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DEPARTMENT OF HEALTH

DOH Health Facility Guidelines 2019

Part B – Health Facility Briefing & Design
195 Inpatient Unit – Paediatric

Executive Summary

The Inpatient Unit - Paediatric's provides accommodation for the delivery of overnight care to paediatric and adolescent patients of a specific age range, typically babies to children aged 16 years.

In order to provide appropriate care, treatment, therapy, and activities for the age ranges accommodated in this Unit, paediatric and adolescent patients may be co-located in the same unit.

In addition, the Unit provides facilities and the environment responding to the preferences of parents, families, and guests, as well as requirements of staff.

Medical and surgical patients will be accommodated in the Inpatient Unit - Paediatric. This unit may also be designed and operated back-to-back with Paediatric HDU or PICU.

Many features of the Inpatient Unit – Paediatric are identical to those of the Inpatient Unit – General. The major differences relate to special supporting components which are age-specific, such as:

- Indoor and Outdoor play areas
- Activity space for the adolescents
- Formula room for very young children

Furthermore, the comfort, convenience, and provisions for the childrens parents should also be considered, including the ability to stay overnight with the children.

The room design and configuration in this unit will be very similar to the Inpatient Unit – General. This means that due to the age of the children the rooms are not made smaller, even though there may be a variety of sizes for the beds or cots used. Similarly the Ensuite bathrooms are still required even if some children may not use them.

For toddlers and young children an internal play area must be provided, including safe toys. This is not only for diversion but also a therapeutic tool. Space should be provided for nursing staff to monitor the children in the play area.

Optionally an outdoor play area should also be provided and linked to the internal play area. The external play area must consider the safety of children and make all necessary provisions to avoid the risk of falls, sharp objects, and water.

For adolescents, separate activity rooms should be provided which may include games consoles or similar age-appropriate activities.

Due to the particular sensitivity of this Unit, additional security and monitoring is required to ensure that children are not lost, stolen or taken by unauthorised people.

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.

Table of Contents

1. Inpatient Unit - Paediatric

1.1 Introduction

The Inpatient Unit - Paediatric's primary purpose is to provide appropriate accommodation for the delivery of health care services to paediatric and adolescent patients of a specific age range, typically babies to children aged 16 years.

The Unit must also provide facilities and circumstances that suit the needs of patients and visitors, as well as the needs of staff in the workplace.

1.1.1 Description

In order to provide appropriate care, treatment, therapy, and activities for the age ranges accommodated, paediatric and adolescent patients may be co-located in the same unit. In addition, the Unit provides facilities and the environment responding to the preferences of parents, families, and guests, as well as requirements of staff.

Medical and surgical patients will be accommodated in the Inpatient Unit - Paediatric.

Paediatric Patients who require Intensive or High Dependency care need to be admitted to the Paediatric Intensive Care Unit (PICU) which may include a component of High Dependency Unit (HDU). The Inpatient Unit - Paediatric can then act as step-down from PICU or Paediatric HDU.

This unit may also be designed and operated back-to-back with Paediatric HDU or PICU.

1.2 Functional & Planning Considerations

1.2.1 Models of Care

In general, the Paediatric Unit will provide family-centred care, with parents playing a vital part in the patient's treatment and family members providing support.

Examples of the Models of Care that may be implemented include:

- Patient allocation, which involves allocation of a group of patients to nursing staff who undertake complete care and treatment. This model provides opportunities for staff to become skilled with varying patient care acuities but requires the assignment of patients suitable to the experience and capabilities of the nursing staff.
- Task assignment, where nursing staff are assigned patient care tasks that are undertaken on all patients. This model is efficient in delivery of patient care where there are minimal staff resources, such as night shifts.
- Team nursing, where nursing staff are divided into teams and assigned a group of patients to undertake all patient care. This model provides for a differing skill mix of staff and allows more junior staff to be directly supervised by more experienced staff.
- Case management, where nursing staff with particular skills or specialties are assigned patients related to the same specialty. This model provides for specialist care of the more acutely ill patients and allows staff to specialise in particular clinical areas.
- Multi-disciplinary care, where comprehensive range of generalist services by multidisciplinary teams including GP's, nursing staff, allied health professionals and other health workers. This model provides an inclusive patient care and treatment program.
- A combination of the above.

The planning of the Unit should allow for flexibility to suit a range of models of care to be adopted in the future.

Levels of Care

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

Patients requiring 24-hour medical intervention or cover will generally not be nursed or managed within a general inpatient unit.

1.2.2 Planning Models

Bed Numbers and Complement

The Paediatric Inpatient Unit can have up to 30 patient beds (±2), but 24-26 beds is preferred to allow for additional facilities such as play, activity, and family communal space. Additionally, this enables the creation of identical-sized inpatient tower layouts in terms of size and length.

A minimum of 80% of the total bed complement shall be provided as Single Bedrooms. In an Inpatient Unit used for overnight stay; not only the current trend is to provide a greater proportion of single bedrooms largely for infection control and privacy reasons, but parents staying overnight with a younger patient in the patient bedroom is a common practice. This practice should be encouraged and enabled.

Rooms with 3 or more beds should not be used for new Paediatric Units.

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 converted to acute beds.

At any given time, swing beds are part of an Inpatient Unit in terms of the total number of beds and the components of the unit. For example:

- Unit A + Swing Beds = One Inpatient Unit as per these Guidelines.
- Alternatively: Unit B + the same Swing Beds = One Inpatient Unit as per these Guidelines

Facility design for swing beds will often require additional corridor doors and provision for switching patient/ nurse call operation from one Staff Station to another. Security is also an issue, for example, converting General/Medical beds to Paediatric beds.

1.2.3 Unit Planning Geometric Models

Inpatient Accommodation for Paediatric patients will be similar to general Inpatient accommodation and a number of suitable options are the same, including:

- Linear model - Patient and support rooms are clustered along a single corridor.
- Racetrack model - Patient rooms are located on the external aspects of the space and support rooms are clustered in the central areas in a racetrack configuration.
- “L” shaped model - Similar to Linear model, however the unit is bent roughly in the centre to form an “L” Shape.
- “T” shaped model - Similar to “L” model with one linear entrance wing splitting into two side wings forming a “T” shape.
- Hybrid “T” mode - The entrance wing has a racetrack configuration with support services in

