

Part B – Health Facility Briefing & Design

110 Inpatient Unit - General



*i*HFG

International Health Facility Guidelines
2025

110 Table of Contents

111	Inpatient Unit – General	3
1	Executive Summary	3
2	Introduction	3
3	Functional and Planning Considerations	3
4	Design Considerations.....	21
5	Components of the Unit.....	30
6	Schedule Of Equipment (SOE).....	31
7	Schedule of Accommodation	31
8	References and Further Reading	35
9	Sample Plan	36

111 Inpatient Unit – General

1 Executive Summary

This Functional Planning Unit (FPU) covers the requirements of the Inpatient Unit – General. The Inpatient Unit is for general medical and surgical patients. This Unit is sometimes referred to as a “Ward”, “Nursing Unit”, “Inpatient Department” (IPD) or “Inpatient Unit” (IPU).

A common definition of this Unit is the accommodation of patients over 24 hours or more, involving overnight stay. However, the description and design of this unit does not prevent patients from staying for less than 24 hours or being discharged without overnight stay, if required. Where the Unit is intended to support short stay occupancy the design shall provide appropriate admission, discharge, and visitor management arrangements without compromising inpatient privacy gradients and staff workflows.

The Inpatient Unit General is suitable for a wide variety of patients and treatment types including Medical and Surgical patients. In larger healthcare facilities this Unit may be further specialised for cardiology, neurology, neurosurgery, oncology, orthopaedic surgery, gynaecology and a variety of other specialties. The Unit’s fundamental planning provisions, however, will remain the same. Patients awaiting placement elsewhere may also be accommodated in this type of Unit.

Specialised units such as Maternity and Bariatrics have separate FPUs which are also included in these guidelines. The basic requirements of the specialised units are the same as the Inpatient Unit General but with additional facilities such as a Nursery for the Maternity Unit and a Gym for the Rehabilitation Unit.

Therefore, a thorough understanding of the Inpatient Unit General FPU, its typical models of planning and the Standard Components required, will assist in the preparation of other specialised unit types even if they are not explicitly included in these Guidelines.

The Inpatient Unit shall be planned to balance patient safety, dignity, and therapeutic engagement, ensuring observation strategies are integrated without creating a custodial or institutional environment.

There are several fundamental planning geometries which are used for the design of Inpatient Units (of all types). These have been shown as Functional Relationship Diagrams indicating the planning principles and preferred relationship between the components. The swing bed design strategy is defined as a flexible management practice and is demonstrated within this FPU. Where a swing bed strategy is adopted the design shall maintain safe zoning, controlled access and observation coverage during conversion.

The Functional Relationship Diagram indicates the ideal relationships with other key departments such as the Emergency Unit and Operating Theatres, and hospital support services including Pharmacy and catering.

Design considerations address a variety of essential factors including acoustics, natural light and privacy. The typical Units’ Schedule of Accommodation is provided using Standard Components (typical room templates) and quantities for a standard 30 bed unit as well as an optional 15 bed extension.

Refer to the further reading materials at the end of this FPU for supporting documentation.

2 Introduction

The primary function of the Inpatient Unit is to provide appropriate accommodation for the delivery of healthcare services to inpatients including diagnoses, care and treatment.

The Unit must also provide facilities and conditions to meet the needs of patients and visitors as well as the workplace requirements of staff.

3 Functional and Planning Considerations

Models of Care

Models of Care for an Inpatient Unit may vary dependent upon the patient’s acuity and the number and skill level of staff available. The intended model of care, including patient acuity and case mix, nursing model, observation approach, medication distribution model and visitor management

assumptions shall be considered in the design. The design shall support the intended model of care through appropriate spatial layout, functional adjacencies and staff operational workflows.

Examples of the models of care that could be implemented include:

- Patient allocation
- Task assignment
- Team nursing
- Case management
- Multi-disciplinary care (comprehensive range of generalist services by multidisciplinary teams that include not only GPs and nurses but also allied health professionals and other health workers) or
- a combination of the above.

The physical environment shall permit a range of models of care to be implemented, supporting flexibility for future change while maintaining safe observation, patient privacy, and efficient staff workflows.

Levels of Care

The levels of care range from acute nursing and specialist care (high dependency), with a progression to intermediate care and non-acute care prior to discharge or transfer.

Patients requiring 24-hour medical intervention or supervision are generally not nursed or managed within the Inpatient Unit General. Such patients are typically referred to the Intensive Care Unit (ICU) or a step-down ICU referred to as High Dependency Unit (HDU). For ICU and HDU, refer to the Intensive Care FPU within these guidelines.

Bed Numbers and Supporting Components

Each Inpatient Unit may contain up to 30 patient beds (± 2) and shall have bedroom accommodation complying with the Standard Components included in the Schedule of Accommodation (SOA) in this FPU.

Up to an additional 15 beds, as a direct extension of a standard 30 bed unit (± 2) are permitted with additional small sized support facilities for example, 1 extra Sub Clean Utility, Sub Dirty Utility and storage. The minimum provisions for the 15 bed extension are provided as part of the Schedule of Accommodation (SOA) in this FPU.

Any extension beyond 15 additional beds will be regarded as a separate unit requiring the full set of support rooms as per the Schedule of Accommodation (SOA) in this FPU.

The preferred maximum number of beds in a specialised Inpatient Unit such as Maternity or Paediatric Units is 25 to 27 beds. This is due to the need for additional facilities such as indoor play areas (for Paediatrics) and General Care Nursery (for Maternity).

A minimum of 50% of the total bed complement shall be provided as single bedrooms in an Inpatient Unit used for overnight stay. However, there is a preference to increase the number of single bedrooms to a minimum of 80% of the total bed count, to provide a greater proportion of single bedrooms to be available for potential infection control and privacy reasons.

If the provision of a large number of single bedrooms is not possible (for example due to cost), then it is ideal to provide shared bedrooms in a 2-bed configuration. This permits most of the 2-bed rooms to be used by a single patient until the occupancy level of the hospital demands require the use of the second bed in the 2 bed room.

Larger shared patient rooms accommodating up to 4 or 6 beds are available through the iHFG Standard Components for refurbishment projects only. Where 4 bed or 6 bed rooms are proposed as part of a refurbishment project, the design shall maintain compliance with requirements for patient privacy, dignity, infection prevention and control and safe patient observation. The use of 4 or 6 bed rooms shall be subject to approval by the relevant local health authority.

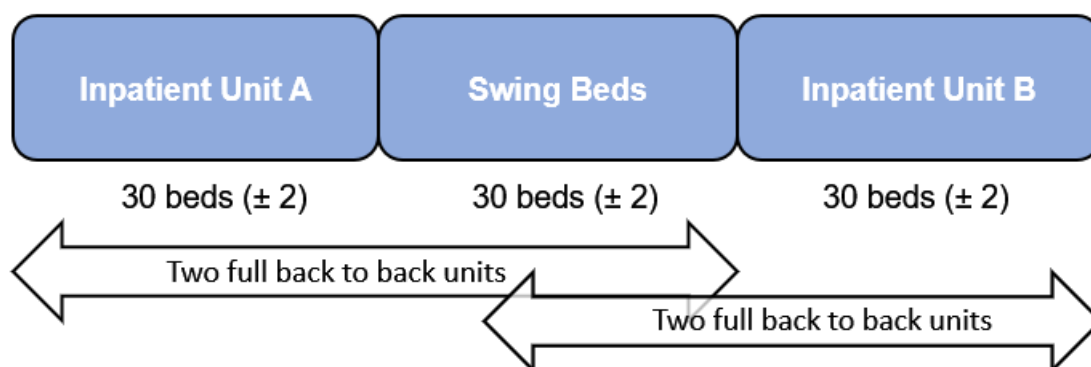
Swing Beds

For flexibility and added options for utilisation it may be desirable to include provisions for Swing Beds. This may be a single bed or a group of beds that may be quickly converted from one category

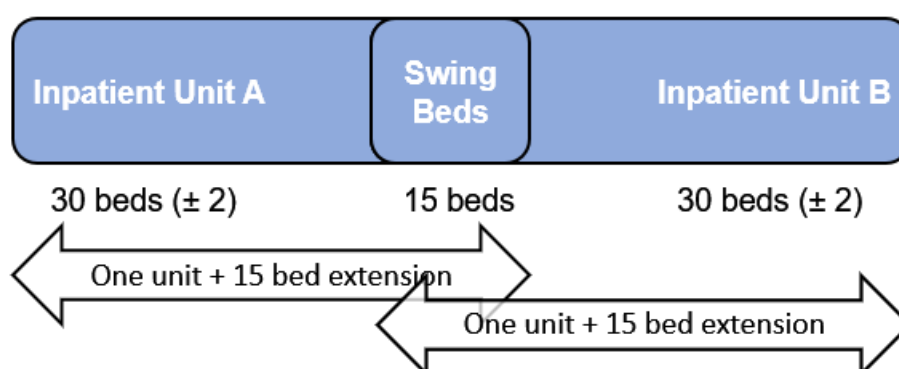
of use to another. An example might be long-stay beds which may be temporarily used as acute beds at a time of high occupancy. Other examples may include a group of shared beds located between two adjoining Inpatient Units which may experience fluctuating utilisation rates.

At any given time, swing beds can be part of an Inpatient Unit in terms of the total number of beds and the supporting components of the units whilst taking advantage of the additional 15 bed extension when required. Three typical permutations of swing beds are shown below:

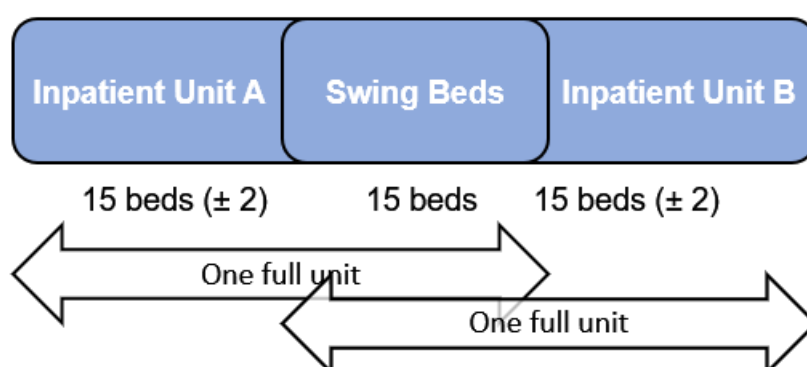
Example 1 – 3 full units back-to-back



Example 2 – Two full units and intermediate 15 bed swing bed unit



Example 3 – Two half units sharing a swing bed half unit

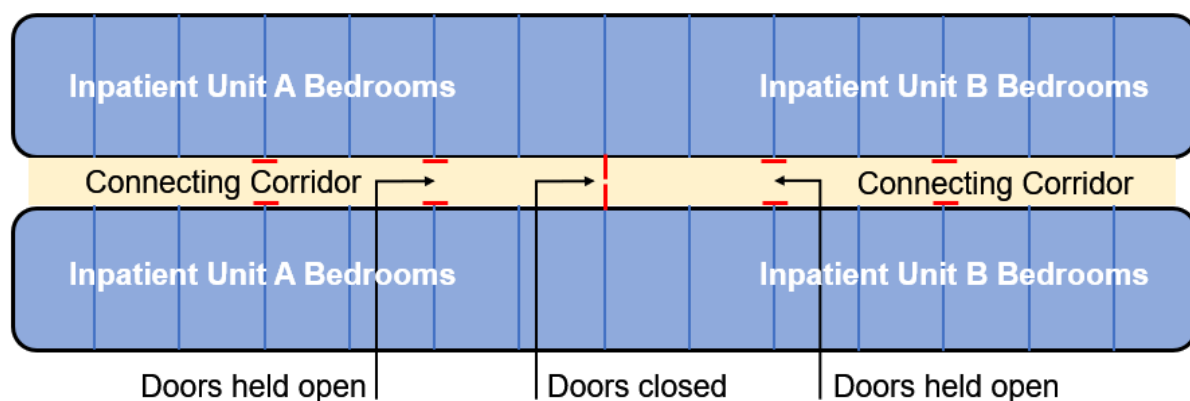


Facility design for swing beds is often enabled by adding wide doors within the connecting corridor. These doors may be closed or held-open depending on the swing bed numbers required on one side or the other.

