Plan and the Operational Policies of the Unit
- Room sizes indicated should be viewed as a minimum requirement; variations are acceptable to reflect the needs of individual Unit
- Staff and support rooms may be shared between Functional Planning Units dependent on location and accessibility to each unit and may provide scope to reduce duplication of facilities



8 Further Reading

In addition to Sections referenced in this FPU, i.e. **Part C- Access, Mobility, OH&S, Part D -**

Infection Control, and Part E - Engineering Services, readers may find the following helpful:

- AHIA, Australasian Health Facility Guidelines, Part B Health Facility Briefing and Planning, HPU 0260 - Coronary Care Unit, Rev 6, 2016; refer to:
<https://healthfacilityguidelines.com.au/health-planning-units>
- DH (Department of Health) (UK), Health Building Note 01-01: Cardiac facilities, 2013, refer to website: www.estatesknowledge.dh.gov.uk
- DHA (Ministry of Health – UAE), Unified Healthcare Professional Qualification Requirements, 2017, website: <https://www.haad.ae>
- International Health Facility Guideline (iHFG) www.healthdesign.com.au/iHFG
- Guidelines for Design and Construction of Hospitals; The Facility Guidelines Institute, 2018 Edition; refer to website: www.fgi.org