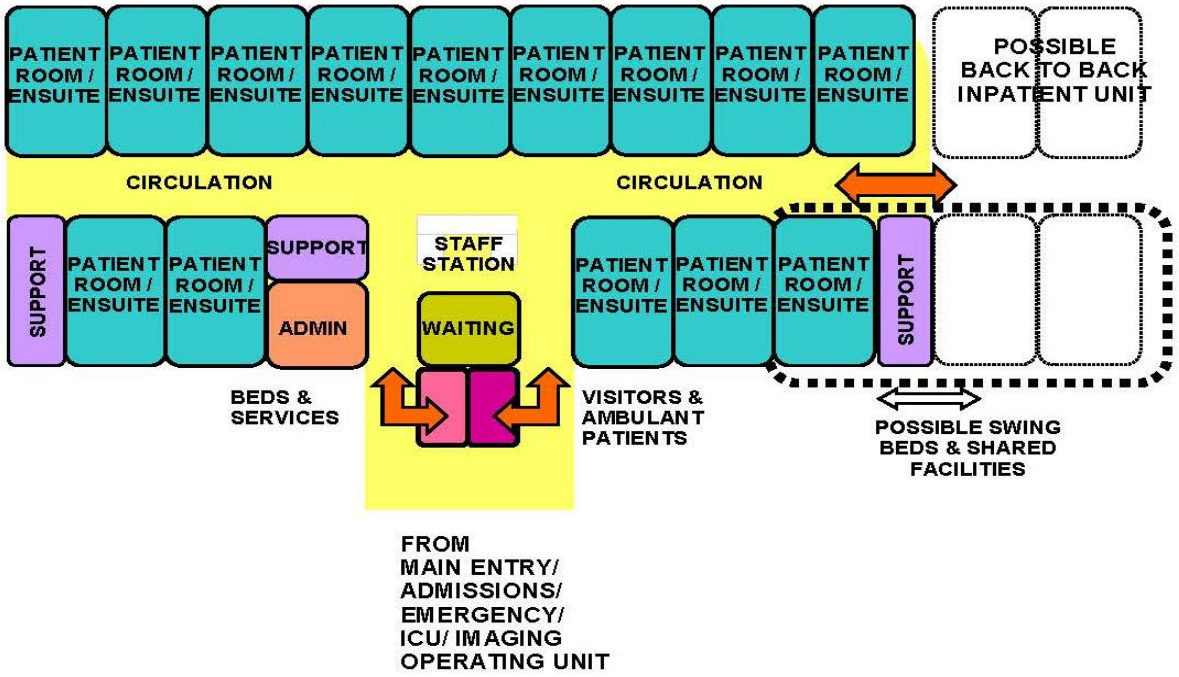
the centre of the racetrack. The central racetrack then splits into two linear wings similar to the "T" option.

- "+" shaped model - This is a similar to the "T" model with one extended central wing added.

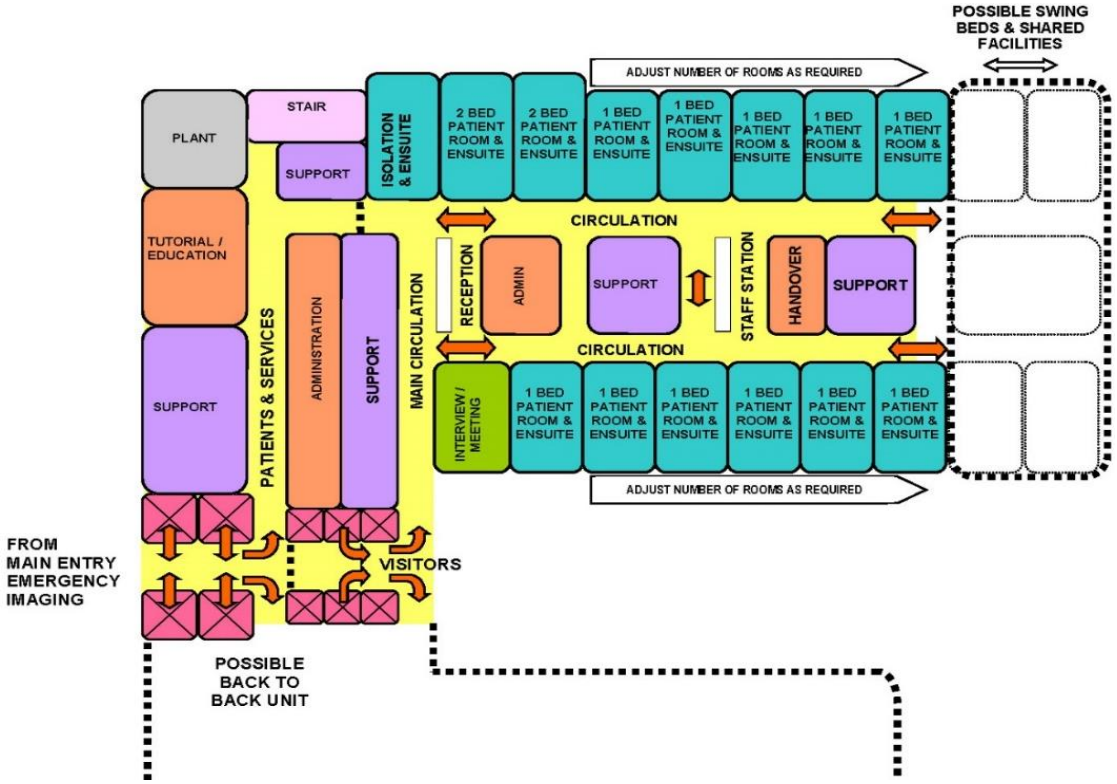
In all models, the security of the unit for babies and paediatric patients must be provided.

The above geometric models are represented in the diagrams below:

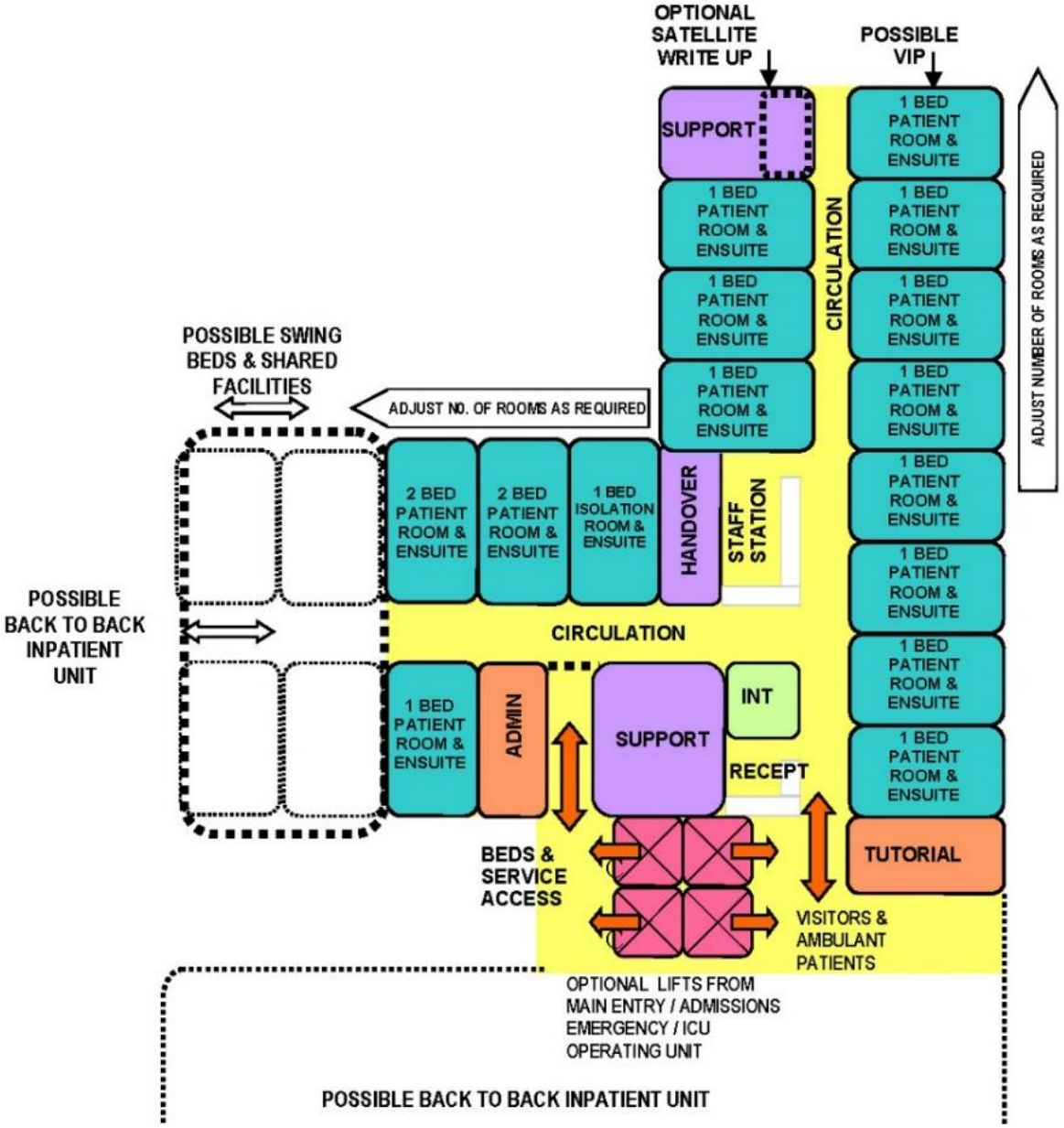
Linear Model



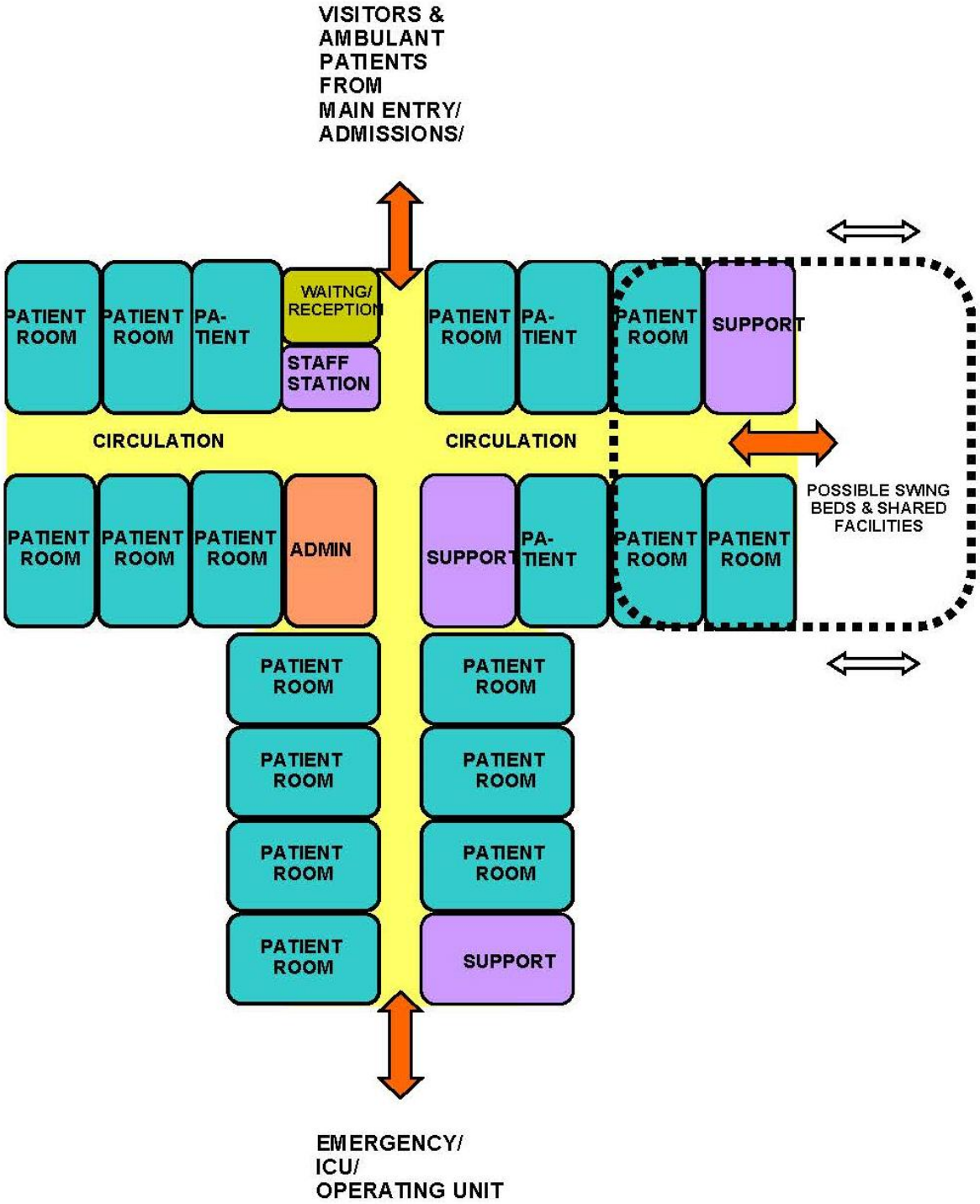
Racetrack Model



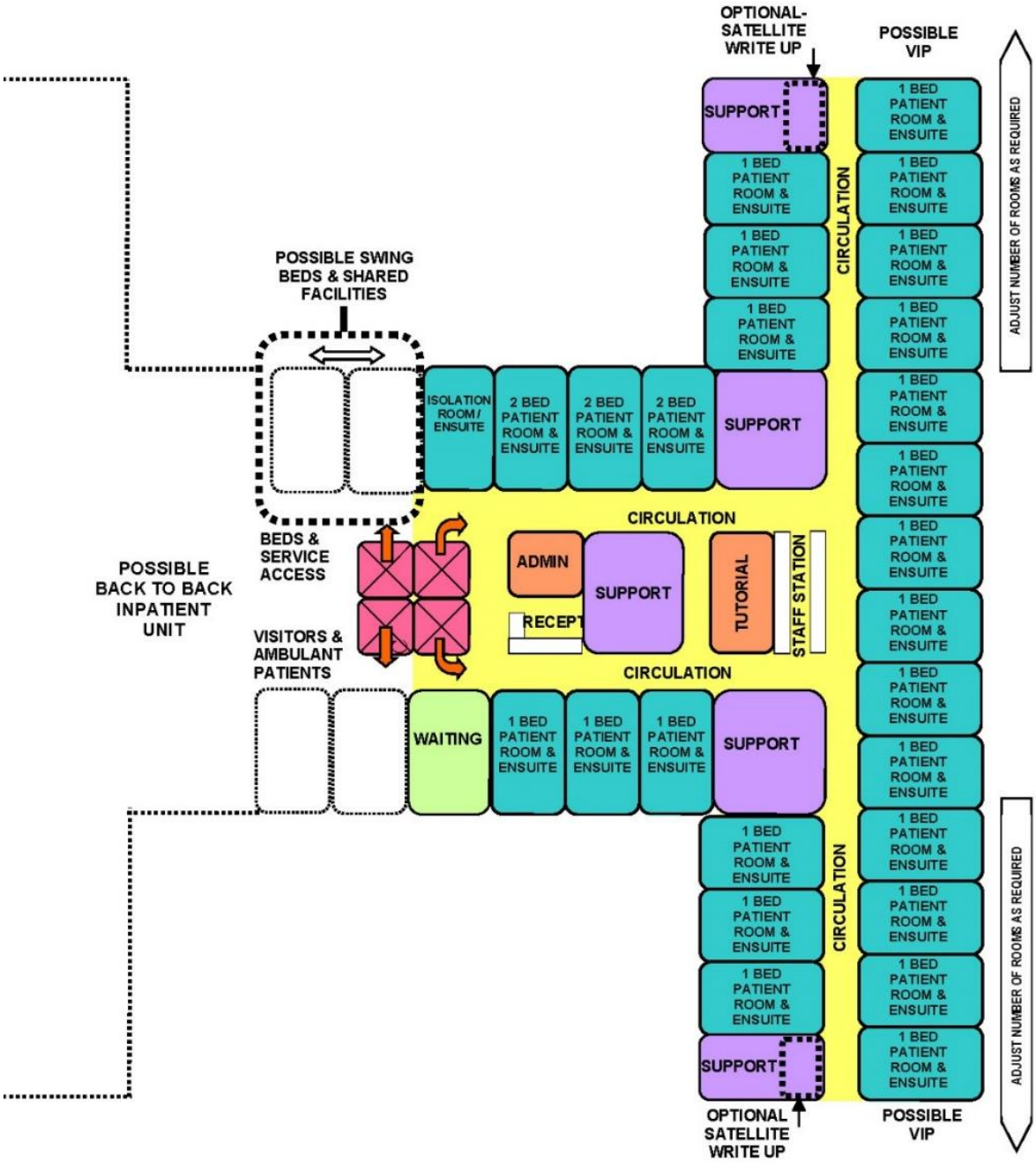
"L" Shaped Model



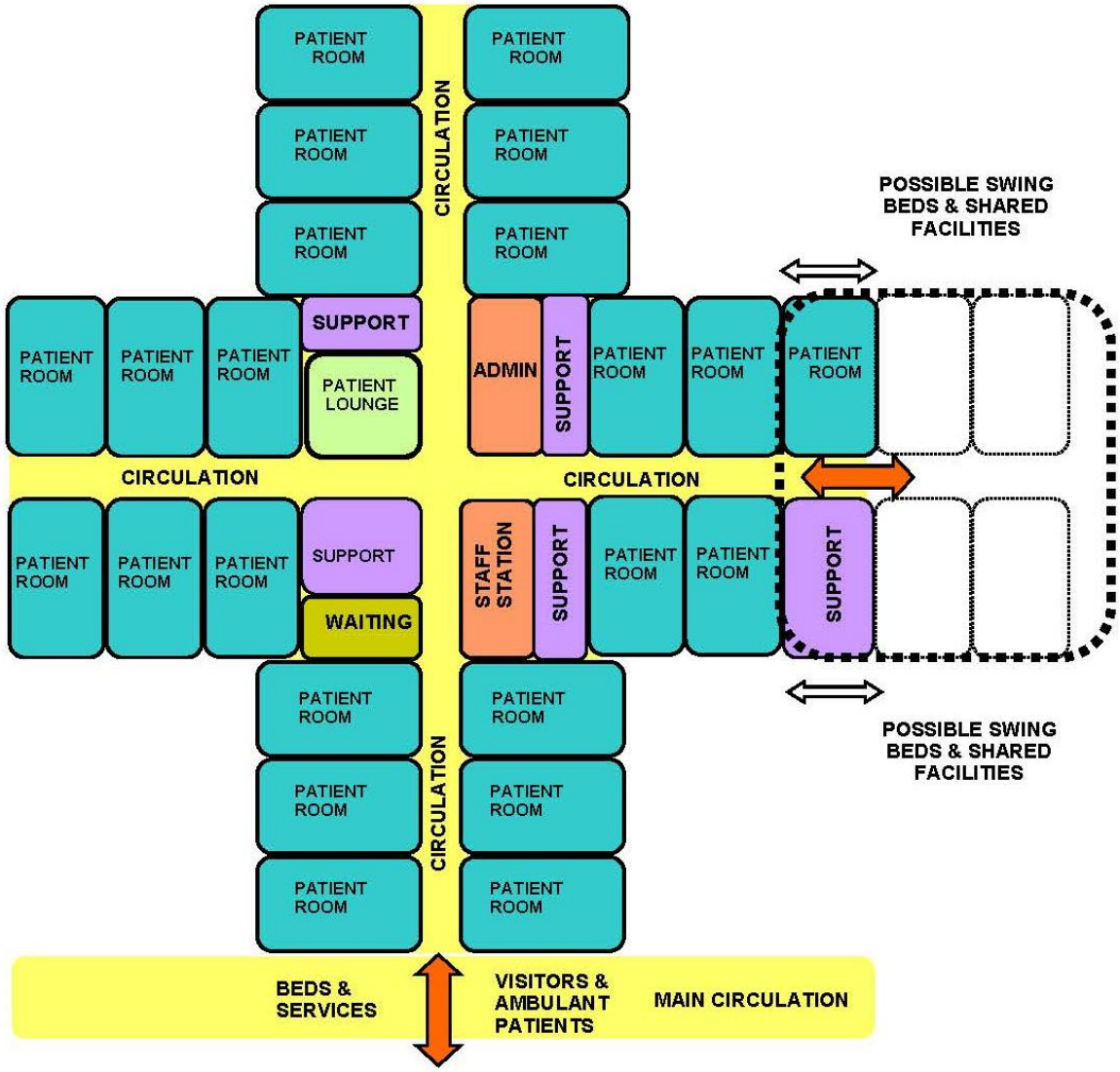
"T" Shaped Model



Hybrid "T" Model



"+" Shaped Model



1.2.4 Functional Zones

The Paediatric Inpatient Accommodation Unit will comprise the following Functional Zones:

- Entry/ Reception area - may also be a shared area or provided at the Main Entry. Optionally, this area may incorporate a waiting area.
- Patient Areas - areas where patients are accommodated, and facilities specifically intended for the patients.
- Activities areas - multi-purpose areas for recreational activities including, television, music, play areas, computer activities, schooling or learning activities and family communal space.
- Support Areas - areas used by staff to support the activities of the unit including utility rooms and stores.
- Staff Areas - areas accessed by staff, including administration and rest areas.
- Shared Areas - public and staff areas that may be shared by two or more Inpatient Units.

The above zones are briefly described here:

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 2 or even 3 adjacent Inpatient Units. This area needs access to separate male/female toilet facilities and prayer rooms. Optionally, visitor and staff gowning and protective equipment may also be located immediately at the entrance for infection control in case ward isolation becomes necessary during a break-out.

Patient Areas

Patient Areas will include:

- **Bedrooms** – These may include 1 or 2 bedrooms in new facilities. Existing facilities undergoing minor refurbishment may retain 3 or 4 bedrooms. Five (5) or more beds in a one inpatient room are not permitted.

  1-bed room is referred to as Single or Private room, while two-bed rooms are referred to as Shared bedrooms.

  The preference is for all Single rooms for all new hospitals. If this is not economically feasible, then 2-bed rooms may also be considered. In new facilities at least 80% of all beds should be in single 1-bed rooms. Paediatric bedrooms will generally include facilities for parents to stay overnight and hence, single rooms will be more appropriate and preferred.