By closing one set of doors whilst opening all other doors, the swing bedrooms may be shifted from one Unit to the adjoining Unit. This technique must also require provision for switching patient/ nurse call operation from the Staff Station in one Unit to the adjoining Unit. Security aspects of this

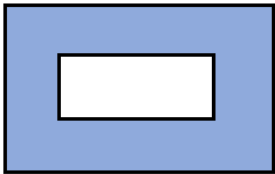
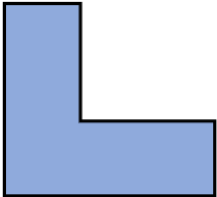
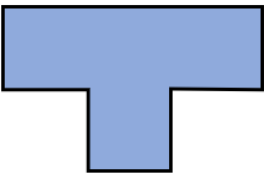
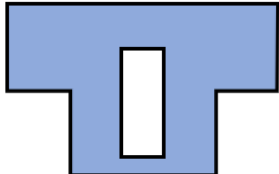
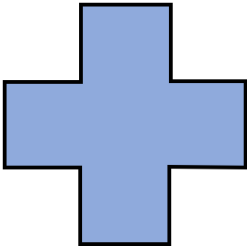
arrangement shall also be considered, for example in situations where access control is preferred between the Units.

The diagram below shows the typical configuration of swing beds.



Unit Planning Geometric Options

There are several common and acceptable planning models for Inpatient Units. Most plans can be categorised and diagrammatically reduced to one of the following geometric forms which are named for convenience. Each model has its own potential and should be studied thoroughly against the specific clinical, operational and service requirements of the unit along with the particular local conditions to achieve the best results. The planning options include the following:

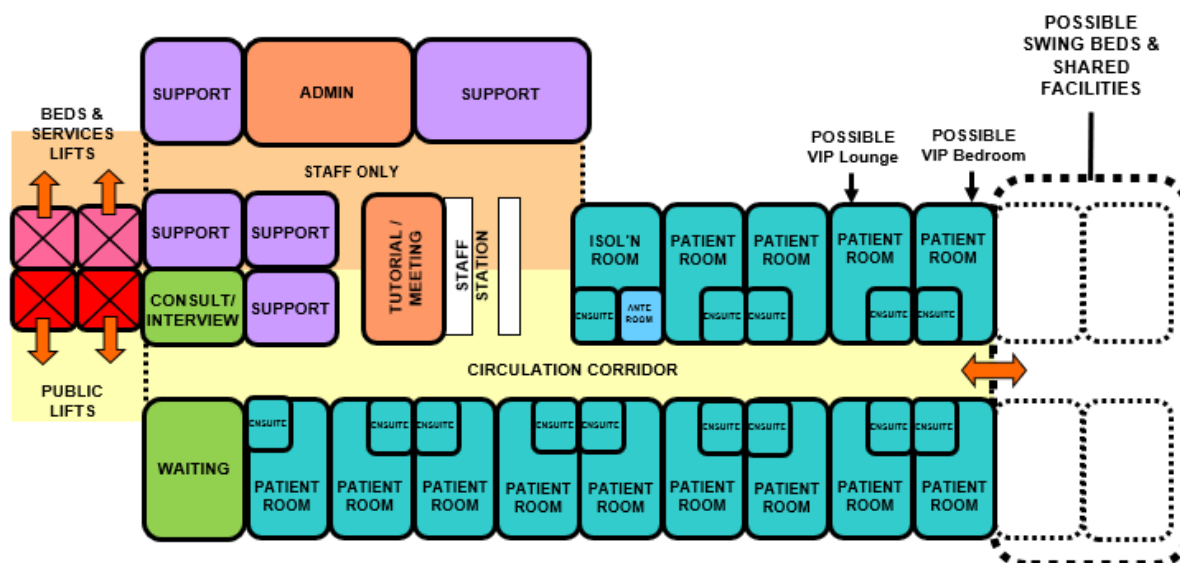
1		Linear	Single corridor configuration. Patient and support rooms are clustered along a single corridor.
2		Racetrack	Double corridor configuration. Patient rooms are located on the external aspects of the unit and support rooms are clustered in the central areas in a racetrack configuration.
3		L shaped	Single corridor configuration. A variation of the linear model where two linear wings are joined at 90 degrees to create the "L" shape.
4		T shaped	Single corridor configuration. A variation of the linear model, where two linear wings intersect to create a "T" shape.
5		Hybrid T	Combination of the Racetrack model and T model. The entrance wing has a racetrack configuration with support services in the centre. This splits into two wings at 90 degrees to form a "T" shape.
6		+ shaped	Single corridor configuration. A variation of the linear model, where two linear wings intersect approximately in the centre to create a "+" (cruciform) shape.

Part B: Health Facility Briefing & Design

Inpatient Unit - General

The functional relationship diagrams of each of the above planning models are provided below.