  Hospital Management may consider utilising 2-bed rooms for a single patient use until the Inpatient Unit occupancy reaches a level where each 2-bedroom has one patient. After that the 2-bed rooms will take one additional patient each. Considering that typically Inpatient units are planned for 85% occupancy, in this option, the balance of 15% un-occupied beds will comprise the second beds in the 2-bedrooms. Therefore, such an option can combine economy with maximum patient privacy for most patients most of the time.

  A variety of Patient Bedrooms will be required in each Inpatient Unit. These are listed in the schedules provided in the Schedule of Accommodation within this FPU guidelines. These include Standard Rooms, Isolation Rooms and optionally VIP rooms.
- **Ensuites** – each ensuite includes a toilet, shower and wash basin. Provide a minimum of one toilet per 4 inpatient beds in shared rooms (ideal is one per 2 beds) and one toilet per private inpatient rooms. Optionally, in multi-bedded rooms two separate ensuite or one with toilet and wash basin and the other with shower and hand wash basin. Ensuites may only serve one room. Ensuites may not be shared between two rooms.
- **Lounge areas** – Family Lounges are optional where all patient bedrooms are Single. However Family Lounges are required where the unit includes shared bedrooms.
- **Multi-purpose Activities** – separate areas or rooms may be configured as Multi-purpose rooms for various common age ranges and used for a variety of recreational or educational activities, meetings or parent facilities.
- **Treatment Room** - a separate treatment room to avoid distressing procedures being undertaken in the patient bedroom.
- **Activity and Play areas** – It is necessary to provide age-appropriate activity and play areas. For toddlers and young children an internal play area must be provided, including safe toys. This is not only for diversion but also a therapeutic tool. Space should be provided for nursing staff to monitor the children in the play area. Optionally an outdoor play area should also be provided and linked to the internal play area. The external play area must consider the safety of children and make all necessary provisions to avoid the risk of falls, sharp objects, and water. For adolescents, separate activity rooms should be provided which may include games

consoles or similar age-appropriate activities.

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

Support Areas

Support Areas include:

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

Staff Areas

Staff Areas will consist of:

- Offices and workstations
- Staff Room
- Staff Station and handover room
- Toilets, Shower and Lockers

Note 1: The Offices / workstations will be required for administrative as well as clinical functions to facilitate educational / research activities

Note 2: Staff Areas, particularly Staff Rooms, Toilets, Showers and Lockers may be shared with adjacent Units as far as possible.

Shared Areas

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

- Patient Bathroom - Assisted
- Public Toilets
- Gender Segregated Visitor Lounge
- Family Visiting Room – Area should consider the potential usage and adjust pro-rata if it is to be shared
- Some of the Staff Areas

Note 1: Shared Areas must be shared by the same type of FPU only with all staff having access to at least one Shared Area.

1.3 Functional Relationships

Similar to other Inpatient Units, the Inpatient Unit – Paediatric requires good functional relationships to ensure the efficient delivery of services.

1.3.1 External Relationships

Principal relationships with other Units include:

- Ready access to diagnostic facilities such as Medical Imaging
- Ready access from the Emergency Unit
- Ready access to Critical Care Units (ICU and CCU)
- Ready access to Clinical Laboratories and Pharmacy (may be via Pneumatic Tube System)
- Ready access to Materials Management, Housekeeping and Catering Units
- 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 centrally located

Note: Paediatric Inpatient Units must not be located so that access to one Unit is via another (except the Swing Bed components).

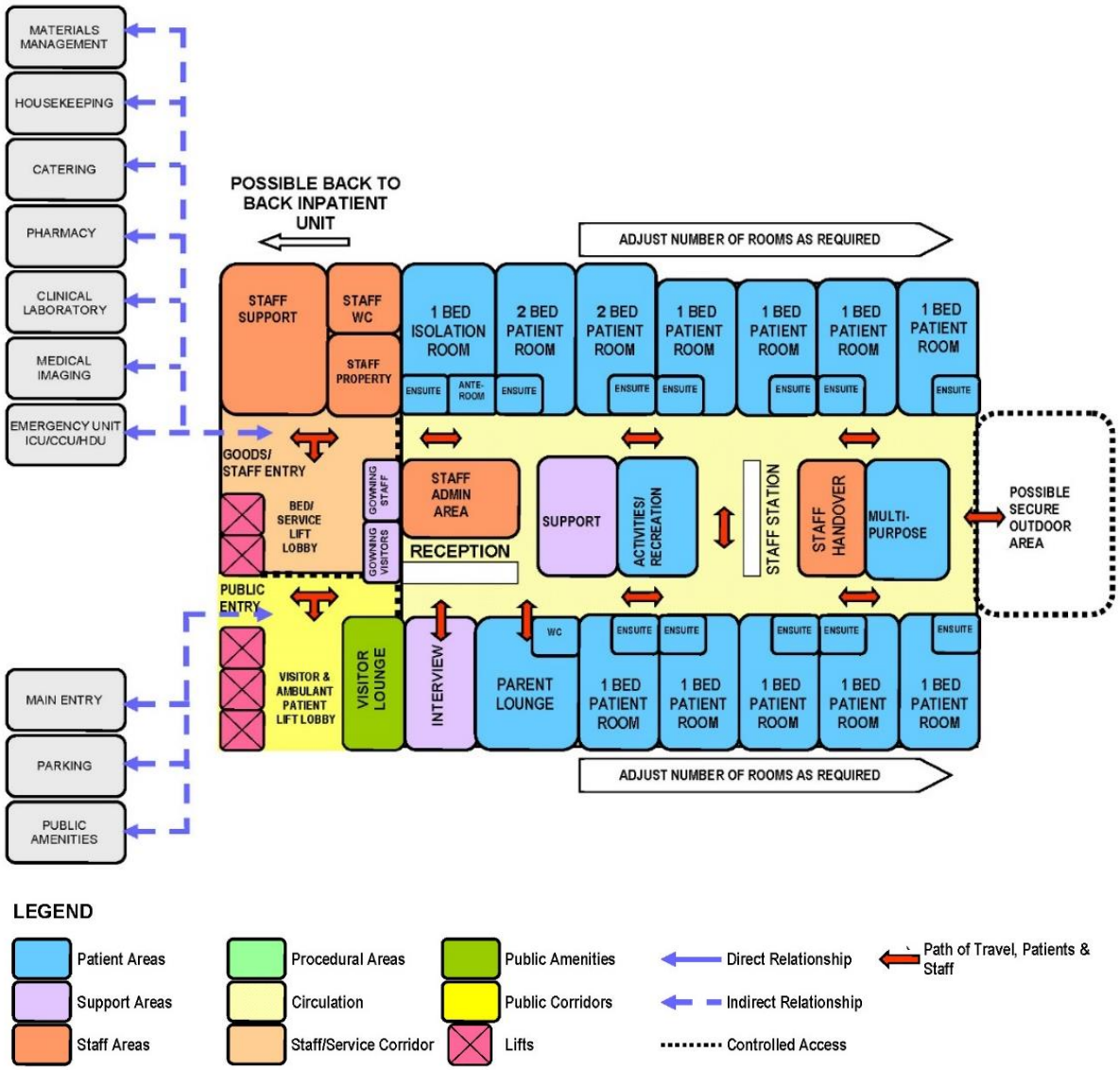
1.3.2 Internal Relationships

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.