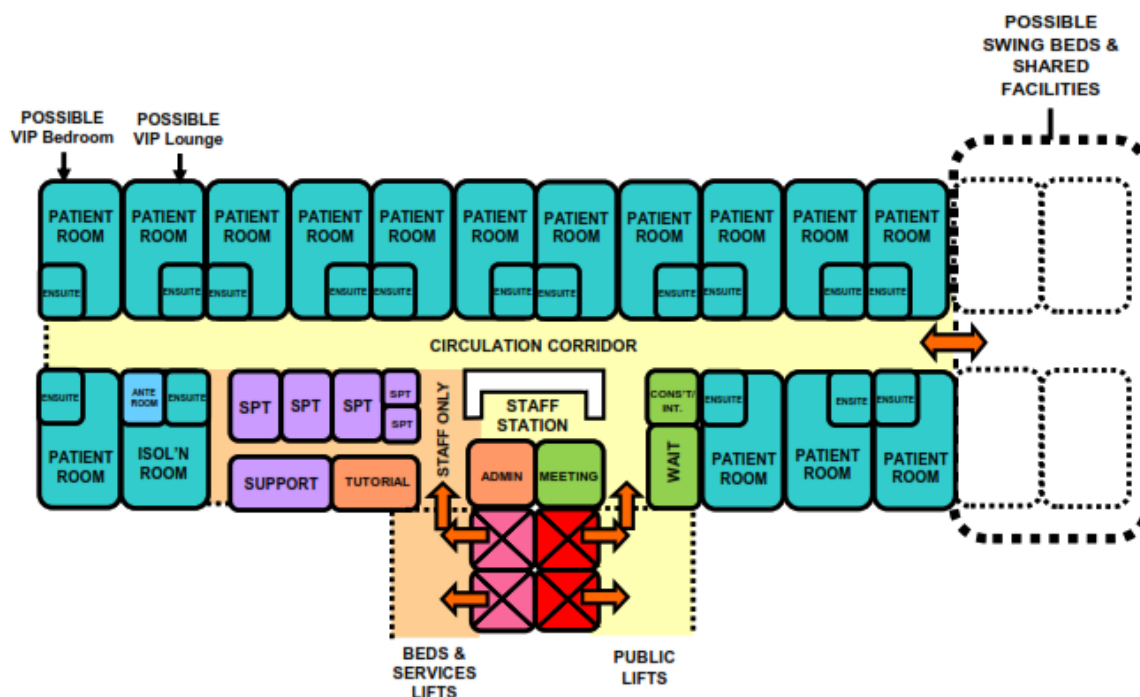
Linear (single corridor) Model 1a



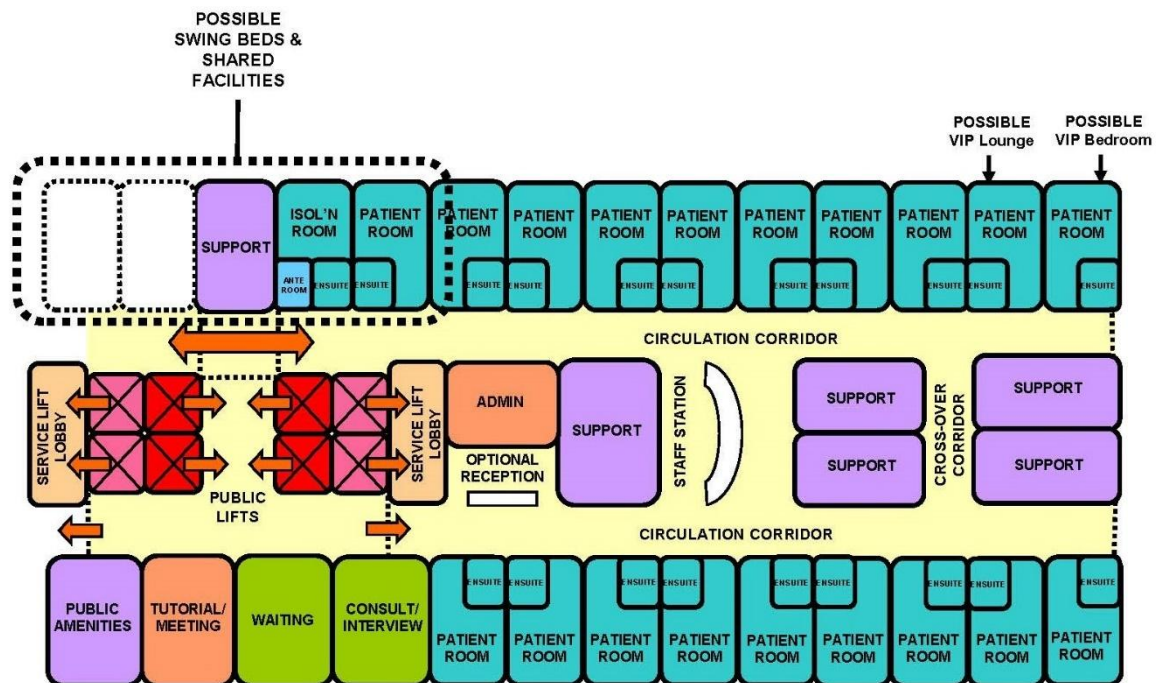
LEGEND



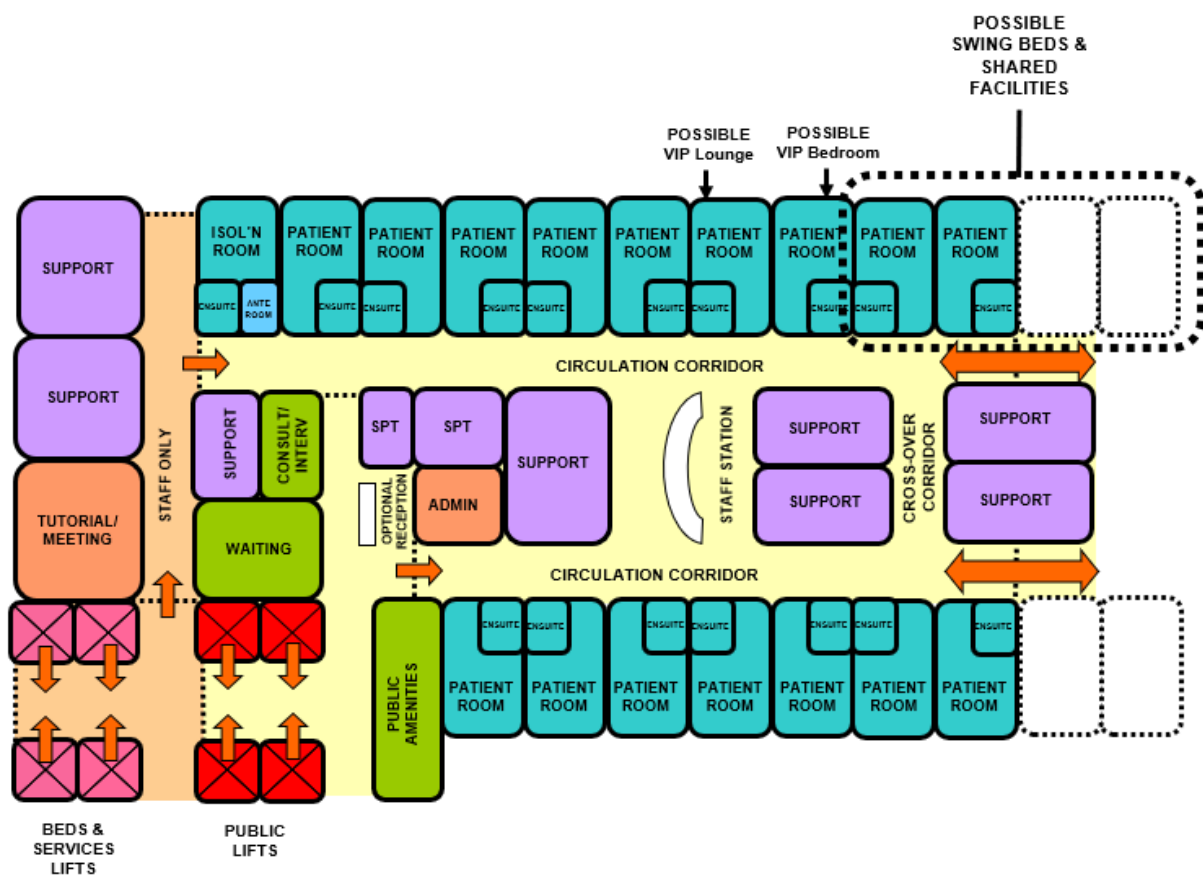
Linear (single corridor) Model 1b



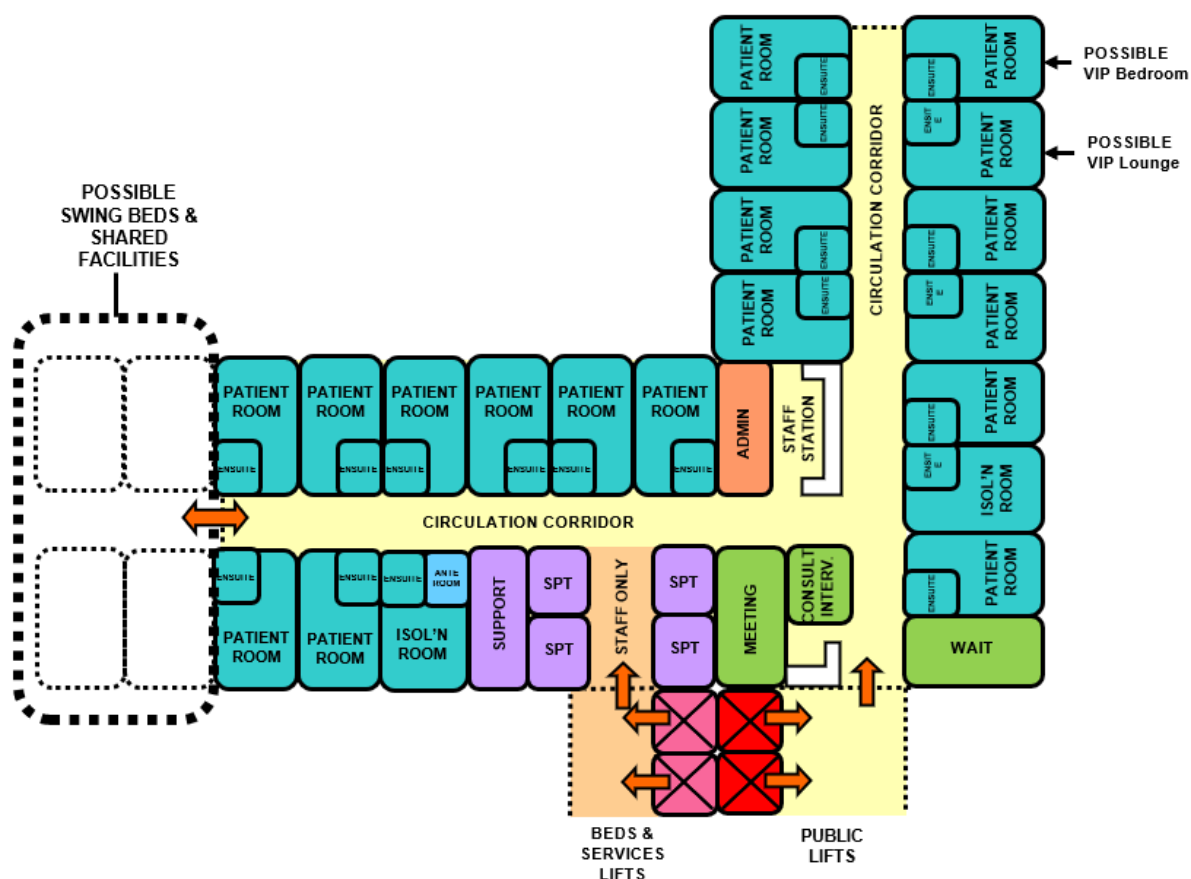
Racetrack (double corridor) Model 2a



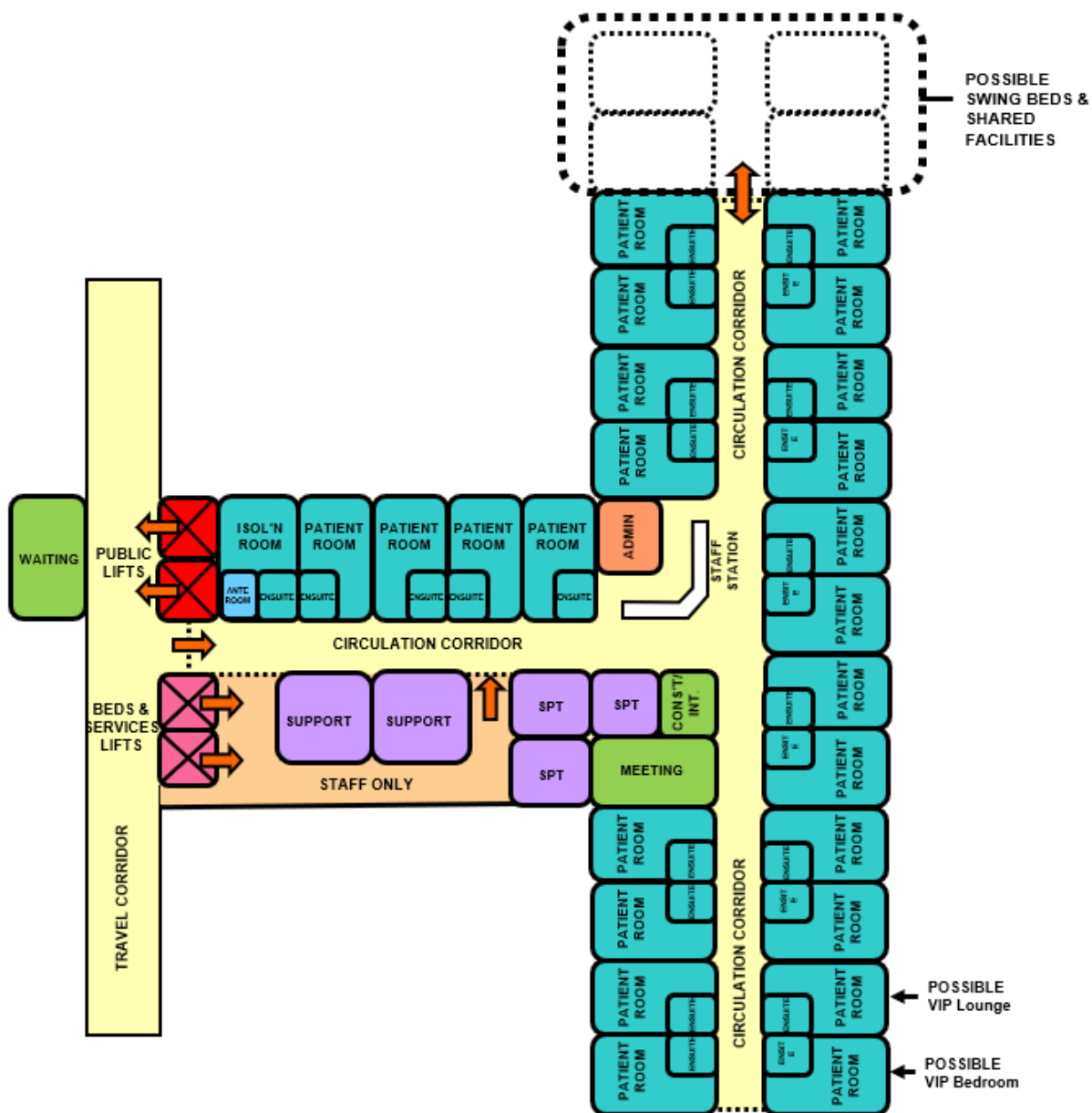
Racetrack (double corridor) Model 2b



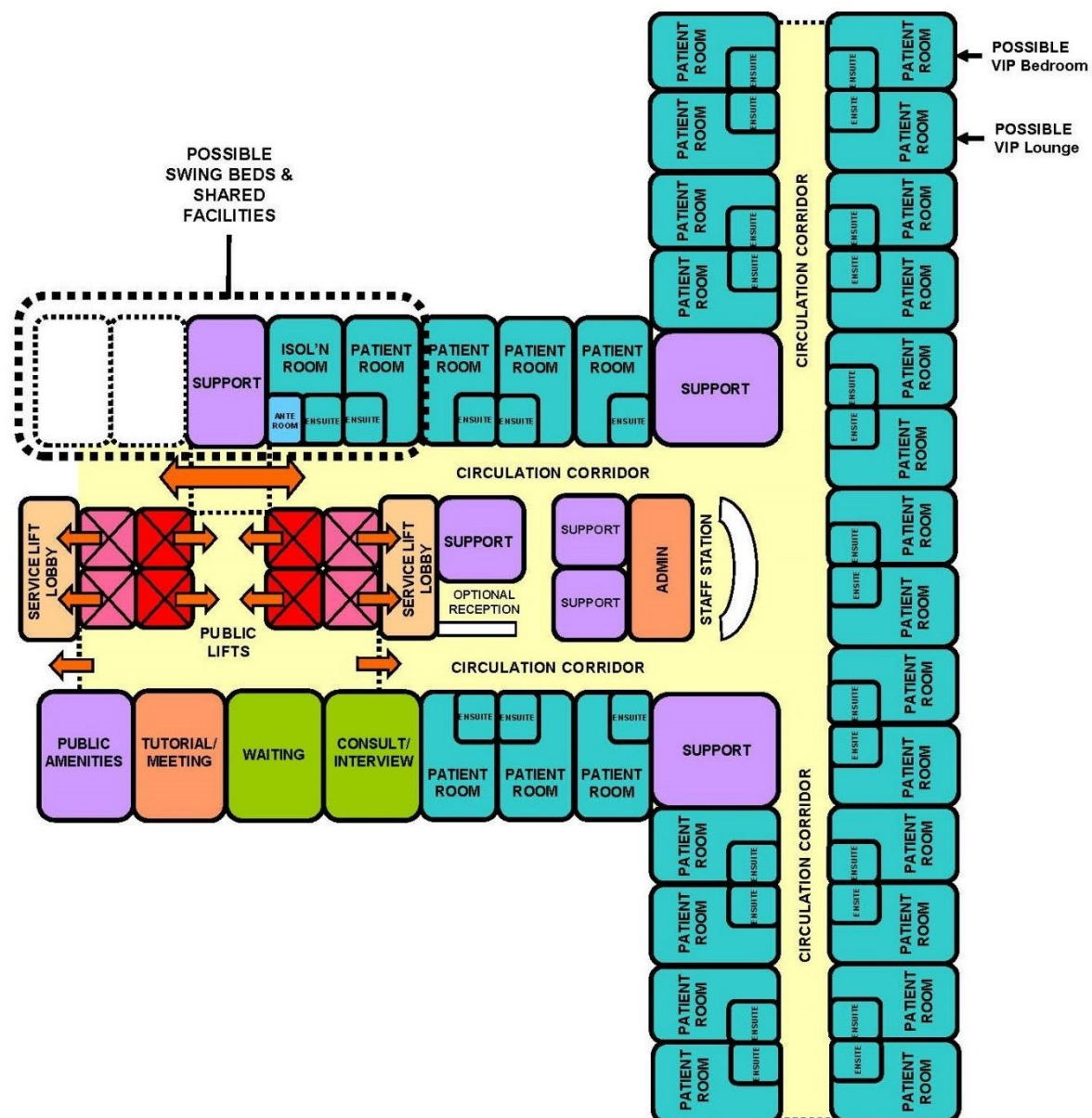
L shaped Corridor Model 3



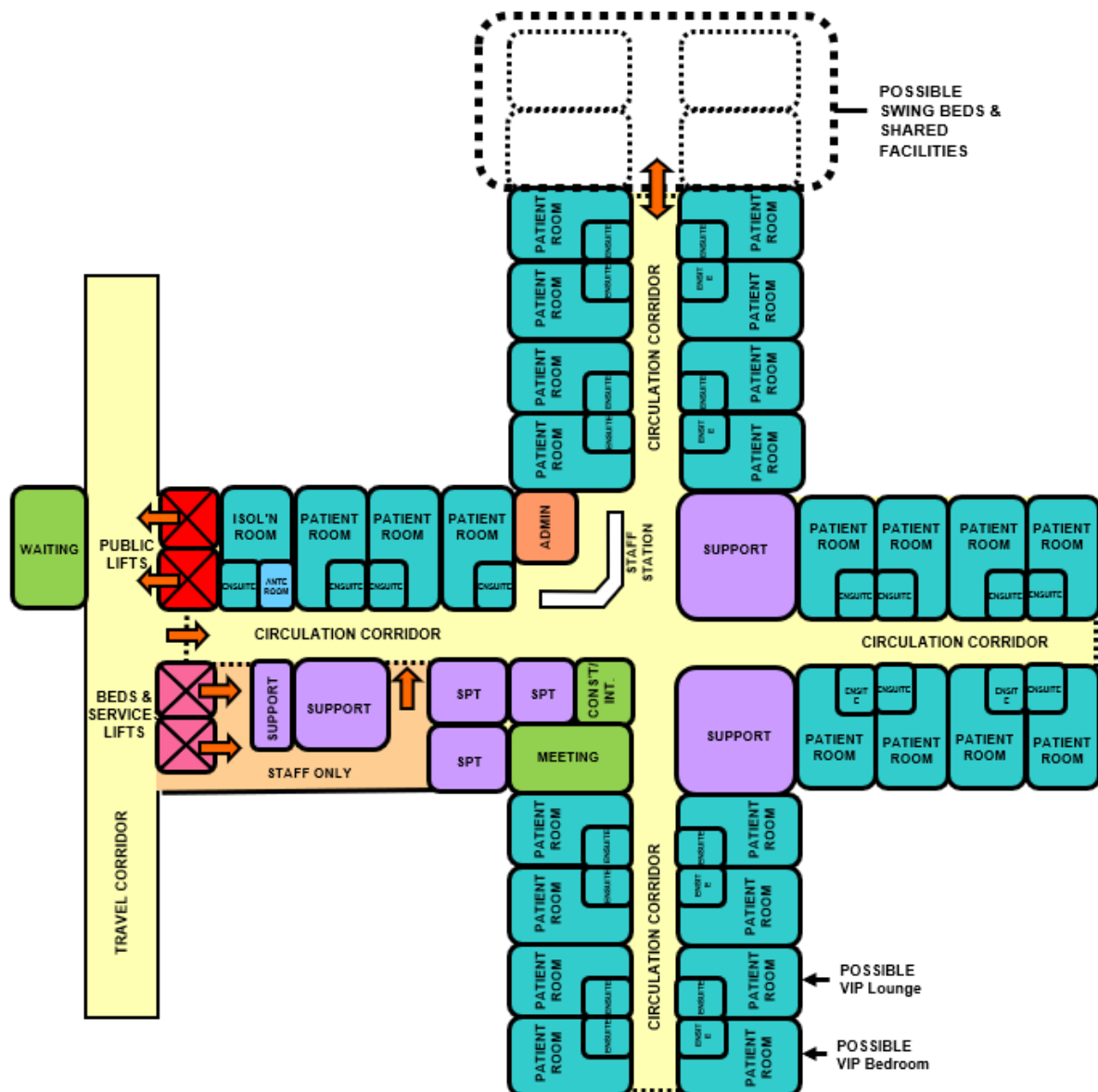
T shaped Corridor Model 4



Hybrid T shaped Corridor Model 5



Cruciform Corridor Model 6



LEGEND



Bed Configurations

In the above diagrams, the number and type of patient bedrooms are symbolic.

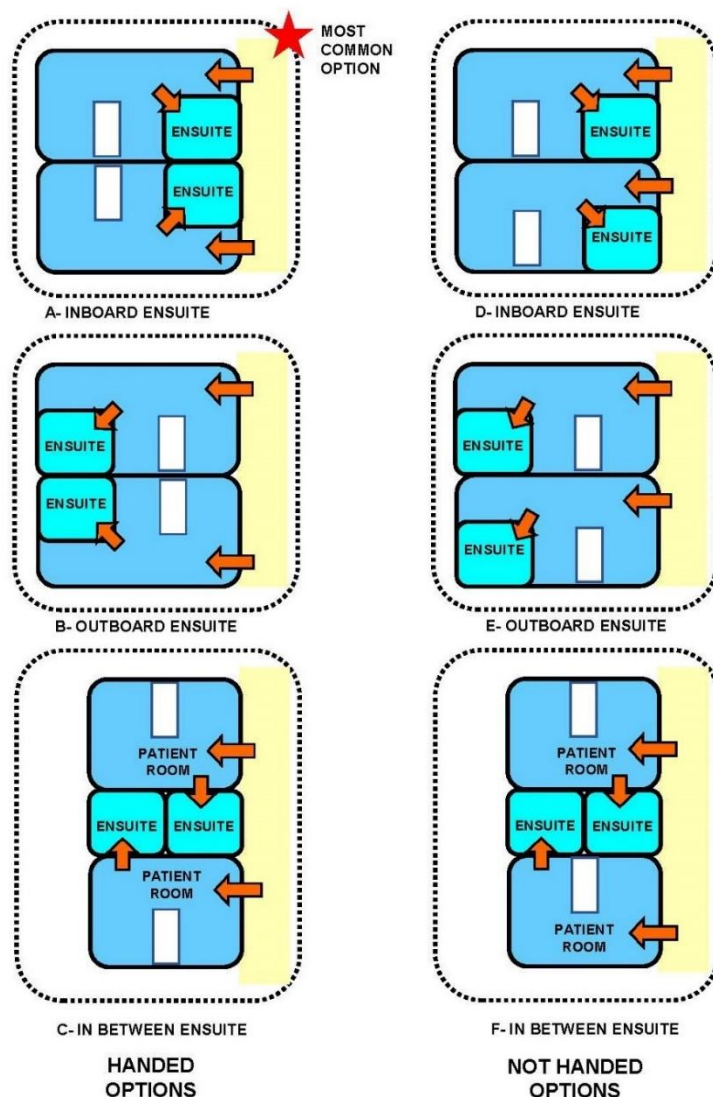
In actual design the recommended efficient bed number per unit is 30 (± 2).

The bedroom types may be:

- Single bedrooms
- 2 bed rooms
- 4 bed rooms
- 6 bed rooms

However, only single and 2 bed rooms shall be designed for new facilities. 4 bedroom and 6 bedrooms shall be permitted only in refurbishment projects.

The Ensuite (means attached) Bathrooms shall be provided to each 1 bedroom and 2 bed room. Ensuities shall not be shared between separate rooms. This requirement supports infection prevention, patient dignity, and operational resilience. For 4 bed and 6 bed rooms, sanitary provision shall meet the minimum criteria stated in the Patient Areas section. These can be arranged according to one of the following permutations:



Back-to-Back rooms may be handed or mirrored.

Mirrored configuration is most common due to the sharing of services risers.

If standardisation of the patient bed heads is preferred by the operators, this can be achieved even as the room itself is mirrored. This however, is not mandatory.

Functional Areas

The Inpatient Accommodation Unit comprises the following Functional Areas:

- Entry/ Reception area - may be a shared area or provided at the Main Entrance to the Unit with
 - Reception desk (optional),
 - Waiting Areas, can be shared between two Units
 - Interview room
 - Gowning area for staff and visitors (optional)
- Patient Areas - where patients are accommodated, or facilities that specifically serve patients including:
 - Bedrooms
 - Ensuites
 - Patient lounge
 - Patient laundry for specialist Units
- Support Areas – support the functions of the unit including:
 - Beverage Bay or pantry
 - Bays for handwashing, linen, meal trolleys, resus trolley, mobile equipment etc.
 - Cleaners' room
 - Clean and Dirty Utility rooms
 - Stores for equipment and general stock
- Staff Areas - accessed by staff, comprising:
 - Staff Station
 - Office for Clinical Handover (if required)
 - Offices for administration
- Shared Areas - public and clinical areas that may be shared by two or more Inpatient Units including:
 - Assisted Bathroom
 - Waiting Areas
 - Public Amenities
 - Staff Amenities with Staff Room, Toilets and Locker areas
 - Treatment Room, according to service demand

These Functional Areas are briefly explained below.

Entry/ Reception Area

The reception is the receiving hub of the unit and may be used to control the security of the Unit. It shall be positioned to command a clear view of the entrance and primary access routes into the Unit. Where reception functions are shared between Units, the shared reception arrangement shall maintain controlled access and clear accountability for entry management. The Unit entry door should be lockable as required by the staff. A Waiting area for visitors may be provided with access to separate male/female toilet facilities. Depending on the regional and cultural requirements, gender separated waiting areas may be required. Waiting areas may be shared between 2 or 3 Inpatient Units if they are located adjacent to each other.