1.3.3 Functional Relationships Diagram

The functional relationships of a typical Paediatric Inpatient Unit in the Racetrack Model are demonstrated in the diagram below. Other Models will need to have similar relationships but implemented in different ways. Refer to the typical models above.



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:

- Bedroom(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
- The Family Lounge/ Activities area 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
- Personal Protective Equipment Bays located at entry for both Staff and Visitors for infection control during ward isolation.

1.4 Design Considerations

Refer to **Part C for Ergonomic issues, Part D for Infection Control,** and **Part E for Engineering** requirements.

1.4.1 Environmental Considerations

Acoustics

The Paediatric Inpatient 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.

Acoustic treatment will be required to the following:

- patient bedrooms
- play and activities areas
- interview and meeting rooms
- treatment rooms
- staff rooms
- toilets and showers

Refer to **Part G – Acoustics** of these Guidelines for more information.

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.

Rooms may be organised to face internal courtyards (open to the sky). However, care should be taken to prevent privacy issues (also see below).

Rooms may be organised to face an internal multi-storey atrium as long as the atrium itself receives natural light. Care should be taken to prevent any privacy issues if rooms face an internal atrium.

Privacy

The design of the Paediatric Inpatient 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. The patient acuity including high dependency or intermediate care will be a major influence.

Each bed shall be provided with bed screens to ensure privacy of patients undergoing treatment in both private and shared inpatient rooms. 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; room used for paediatric patients should have glazed doors to the top and bottom in order to observe children on the floor
- 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 the bedrooms.

1.4.2 Space Standards and Components

Room Capacity and Dimensions

In new facilities, maximum room capacity shall be two patients per room.

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

Room Type	Minimum Width	Minimum Length	Minimum Area
SINGLE BEDROOM	3800 mm	3960 mm	18m2
TWO BEDROOM	3800mm	6300mm	28m2

These spaces should accommodate comfortable furniture for one or two family members or carers without blocking staff member access to patients.

Minimum room dimensions are based on overall bed dimensions (buffer to buffer) of 2250 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 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 bedrooms there shall be a clearance of 1200 mm available at the foot of each bed to allow for easy movement of equipment and beds. For other clearances please refer to the diagrams provided below:

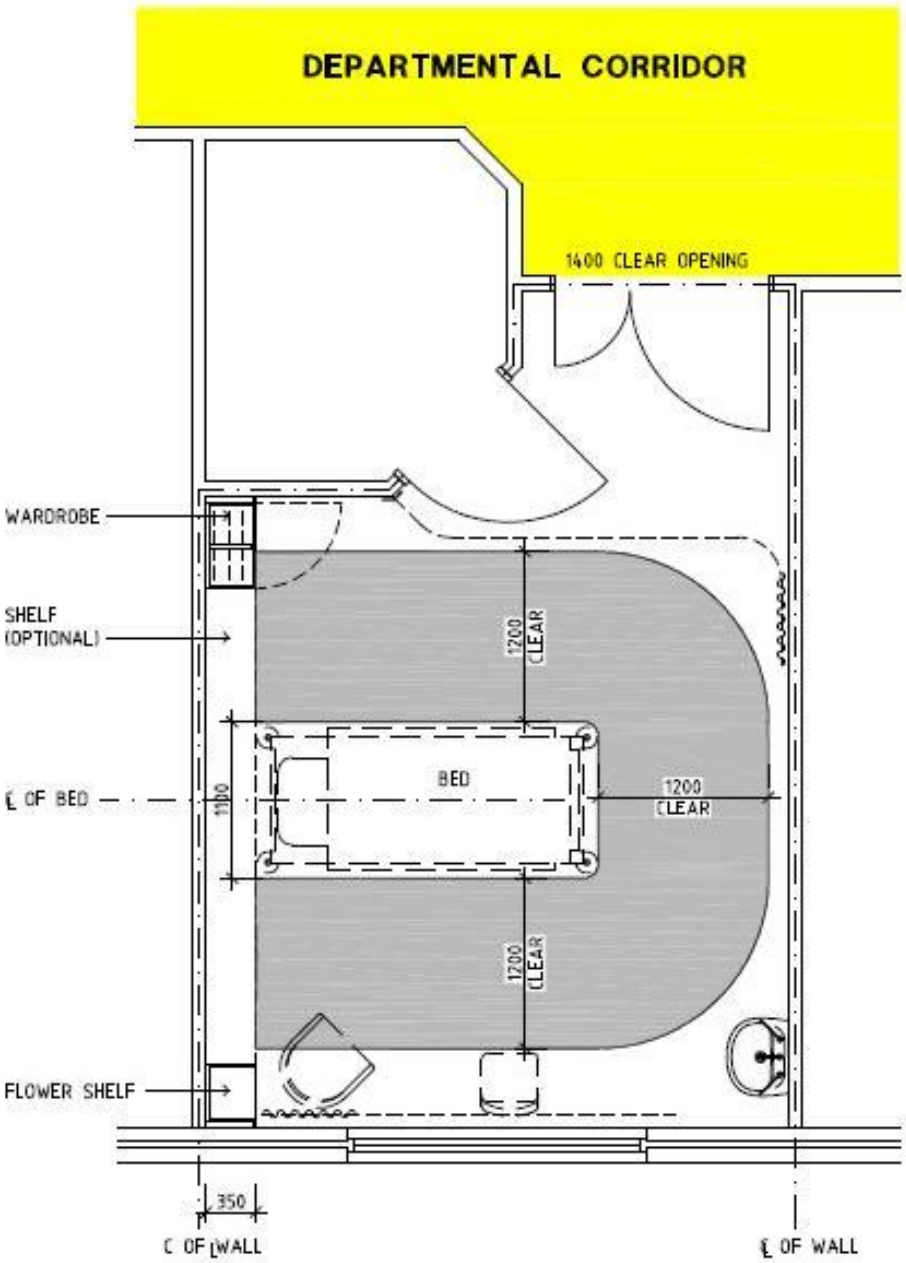
Note: the following diagrams are only intended to show the clearance around beds, and are not indicative of the room design.