If immediately adjacent to the Unit, a visitor and staff gowning and personal protective equipment (PPE) area may also be located here for infection control requirements during ward isolation, if required. This shall be determined by the project infection prevention risk assessment and the hospital's outbreak response model. Where ward isolation or controlled entry during outbreaks is a defined requirement, the design shall include appropriately located gown up and gown down facilities, and PPE bays at entry and exit points, without compromising normal day to day visitor management and privacy gradients.

Patient Areas

Patient Areas include:

Part B: Health Facility Briefing & Design

Inpatient Unit - General

- Bedrooms: may be provided in 1 and 2 beds per room. 4 or 6 beds per room are permitted in refurbishment projects. Rooms with more than 6 beds are not recommended. A typical Unit will include a combination of rooms with different numbers of beds based on the operational policy of the facility. Single rooms or shared rooms with 2 beds are recommended. In hospitals where there are rooms with either a single bed or two beds, a room for 2 beds may be used to accommodate a single bed when the Unit has not reached maximum occupancy. When occupancy increases, an additional bed can be added to all rooms designed for 2 beds to reach maximum occupancy. Managing bed allocation this way combines maximum patient privacy with economy.
- A single Inpatient Unit is commonly comprised of a variety of types of patient rooms including standard rooms, isolation rooms, bariatric rooms and may even include VIP rooms. Gender separation by rooms or by Unit is subject to the Operational Model of the Hospital.
- Ensuities: an ensuite is to be provided for each 1-bed and 2-bed room and is to include a shower, WC and a hand wash basin. For 4-bed and 6-bed rooms, there must be at least one WC and one shower per room. If a WC and shower are provided in two separate rooms, each must also include a hand wash basin. An ensuite cannot be shared between two separate rooms.
- Lounge areas: may be optional if all rooms in the Unit are single rooms. In a Unit with beds in a shared room, lounge areas should be provided.
- On-ward gym: depending on the operational policy of the hospital, on-ward gyms may be provided for immediate post-surgery rehabilitation in preference to transfer to (or in addition to) a central gym. These rooms may also be configured as multi-purpose rooms and used for a variety of purposes including ad-hoc meetings or patient education.
- Therapy areas - depending on the operational policy of the hospital, multipurpose room/s may be provided where unit-based therapy and activities may be undertaken. Assisted daily living (ADL) assessment and training rooms may also be included. These rooms are particularly used in Inpatient Rehabilitation Units. The Schedule of Accommodation section includes an optional section listing additional rooms required for a Rehabilitation Unit. A dedicated Inpatient Rehabilitation Functional Planning Unit is also included in Part B.

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

Other Inpatient Units with specific clinical specialties are also available in these Guidelines. They include Bariatric, Long-Term Care (LTC), Mental Health, Paediatric and Rehabilitation. These can be found in Part B - Functional Planning Units.

Support Areas

Support Areas include:

- Handwashing, Linen, and Equipment bays
- Clean Utility, Dirty Utility and Disposal Rooms
- Beverage Bays and Pantries
- Meeting Room/s and Interview rooms for education sessions, interviews with staff, patients and families and other meetings

Staff Areas

Staff Areas consist of:

- Offices and workstations
- Staff Room
- Staff Station; depending on the unit's geometry and acuity, optional decentralized staff stations may also be incorporated into the design
- Clinical handover room (if required)
- Toilets, Showers and Lockers

Part B: Health Facility Briefing & Design

Inpatient Unit - General

Offices and workstations are required for administrative functions to facilitate educational/ research activities as well as clinical functions such as patient care documentation and medication administration, as required.

Staff Areas, particularly Staff Rooms, Toilets, Showers and Lockers may be shared with adjacent Units as is reasonably practicable.

Shared Areas

In addition to the shared Staff areas above, Shared Areas include:

- Patient Bathroom (assisted)
- Treatment Room
- Public Toilets
- Waiting Area
- Family Visiting Room (if culturally required)
- Some Staff Areas

Shared Areas are possible between more than one Unit if they are an appropriate size suitable to meet the needs of the Units they serve.

Functional Relationships

The Inpatient Unit is a key functional component of the hospital, connected with many clinical and operational support units. Correct functional relationships promote delivery of services that are efficient in terms of management, cost and human resources.

External

Principal relationships with other Units include:

- Ready access to/ from diagnostic facilities such as Medical Imaging
- Ready access from the Emergency Unit
- Ready access to/ from Critical Care Units (ICU and CCU)
- Ready access to/ from Clinical Laboratories and Pharmacy (possible use of Pneumatic Tube System)
- Ready access to/ from Materials Management, Housekeeping and Catering Units
- Ready and discrete access to the Mortuary. Deceased patient transfer routes should avoid public waiting areas, main visitor routes and patient social spaces wherever reasonably practicable
- Inpatient Surgical Units require ready access to Operating/ Day Procedures Units.

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 shared by multiple Units in a central location

Note: Inpatient Units must not be located so that access to one Unit is via another Unit with the Swing Bed components being the only exception.

Internal

Optimum internal relationships include:

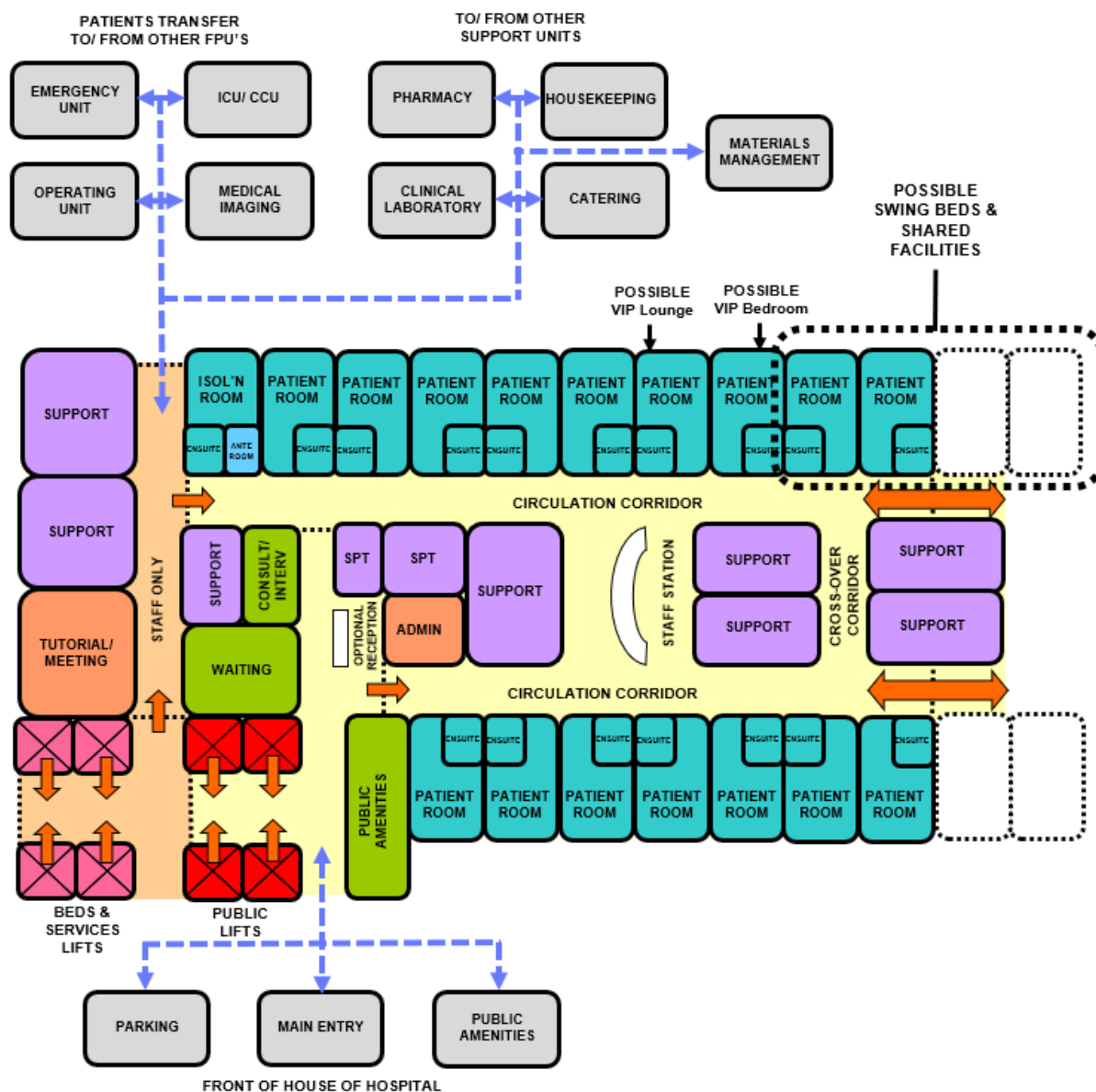
- Patient occupied areas as the core of the unit
- The Staff Station and associated areas need direct access and observation of Patient Area corridors

Part B: Health Facility Briefing & Design
Inpatient Unit - General

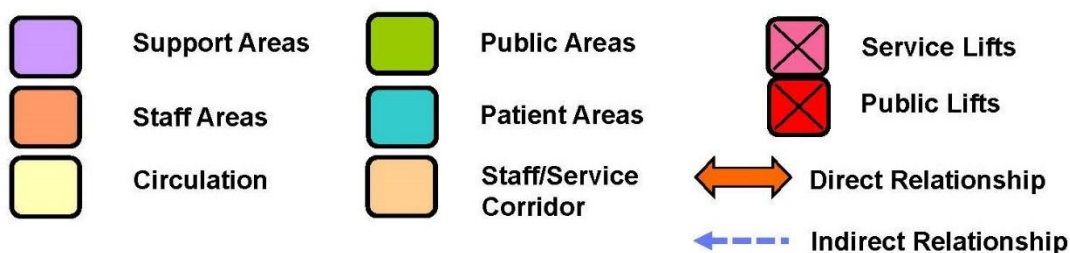
- Utility and storage areas need ready access to both patient and staff work areas
- Public Areas should be on the outer edge of the Unit
- Shared Areas shall be easily accessible from the Units served without passing through another Unit

Functional Relationships Diagram

The functional relationships of a typical Inpatient Unit in the Racetrack Model are demonstrated in the diagram below. The same relationships must be considered when applied to other Models.



LEGEND



Important and desirable external relationships outlined in the diagram include:

Part B: Health Facility Briefing & Design

Inpatient Unit - General

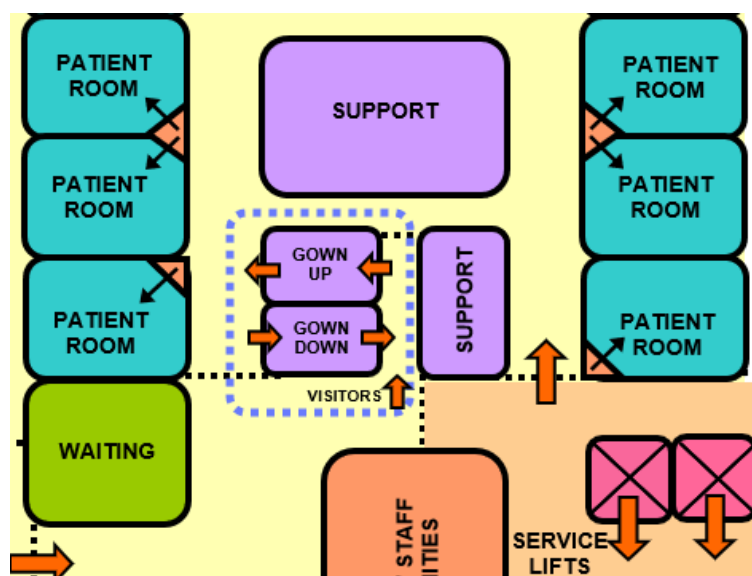
- Clear Goods/ Services/ Staff Entrance
 - Access to/ from key clinical units associated with patient arrivals/ transfers via service corridor
 - Access to/ from key diagnostic facilities via service corridor
 - Entry for staff via the public or service corridor
 - Access to/ from shared staff break and property areas via service corridor
 - Access to/ from Materials, Catering and Housekeeping Units via service corridor
- Clear Public Entrance
 - Entry for 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 (other Planning Models described in this FPU are also suitable)
- Isolation Room is located close to the Bed/ Service Lift, to avoid passing other patient rooms
- 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
- Patient Lounge located close to the Unit entry allowing relatives to visit patients without traversing the entire Unit
- Reception located at Unit entry for control over entry corridor and security of the Unit
- Personal Protective Equipment Bays located at entry for both Staff and Visitors for infection control requirements during ward isolation

Optional PPE Entrance Module

Where outbreak isolation of the Unit is a defined requirement, the design shall include provision for gown-up and gown-down facilities for staff and visitors at entry and exit points, based on the infection prevention risk assessment.



4 Design Considerations

Refer to Part C for – Access, Mobility and OH&S, Part D for Infection Control, and Part E for Engineering requirements.

Environmental Considerations

Acoustics

The Inpatient Unit shall be designed to control ambient noise levels and sound transmission between patient, staff and public areas to support patient recovery and staff performance. Consideration should be given to the location of noisy areas or activities, preferably placing them away from quiet areas including patient bedrooms.

Acoustic treatment is required to the following areas:

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

Natural Light

The use of natural light should be maximised throughout the Unit. Windows are an important aspect of sensory orientation and the psychological well-being of patients. All bedrooms must have a window providing natural light. Natural light is also desirable in Inpatient areas such as lounge rooms. Windows should provide an open and pleasant outlook where possible, preferably to a landscape or view of the natural environment.

Bedrooms may be configured with windows surrounding an internal courtyard (open to the sky) where natural light can enter the interior spaces. It is also possible to have bedrooms facing an internal multi-storey atrium if it is filled with natural light. In both arrangements, care must be taken to maintain privacy.

Privacy

The design of the Inpatient Unit needs to consider the contradictory requirement for staff visibility of patients while maintaining patient privacy. Unit design and location of staff stations offer varying degrees of visibility and privacy. This is largely influenced by patient acuity including high dependency, elderly or intermediate care.

Each bed in both single bedroom and shared bedrooms must be provided with bed screens to ensure privacy of the patients undergoing treatment. Bed screens can either surround the bed providing sufficient clearances between the bed and the screens or they can be located closer to the entry door of the bedroom. Refer to the Standard Components in these Guidelines for examples.