Single Bedrooms

Multiple Bedrooms

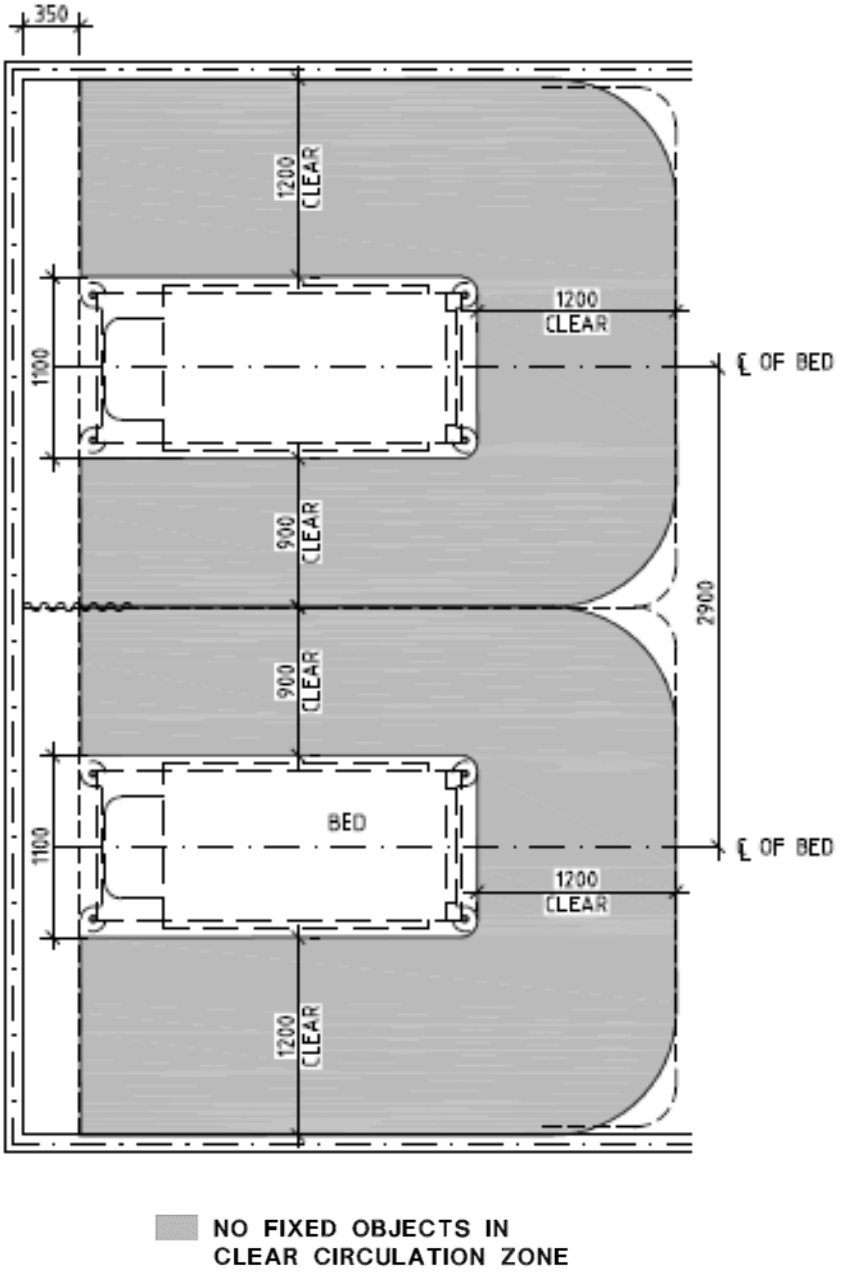
In multiple-bedrooms such as 2 bedrooms, the minimum distance between bed centre lines shall be 2900 mm.

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 2900



mm centre line is still recommended. Consider allowing additional floor area within the room for the children to play.

The clearance required around beds in multiple-bedrooms and chair spaces is represented diagrammatically below. Please note that in new facilities, there should be no more than 2 beds per room. However, in existing facilities, undergoing minor refurbishment 3 or 4 bedrooms are also permitted and these guidelines apply.



1.4.3 Accessibility

Bedrooms and ensuites should comply with accessibility requirements in line with regional and international standards; including NFPA. 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.

1.4.4 Doors

Door openings to inpatient bedrooms shall have a minimum of 1200mm clear opening to allow for easy movement of beds and equipment.

1.4.5 Safety and Security

The Paediatric Inpatient Unit shall provide a safe and secure environment for babies, toddlers, paediatric 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 children and all other users of the facility are not exposed to avoidable risks of injury. Fittings, surfaces and furniture should have rounded edges and no small, removable elements. All cupboards should be provided with locks.

Security issues are important, to prevent children wandering and to provide protection from intruders and unauthorised personnel. 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. Units should be assessed and must meet security provision checklists as seen in **Part C - Access, Mobility, OH&S** of these Guidelines.

1.4.6 Drug Storage

Drugs prescribed at the hospital should not be stored in the patient bedroom. 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 with integrated alarm and temperature monitor, lockable, to store restricted substances as required.

Medication Room must have space for parking a medication trolley.

The room requires controlled staff only access and may include CCTV surveillance.

Note: Storage for dangerous drugs must be in accordance with the relevant Authority requirements.

1.4.7 Finishes

Finishes including building fabric, floor, wall and ceiling finishes, should be relaxing 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, colour selected must not impede the accurate assessment of skin tones. Walls shall be painted with lead free paint.

Refer to **Part C - Access, Mobility and OH&S** of these Guidelines for more information on wall protection, floor finishes and ceiling finishes.

1.4.8 Fixtures, Fittings and Equipment

Curtains / Blinds

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

Window curtains and 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:

- Blinds must not have dangling cords that children may entangle.
- 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.

1.4.9 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.

Information and Communication Technology

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

- Electronic patient records and patient information systems
- Electronic forms and requests for investigations, pharmacy, catering, supplies
- Telephones including cordless and mobile phones
- Picture archiving communications systems (PACS)
- Computers, laptops, hand-held tablets and other smart devices
- Patient call, nurse assist call, emergency call systems
- Paging for staff and emergencies
- Duress systems, personal mobile duress systems may be considered
- Supply and records management systems including bar coding for supplies
- Data and communication outlets, servers and communication room requirements
- Wireless network requirements for staff, patients and visitors
- Videoconferencing requirements.

Nurse Call

Patient call, staff assist, and emergency call facilities shall be provided in all patient areas including Bedrooms, Nurseries, Feeding Rooms, Lounges, Toilets, Ensuites and Bathrooms for patients and staff to request urgent assistance.

The individual call buttons shall alert to an annunciator system. Annunciator panels should be located in strategic points within the circulation area, particularly in Staff Stations, Staff Rooms, and Clean Utility/ Medication Rooms, and should be of the "non-scrolling" type, allowing all calls to be displayed at the same time. The audible signal of these call systems should be controllable to ensure minimal disturbance to the young patients. The alert to staff members shall be done in a discreet manner at all times.

Heating Ventilation and Air-conditioning (HVAC)

The air temperature in inpatient areas should be capable of being maintained along with relative humidity, both should be adjustable.

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

Medical Gases

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

Oxygen and suction must be provided to all inpatient beds, while medical air is optional dependent of the service being provided. Medical gases will be provided for each bed according to the quantities noted in the **Standard Components Room Data Sheets**.

Medical Gases must be dedicated to each patient. Gas outlets may not be shared between two patients.

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)

Pneumatic Tube Systems

The Paediatric Inpatient 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.

Hydraulics

Warm water supplied to all areas accessed by patients within the Inpatient Unit should be ideally at 38 degrees Celsius and must not exceeds 43 degrees Celsius. This requirement included all staff handwash basins and sinks located within patient accessible areas.

1.4.10 Infection Control

Hand Basins

Hand washing facilities will be required in the corridors, patient bedrooms and other rooms as specified for the Standard Components. Hand washing facilities shall not impact on minimum clear corridor widths.

At least one hand washing 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.

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 based 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.

Isolation Rooms

Standard Single (1 bed) patient rooms are regarded as Class S isolation. At least two 'Class N - Negative Pressure' Isolation Room shall be provided for each 60 beds in facilities of Role Delineation Level (RDL) 4 and above. These isolation rooms beds may be used for normal acute care when not required for isolation.

Additional Isolation Class P may be provided according to the Hospital's Clinical Service Plan or the recommendation of the Infection Control officers.

1.5 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.

1.5.1 Non-Standard Components

Non-standard rooms are identified in the schedules of accommodation as NS and are identified below.