Other factors for consideration include:

- Use of windows in internal walls and/or doors, provision of privacy blinds or switchable glass
- Location of beds that may affect direct staff visibility
- Location of sanitary facilities to provide privacy for patients while not preventing observation by staff
- Location of external/ internal courtyards or an atrium facing bedroom windows to prevent others from looking into the bedrooms

Space Standards and Components

Accessibility

Bedrooms and Ensuities should be provided with full accessibility compliance to applicable standards (regional and international). The quantity of accessible rooms could be determined by the service plan or comply to any relevant applicable standards. Accessible bedrooms and ensuities should enable normal activity for patients who are wheelchair dependent, as opposed to patients who are in a wheelchair because of their hospitalisation.

Doors

Door openings to inpatient bedrooms must have a minimum of 1350 mm clear opening (although 1400 mm is recommended) to allow for easy movement of beds and equipment.

Room Capacity and Dimensions

Maximum room capacity is six patients in a room. In new facilities, all patient rooms should be single occupancy or contain no more than two beds. Four bed rooms and six bed rooms are permitted only in refurbishment projects where existing building constraints limit feasibility of providing single or two bed rooms. Even in refurbishment projects, larger multi-bed rooms should be avoided wherever possible to enhance patient privacy and dignity.

Minimum dimensions, excluding such items as ensuites, built-in robes, alcoves, entrance lobbies and floor mounted mechanical equipment shall be as follows:

Room Type	Width	Length
Single Bedroom	4200 mm	3600 mm
Two Bed room	4200 mm	6400 mm
Four Bed room	8400 mm	6400 mm
Six Bed room	8400 mm	8950 mm

Depending on the operational policy, patient bedrooms may be equipped with comfortable furniture for one or two family members/ carers without interfering with staff member access to patients.

Minimum room dimensions are based on overall bed dimensions (buffer to buffer) of 2200 mm long x 1050 mm wide. Minor encroachments including columns and hand basins that do not interfere with functions may be ignored when determining space requirements.

Bed Spacing/ Clearances

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

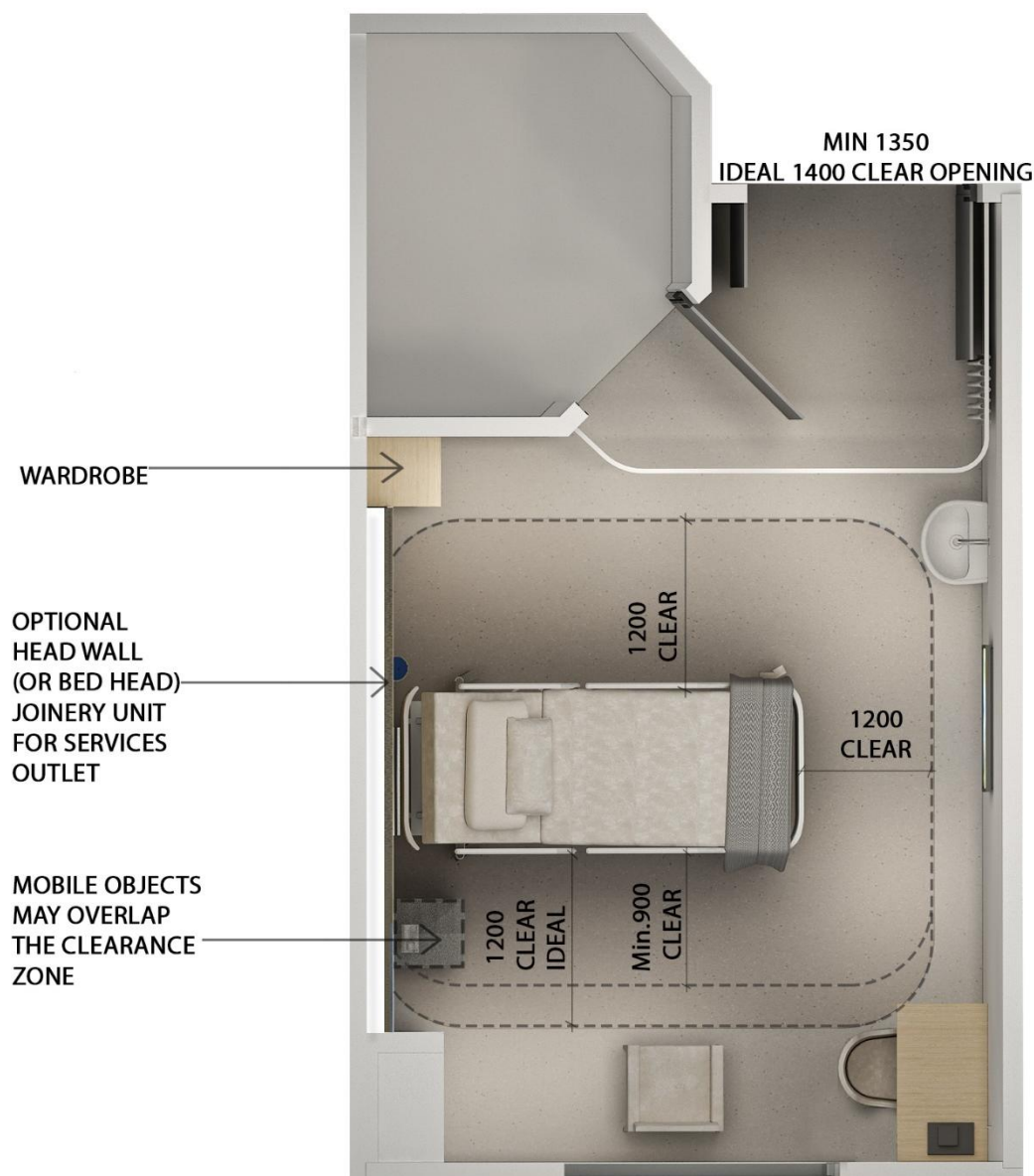
The design and arrangement of all patient beds, in relation to fittings, furniture, mechanical and electrical services, and staff call systems, must comply with the standard components as well as the clearances that they imply.

Refer to the diagrams below for required clearances. These are intended to indicate the clearance around beds and are not design suggestions of the room.

Typical Single Bedrooms

In single bedrooms there shall be a minimum clearance of 900mm (1200mm recommended) to both sides of the bed and a clearance of 1200 mm available at the foot of the bed to allow for easy movement of equipment and beds.

The clearance required around a bed in a single room is represented diagrammatically below:

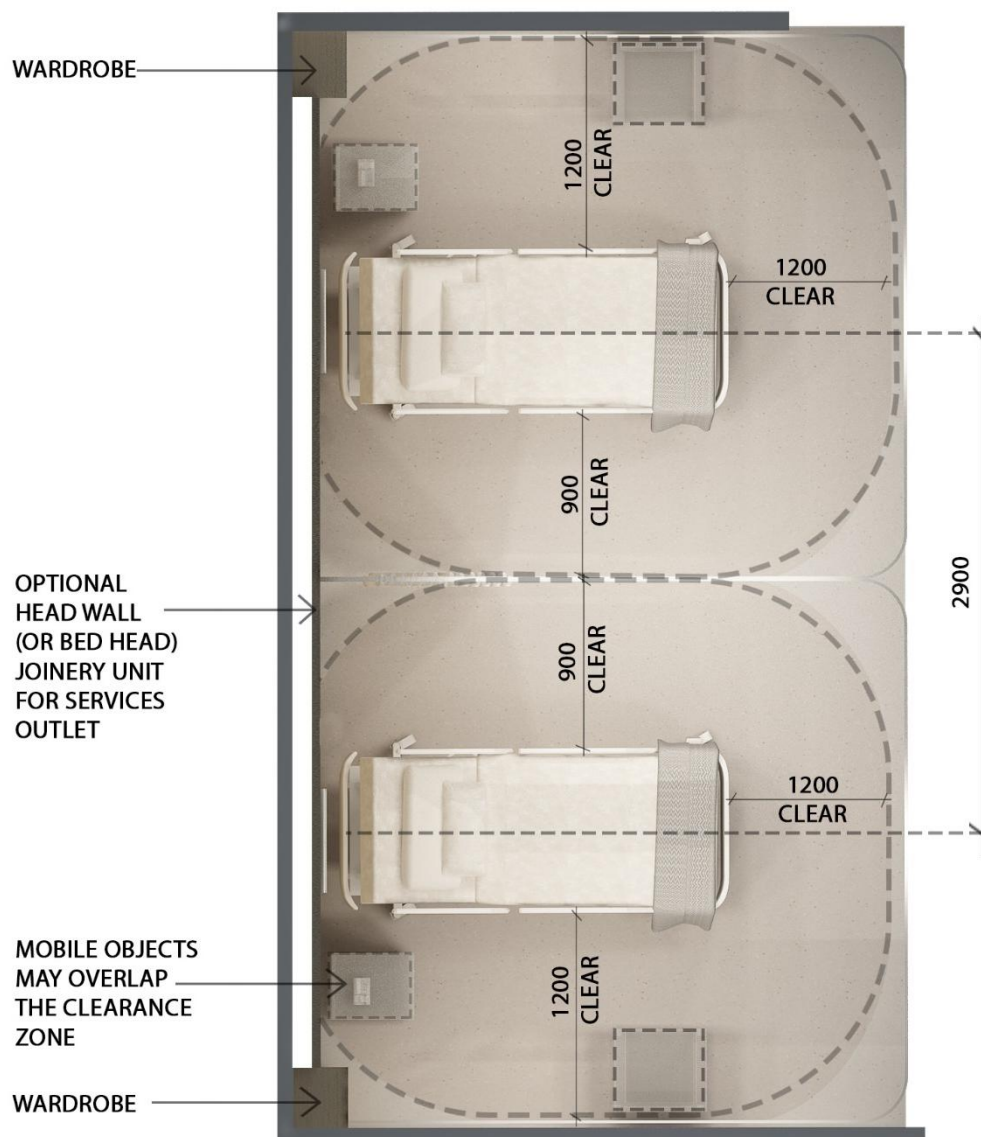


Typical 2 Bed rooms

In 2 bed rooms, the minimum distance between beds shall be 900 mm to each side of each bed, 1200mm at the foot of each bed and between the side of a bed and a wall. The distance between bed centrelines must not be less than 2900 mm.

Paediatric bedrooms that contain cots may have reduced bed centres, but consideration must be given to the spatial needs of visiting relatives. To allow for more flexible use of the room the above clearances are still recommended. Consider allowing additional floor area within the room for the children to play.

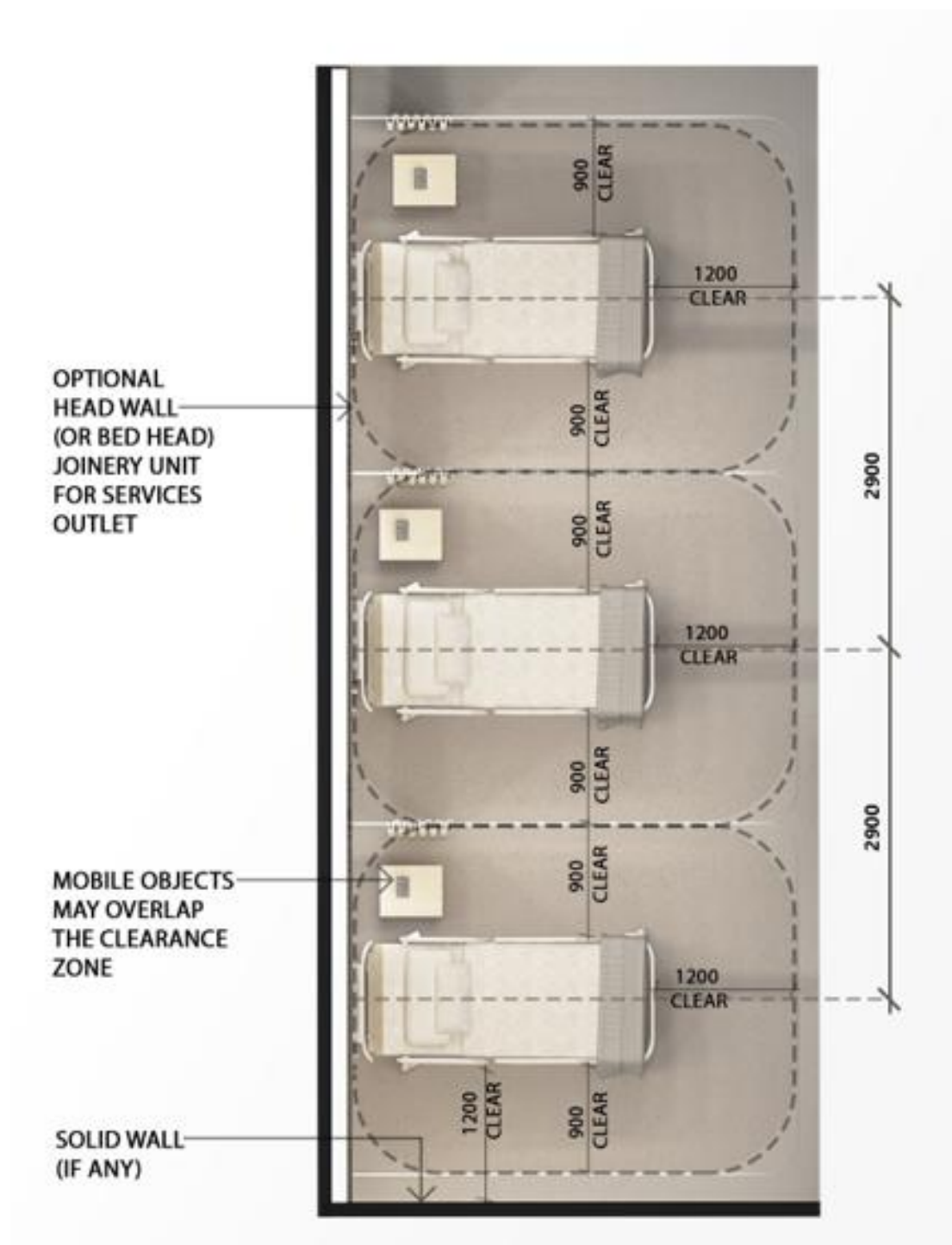
The clearance required around beds is represented diagrammatically below:



Multiple Bed Bays

In multiple-bed bays, the minimum distance between beds shall be 900 mm to each side of each bed. 1200mm clearance shall be provided at the foot of the bed and between the side of a bed and a wall. The distance between bed centrelines should not be less than 2900 mm.

The clearance required around beds in multiple-bed areas is represented diagrammatically below:



Bariatric Patient Facilities

In each Inpatient Unit, the provision of facilities for bariatric patients will be according to the facility's Operational Policy. Inpatient Units shall assume a minimum provision for bariatric patients based on service demand and population profile. Where bariatric care is anticipated, at least one bariatric-capable bedroom with ensuite and lifting provision shall be included per Unit. These include:

- Large single Bedroom: require additional space for a bariatric bed and lifter access
- Large single Ensuite: with appropriate door to permit patient lifter access with staff assisting patient transfers

Refer to Inpatient Unit - Bariatric in these Guidelines for specific additional requirements.

All fixtures and fittings for bariatric patients need to accommodate up to 350 kg weight.

Ceiling suspended lifting system may be considered between the Bedroom bed area and the adjacent Ensuite.

Drug Storage

Drugs prescribed at the hospital must not be stored in the patient bedrooms. Each Inpatient Accommodation Unit shall have a dedicated lockable storage room with restricted staff access. This could either be a Clean Utility room incorporating medication storage or a stand-alone Medication Room.

In both scenarios, the room must contain:

- Benches and shelving
- Lockable cupboards for the manual storage of restricted substances or provision of an automated Medication Management Systems
- A lockable steel cabinet for the storage of drugs of addiction or controlled drugs
- A refrigerator, as required to store restricted substances, must be lockable or housed within a lockable storage area
- Controlled access by authorised staff only
- CCTV surveillance camera/s and monitoring measures shall be implemented in accordance with applicable legislation and hospital policy
- Space for a medication trolley

Note: Storage for dangerous and controlled drugs must be in accordance with the relevant legislation and not stored in a patient bedroom.

Infection Control

Handbasins

Handwashing facilities are to be provided in corridors, patient bedrooms, and other rooms as specified in the Standard Components in these Guidelines.

Handwashing 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 - Handwashing and Part D of these Guidelines.

Hand Basins in patient bedrooms are provided for the exclusive use by staff for infection control considerations. Hand basins are available in the ensuites for patients and their visitors which shall not be used by Staff.

Antiseptic Hand Rubs

Antiseptic hand rubs should be provided in areas where they can be used frequently, such as at points of care, near patient beds and in high-traffic areas. The placement of antiseptic hand rubs should be consistent and reliable throughout facilities.

Antiseptic hand rubs are necessary and essential to safe patient care delivery, however they should be provided in addition to Handwash Bays and not as a substitute.

Antiseptic hand rubs are to comply with Part D in these Guidelines.

Isolation Rooms

Isolation Rooms can only accommodate one patient bed per room. At least two 'Class N' (Negative Pressure) Isolation Rooms shall be provided for each 30 beds in facilities of RDL (Role Delineation Level) 3 and above. Additional isolation capacity shall be considered where the service profile, patient acuity, or outbreak preparedness assessment indicates increased demand. The beds in isolation rooms may be used for acute care when not required for isolation.

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

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

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

Corridor	(N) Neutral
Airlock	(-) Negative
Inpatient room	(--) Negative
Ensuite	(---) Negative

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

Refer to Parts D & E in these Guidelines.

Safety and Security

An Inpatient 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 healthcare 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 shall support effective staff observation of patient areas, minimise blind spots and allow timely response to clinical or security incidents. The level of observation and visibility has security implications.

Refer also to Part C in these Guidelines.

Finishes

Finishes including fabrics, floor, wall and ceiling finishes should create an environment that is relaxing and has a non-institutional appearance. The following factors should be considered in the selection of finishes:

- acoustic properties
- durability and resilience
- ease of cleaning
- infection control
- fire safety
- movement of equipment
- work health and safety
- compliance with relevant standards and guidelines

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

Part B: Health Facility Briefing & Design

Inpatient Unit - General

Walls to be painted with lead free paint and wall protection shall be provided where bed and trolley movement occurs such as corridors, patients' bedrooms, equipment and linen storage, and treatment areas.

Refer to Part C of these Guidelines.

Fixtures, Fittings & Equipment

Window Treatments

Each room shall have partial blackout facilities (blinds or lined curtains) to allow patients to rest during the daytime. Similar to bed screens, window curtains shall be fireproof, waterproof and be cleaned often, according to the Infection Control policy of the facility.

Compliance with the relevant local Authority for the required level of fire resistance should be ensured.

If blinds are preferred over curtains, the following applies:

- Blinds must not have loose cords or strings that can cause children to become entangled. Window treatments shall be selected to minimise ligature and entanglement risks and to support patient safety across all inpatient settings.
- Vertical or roller blinds are better alternatives than horizontal blinds as horizontal blinds have more surfaces for collecting dust.
- Horizontal blinds can be fitted within a double-glazed window assembly with a knob control on the one side (commonly the bedroom side) or with a dual control (both sides) depending on the location of the window. This option is preferable in rooms used for isolation.

Window treatments should be durable and easy to clean. Consideration may be given to use of double glazing with integrated blinds, tinted glass, reflective glass, switchable glass, exterior overhangs or louvres to control the level of lighting.

Patient Entertainment Systems

Patients may be provided with entertainment/ communications systems according to the Operational Policy of the facility including television, bedside telephone, radio and internet (Wi-Fi) access. A single patient handset may combine the entertainment system, nurse call system and lighting control all in one unit.

Bed Screens

In both single and multiple-bed rooms, visual privacy (bed screens) shall be provided for each patient. The design for privacy shall not restrict patient access to the entrance, toilet or shower. Bed screens must be regularly cleaned and washed or changed if using disposable curtains.

Selection of fabric that is waterproof, fireproof and optimally with an antimicrobial property is recommended. Disposable bed screens are another option if it aligns with the Infection Control Policy of the facility. In isolation rooms or patient rooms used for quarantine, disposable bed screens could be a more appropriate option than regular bed screens.

Building Services Requirements

This section only identifies unit specific services' briefing requirements and must be read in conjunction with Part E - Engineering Services for a complete list of applicable parameters and standards.

Mechanical Services (HVAC)

The air temperature in Inpatient areas should be capable of being maintained along with relative humidity. A local thermostat in the patient room should be provided from which room temperature can be adjusted by the occupant.

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

Medical Gases

Medical gas is used for administration to a patient during anaesthesia, therapy, treatment, diagnosis, or resuscitation.

Part B: Health Facility Briefing & Design

Inpatient Unit - General

Medical gases shall be installed, readily available and dedicated for each patient. They must not be shared between two patients even in a shared Inpatient room.

Oxygen, medical air and suction must be provided to all Inpatient beds. 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 supplied to all areas accessed by patients within the Inpatient Unit should be maintained at 38°C and shall not exceed 43°C. This requirement applies to all staff handwash basins and sinks in patient accessible areas.

Sinks in Staff Areas may be provided with hot and cold water services.

Refer to Part E - Engineering Services for details.

Information Technology (IT) and Communications

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

- Health Information System (HIS)
- Electronic Health Records (HER) which may form part of the HIS
- Hand-held tablets and other smart devices
- Picture Archiving Communication System (PACS)
- DECT phones and computers
- Data entry including scripts and investigation requests
- Bar coding for supplies and X-rays/ Records if physical copies are still being used
- Data and communication outlets, servers, and communication room requirements
- Wi-Fi availability for staff, patients and/or visitors

Nurse Call / Emergency Call / Staff Call

Hospitals must provide an electronic call system that allows patients and staff to alert nurses and other health care staff in a discrete 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 Utility and Dirty Utility rooms. Within a defined response time, the system shall automatically escalate the call priority and notify additional staff. The Nurse Call system may also use mobile paging systems or SMS to notify staff of a call.

Pneumatic Tube Systems

The Inpatient Units may include a Pneumatic Tube Station (PTS), as determined by the facility's operational policy. If provided, the station should be located in close proximity to the Staff Station or under direct staff supervision. When required, a second PTS station may be provided within the medication storage area.

Refer to Part E - Engineering Services for details.

Renal Dialysis Facilities

The Inpatient Unit should provide one Bedroom with a dialysis drain for use with mobile dialysis equipment, as per the Unit Operational Policy. Also, all isolation rooms are to have Renal Dialysis provisions.

In the combined IPU-HDU model, all HDU rooms must be provided with renal dialysis equipment and associated provisions.

Refer to Part E – Engineering Services for details.

5 Components of the Unit

Standard Components

Standard Components are typical rooms in a health facility, each represented by a Room Data Sheet (RDS) and Room Layout Sheet (RLS). Sometimes, there is more than one configuration possible therefore, more than one room layout sheet can be found in the Standard Components for a room with same function. They may differ in room size and/or the requirement of FF&FE items.

The Room Data Sheets are presented in a written format, describing the minimum briefing requirements of each room type divided into the following categories:

- Room Primary Information; includes briefed areas, occupancy, room description, relationships and special room requirements
- Building Fabric and Finishes; describes fabric and finishes for the rooms' ceiling, floor, walls, doors and glazing
- 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 commonly located in the room along with the services required such as power, data, water supply and drainage. Fixtures and Equipment are also identified with a group number as above indicating who is responsible for the provision of these items
- Building Services; indicates the requirement for communications, power, HVAC (Heating, Ventilation and Air Conditioning), 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 (RLSs) are indicative plan layouts and elevations illustrating an example of a good design. The RLSs indicated are designed to satisfy these Guidelines. Alternative layouts and innovative planning shall be deemed to comply with these Guidelines provided the following criteria are met:

- Compliance with 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

Standard Components have considered the required design parameters described in these Guidelines. Each FPU should be designed with compliance to Standard Components - Room Data Sheets and Room Layout Sheets, nominated in the Schedules of Accommodation in Appendices of this FPU.

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 - Standard, Room Code (1br-st-18-i), 1 Bed Room - Isolation, Room Code (1br-is-n-18-i), 1 Bed Room - Large, Room Code (1br-lg-30-i), 1 Bed Room - VIP, Room Code (1br-vip-28-i), 2 Bed Room - Standard, Room Code (2br-st-30-i)		
Air flowmeter	Locker: bedside	Suction adapter
Bed: inpatient, electric	Oxygen flowmeter	Table: overbed
Treatment Room, Room Code (trmt-14-i)		
Air flowmeter	Light: examination	Refrigerator: drugs (optional)
Diagnostic set (optional)	Monitor: physiologic, acute care	Stretcher: procedure/ recovery
Infusion pump: single channel	Oxygen flowmeter	Suction adapter

7 Schedule of Accommodation

The Schedule of Accommodation (SOA) provided in the Appendices of this FPU 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 of the Net Area. The total area comprises of the sub-total areas of these rooms plus an additional percentage of the sub-total applied as the circulation (corridors within the Unit). Circulation which is represented as a percentage, is the minimum recommended target area. Any external areas and optional rooms/spaces are not included in the total areas in the SOA.

Within the SOA, room sizes are indicated for typical units and are organised into functional zones. Not all rooms identified are mandatory, therefore, some rooms are found as optional in the corresponding remarks. These Guidelines do not dictate the size of the facilities, and the SOA provided represents a limited sample based on assumed unit sizes. The actual size of the facilities is determined by the 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 the Role Delineation Level (RDL) and are numbered from 1 to 6. Applicable RDL's are noted in each SOA provided in the appendices. Not all six RDL's are necessarily applicable. Refer to Part A for a full description of the RDLs.

The following should be considered in conjunction with the SOAs provided in the Appendices of this FPU:

- Areas noted in SOA take precedence over all other areas noted in this FPU
- Rooms indicated in the schedule reflect the typical arrangement according to the Role Delineation and/ or capacity required for the clinical service
- Exact requirements for room quantities and sizes reflect Key Planning Units (KPU) identified in the Service Plan and the Operational Policies of the Unit
- All areas shown in the SOA follow the '4 Floor Area Measurement Methodology, Definitions and Diagrams' as described in these Guidelines. Refer to Part B, Complete Part.
- 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
- Offices are to be provided according to the number of approved full-time positions within the Unit

Part B: Health Facility Briefing & Design
Inpatient Unit - General

Inpatient Unit – General

Room/ Space	Standard Component Room Codes	This column is not used			This column is not used			RDL 3-6 Qty x m² 30 Beds			(Additional) RDL 3-6 Qty x m² 15 Beds			Remarks
Entrance/ Reception														
Reception/ Clerical	recl-10-i							1	x	10				Optional
Bay- Beverage	bbev-op-i							1	x	5				Optional, for visitors
Bay – Wheelchair Park	bwc-i similar							1	x	3				
Waiting	wait-20-i wait-30-i							1	x	30	1	x	20	Area may be enlarged to increase seating capacity. Gender separation where required
Meeting Room	meet-9-i meet-1-15-i							1	x	15	1	x	9	Optional; Interviews with patient/ family
Parenting Room	par-i							1	x	6	1	x	6	Optional
Play Area	plap-10-i							1	x	10				Optional
Toilet – Accessible	wcac-i							2	x	6				Gender separated. May be shared
Gown Up/ Gown Down facility	gw-up-i similar gw-dn-i similar							2	x	6				Optional
Patient Areas														
1 Bed Room	1br-st-18-i							20	x	18	8	x	18	Mix and number depend on service demand
1 Bed Room - Isolation	1br-is-n-18-i 1br-is-p-18-i							2	x	18	1	x	18	Class N rooms are mandatory according to the ratios nominated in this FPU. Minimum size is 18m2. Any isolation room may be combined with the mandatory Bariatric room to form an Isolation Bariatric room at 28m2 (1br-is-p-28-i or 1br-is-n-28-i). Class P isolation rooms according to the clinical services plan.
1 Bed Room - Large	1br-lg-30-i 1br-ba-20-i 1br-ba-30-i							1	x	30	1	x	30	Minimum 1 per facility; may be used for bariatric patients/ patients with special needs. May also be combined with Isolation Room. Refer to Standard Components for Bariatric Isolation Room. Include Dialysis outlet in all Bariatric bedrooms. Follow minimum Bariatric standards.
1 Bed Room - VIP	1br-vip-28-i							1	x	28	1	x	28	Provide according to demand
2 Bed Room	2br-st-30-i							3	x	30	2	x	30	Mix and number depend on service demand
Anteroom	anrm-i							2	x	6	1	x	6	For 1 Bed Room - Isolation
Ensuite - Standard	ens-st-i							25	x	5	11	x	5	To be directly accessible from each 1 and 2 Bed Rooms, including isolation room
Ensuite - Super	ens-sp-i							1	x	6	1	x	6	For 1 Bed Room - Large. Special fittings required for bariatric patients
Ensuite - VIP	ens-vip-i							1	x	8	1	x	8	For 1 Bed Room - VIP
Lounge/ Dining - VIP	ld-vip-k							1	x	24	1	x	24	For 1 Bed Room - VIP
Ensuite - Visitor	ens-vis-k							1	x	6	1	x	6	For 1 Bed Room - VIP
Pantry	ptry-svip-k similar							1	x	5	1	x	5	For 1 Bed Room - VIP
Vestibule	NS							1	x	8	1	x	8	Entry to VIP area
Lounge - Patient	lnpt-15-i or lnpt-s-i							1	x	15				Optional. May be shared between 2 units. Note: refer to notes below
Laundry - Patient	laun-pt-i							1	x	6	1	x	6	For specialist units e.g. rehabilitation; as required by service demand
Toilet - Patient	wcpt-i							1	x	4				Optional. Dependent on provision of communal areas

Part B: Health Facility Briefing & Design
Inpatient Unit - General

Room/ Space	Standard Component Room Codes	This column is not used			This column is not used			RDL 3-6 Qty x m ² 30 Beds			(Additional) RDL 3-6 Qty x m ² 15 Beds			Remarks
Assisted Bathroom	bath-i							1	x	16				1 per 60 beds or may be shared between 2 units
Treatment Room	trmt-14-i							1	x	14				Optional. Provide according to service demand
Support Areas														
Bay - Beverage, Enclosed	bbev-enc-i bbev-op-i							1	x	5	1	x	5	
Bay - Handwashing, Type B	bhws-b-i							4	x	1	2	x	1	In addition to basins in patient rooms. Refer to Part D
Bay - PPE	bppe-i							4	x	1.5	1	x	1.5	In addition to bays for isolation rooms. Refer to Part D. May be combined with Bay Handwashing
Bay - Linen	blin-i							2	x	2	1	x	2	Quantity and location to be determined for each facility
Bay - Meal Trolley	bmt-4-i							1	x	4				Optional. Dependent on catering and operational policies
Bay - Mobile Equipment	bmeq-4-i or bmeqe-4-i							1	x	4	1	x	4	Quantity and size dependent on equipment to be stored; can be open or enclosed
Bay - Resuscitation Trolley	bres-i							1	x	1.5	1	x	1.5	
Bay - Pneumatic Tube	bpts-i							1	x	1	1	x	1	Optional. Locate at Staff Station or under staff supervision
Clean Utility	clur-12-i							1	x	12	1	x	12	May be interconnected with Medication Room
Medication Room	medr-10-i							1	x	10	1	x	10	May be interconnected with Clean Utility
Clean Utility/ Medication	clum-14-i							1	x	14	1	x	14	Optional. If combining Clean Utility and Medication Room is preferred
Dirty Utility	dtur-12-i dtur-14-i							1	x	14	1	x	12	2 may be required to minimise travel distances
Disposal Room	disp-8-i							1	x	8	1	x	8	
Pantry	ptry-i							1	x	8				Optional. If Beverage Bay is required
Store - Equipment	steq-10-i steq-20-i							1	x	20	1	x	10	Size dependent on equipment to be stored; staff access. Note: combining all stores into one room is optional, however if they are combined, they must be separated into different zones
Store - General	stgn-8-i similar stgn-10-i							1	x	10	1	x	6	Size as per service demand and operational policies
Cleaners' Room	clrm-6-i							1	x	6				Separate storage for dry goods, small units may share
Staff Areas														
Staff Station	sscu-i sstn-14-i							1	x	14	1	x	9	May include ward clerk. Size and location dependent on operational policies
Staff Station (Decentralised)	sstn-5-i							*	X	5	*	X	5	Optional; *Quantity and location dependent on operational policies
Office - Clinical Handover	off-cln-i							1	x	15	1	x	15	
Office - Single Person	off-s12-i							1	x	12	2	x	12	NUM office and clinical personnel as needed
Meeting Room – Medium/ Large	meet-l-15-i							1	x	20				Tutorial, shared between 2 units. Could be used for counselling sessions or as a multi-purpose room
On-Call Room	ovbr-10-i							1	x	10				Required at the rate of 1 per 2 Units maximum. Does not necessarily need to be located within the Units however, must have convenient access.
On-Call Room - Ensuite	oves-4-i							1	x	4				Ensuite attached to On-Call Room above.
Staff Room	srn-15-i similar							1	x	18	1	x	15	Include Beverage Bay
Property Bay – Staff	prop-3-i							2	x	3	2	x	3	May be separated by male and female. Number of lockers depends on staff complement per shift

Part B: Health Facility Briefing & Design
Inpatient Unit - General

Room/ Space	Standard Component Room Codes	This column is not used			This column is not used			RDL 3-6 Qty x m ² 30 Beds			(Additional) RDL 3-6 Qty x m ² 15 Beds			Remarks
Toilet – Staff	wcst-i							2	x	3	2	x	3	Separated by male and female
Sub Total								1030			582			
Circulation %								35			35			
Total Area								1340			786			

Rehabilitation Inpatient Unit (Optional)

Room/ Space	Standard Component Room Codes	This column is not used			This column is not used			This column is not used			RDL 5/6 Qty x m ²			Remarks
Rehabilitation														
Consult/ Exam Room	cons-i										2	x	14	
Gymnasium/ Multi-purpose room	gyah-45-i similar										2	x	40	Size to suit the service, with a Control room as required
Dining/ Activities	dinr-i similar										2	x	50	Based on 2m ² per patient, 25 patients
Pantry/ Servery/ ADL Kitchen	adlk-enc-i										2	x	12	
ADL Bathroom	adlb-i										1	x	12	
ADL Bedroom	adlbr-i										1	x	18	
Toilet - Patient (Male/ Female)	wcpt-i										2	x	4	
Sub Total											270			
Circulation %											35			
Total Area											365			

Super VIP Suite (Optional)

Room/ Space	Standard Component Room Codes	This column is not used			This column is not used			This column is not used			RDL 5/6 Qty x m ²			Remarks
Super VIP Suite											1 Bed			
1 Bed Room – Super VIP	1br-svip-53-i										1	x	53	Provide according to service demand
Ensuite – Super VIP	ens-svip-i										1	x	20	Provide according to service demand
Store – Equipment	steg-10-i										1	x	10	Provide according to service demand
Pantry – Super VIP	ptry-svip-i										1	x	11	Provide according to service demand
Lounge/ Dining – Super VIP	ld-svip-i										1	x	26	Provide according to service demand
Family/ Carer Room	f-cr-svip-i										1	x	34	Provide according to service demand
Ensuite – Visitor	ens-vis-i										1	x	5	Provide according to service demand
Sub Total											159			
Circulation %											35			
Total Area											215			

8 References and Further Reading

- Australasian Health Infrastructure Alliance (AHIA), Australasian Health Facility Guidelines (AusHFG), Part B, Health Facility Briefing and Planning, HPU B.0340 Adult Acute Inpatient Unit, Revision 8, August 2025; refer to website: <https://healthfacilityguidelines.com.au/hpu/adult-acute-inpatient-unit-0>
- CDC Guidelines for Environmental Infection Control in Health-Care Facilities, 2003, refer to website: <https://www.cdc.gov/infection-control/hcp/environmental-control/index.html>
- Facility Guidelines Institute (FGI), Guidelines for Design and Construction of Hospitals, 2022 edition; refer to website: www.fgiguide.com
- NHS England. Health Building Note 04-01, Adult in-patient facilities (planning and design). First published 1 December 2009, NHS England page updated 28 July 2025; refer to the website: <https://www.england.nhs.uk/publication/adult-in-patient-facilities-planning-and-design-hbn-04-01/>

9 Sample Plan

Please see overleaf.