Activities / Recreation Room

The Activities/ Recreation room will provide an indoor room for noisy activities including watching TV, play, listen to music or access computer activities. The room should be suitable for a range of ages including adolescents.

Requirements include:

- TV, docking station for MP3 music payers
- Computer or computer tablets
- Lounge chairs, soft seating
- Cushioned flooring suitable for children to sit on the floor
- Wi-Fi access

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

Multi-purpose Room

The Multi-purpose room may be used for a variety of quiet activities including schooling, and meetings with staff or families.

Requirements include

- Desk and chair
- Meeting or activities table
- Comfortable seating to suit the room purpose
- Wi-Fi access

Sitting Alcove

The sitting alcove is a small recess along the corridor for the patient to rest quietly and for staff to conduct informal discussions. The Sitting Alcove should consider and include the following:

- Seating suitable with bariatric capacity
- Readily accessible Nurse Call system
- Suitably reinforced heavy-duty grab rail
- Appropriate depth to ensure Sitting Alcove does not encroach on corridor space

1.6 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 26 Bed Paediatric Inpatient Unit 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 DOH for approval.

1.6.1 Inpatient Unit - Paediatric

ROOM/ SPACE	Standard Component Room Codes									All RDLs Qty x m2			Remarks
Unit Size										**26 Beds**			
Entrance/ Reception										**Qty x m2**			
Reception/ Clerical	recl-10-d									1	x	10	
Lounge - Visitor	wait-30-d									1	x	30	Divided into male/female areas. Area may be enlarged to increase seating capacity
Meeting Room - Small	meet-9-d similar									1	x	12	Interviews with family
Toilet - Public	wcpu-3-d									2	x	3	Separate Male and Female. Minimum 1 pair per floor
Toilet - Accessible	wcac-d									1	x	6	Minimum 1 per floor
Patient Areas													
1 Bedroom - Standard	1br-st-18-d									18	x	18	Mix and number depend on service demand. 80% of beds should be in single rooms (including isolation rooms, and VIP rooms)

ROOM/ SPACE	Standard Component Room Codes									All RDLs Qty x m2			Remarks
Unit Size										26 Beds			
1 Bedroom – Isolation, Negative Pressure	1br-isn-18-d									1	x	18	Class N rooms are mandatory according to the ratios nominated in this FPU. Minimum size is 18m2.
1 Bedroom – Isolation, Positive Pressure	1br-isp-18-d									1	x	28	Class P isolation rooms according to the clinical services plan.
1 Bedroom - Large	1br-lg-28-d									1	x	28	Minimum 1 per unit of 30 beds required.
1 Bedroom - VIP	1br-vip-36-d									1	x	36	Provide according to service demand
2 Bedroom	2br-st-28-d									2	x	28	Mix and number depend on service demand
Anteroom	anrm-d									2	x	6	For 1 Bedroom – Isolation Rooms
Ensuite - Standard	ens-st-d or ens-st-c-d									22	x	5	Directly accessible from each 1 Bed, 2 Bed, Isolation rooms
Ensuite - Super	ens-sp-d									1	x	6	For 1 Bedroom - Large.
Ensuite - VIP	ens-vip-d									1	x	8	For 1 Bedroom - VIP
Overnight Stay- Bedroom	ovbr-10-d similar									1	x	14	Available for parents staying overnight, Allow for a bigger bed size.
Overnight Stay – Ensuite	oves-4-d									1	x	4	For Overnight Stay - Bedroom
Activities/ Recreation Room	NS									1	x	15	Noisy activities; Size to suit service
Multi-purpose Room	NS									1	x	15	Quiet activities; Size to suit service
Laundry - Patient	laun-pt-d									1	x	6	Optional
Lounge - Parent/Visitor	lnpa-12-d similar									1	x	20	Parent communal space, Modify size to suit service. Located close to Play Room.
Lounge - Adolescent	lnad-10-d									1	x	10	Optional
Play Room - Internal	plap-10-d similar									1	x	30	May be used for play therapy
Play Room - External	NS									1	x	*	*External Area; Optional, with child safety features
Sitting Alcove	NS									2	x	2	Optional, locate along Corridors
Toilet – Patient (M/F)	wcpt-d									2	x	4	Optional; locate adjacent to communal areas
Bathroom - Assisted	bath-d									1	x	16	1 per 60 beds or may be shared between 2 units
Treatment Room	trmt-14-d									1	x	14	Optional; provide according to service demand
Support Areas													

ROOM/ SPACE	Standard Component Room Codes									All RDLs Qty x m2			Remarks
Unit Size										26 Beds			
Bay - Beverage, Enclosed	bbev-enc-d									1	x	5	
Bay - Handwashing, Type B	bhws-b-d									4	x	1	In addition to basins in patient rooms; 1 at entry, 1 near staff station; Refer to Part D
Bay - PPE	bppe-d									1	x	1.5	In addition to those required for isolation rooms. Refer to Part D - Infection Control
Bay - Linen	blin-d									2	x	2	Quantity and location to suit each facility
Bay - Meal Trolley	bmeq-4-d similar									1	x	4	Optional; depends on catering/ operational policies
Bay - Mobile Equipment	bmeq-4-d or bmeqe-4-d									1	x	4	Quantity, size dependent on equipment to be stored; can be opened or enclosed
Bay - Resuscitation Trolley	bres-d									1	x	1.5	
Bay - Pneumatic Tube	NS									1	x	1	Optional, Locate at Staff Station or under staff supervision
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	*	*Optional, if preference is to combine Clean Utility and Medication Room into a single Room, Minimum 14 m^2
Dirty Utility	dtur-14-d									1	x	14	2 may be required to minimise travel distances
Disposal Room	disp-8-d									1	x	8	
Formula Room	form-d									1	x	10	
Pantry	ptry-d									1	x	*	Optional; if Beverage Bay is not provided.
Store - Equipment	steq-20-d									1	x	20	Size dependent on equipment to be stored
Store - General	stgn-8-d similar									1	x	10	Size as per service demand and operational policies
Cleaner's Room	clrm-6-d									1	x	6	Includes storage for dry goods
Staff Areas													
Staff Station	sstn-14-d									1	x	14	May include ward clerk; size dependant on qty of staff
Office - Clinical / Handover	off-cln-d									1	x	15	May be collocated with Staff Station

ROOM/ SPACE	Standard Component Room Codes									All RDLs Qty x m2			Remarks
Unit Size										**26 Beds**			
Office - Single Person	off-s12-d									2	x	12	NUM office and clinical personnel as needed
Meeting Room - Medium / Large	meet-l-15-d similar									1	x	20	Meetings, Tutorials; shared between 2 units
On-call - Bedroom	ovbr-10-d									1	x	10	Required at the rate of 1 per 2 Units maximum but does not necessarily need to be located within the Units however, must have convenient access.
On-call Room - Ensuite	oves-4-d									1	x	4	Ensuite attached to On-Call Room above.
Staff Room	srm-15-d similar									1	x	20	Include Beverage Bay
Property Bay - Staff	prop-3-d similar									2	x	2	Separated for male and female. Number of lockers depends on staff complement per shift
Toilet – Staff (M/F)	wcst-d									2	x	3	Separate Male and Female
Sub Total												**1076.0**	
Circulation %												35	
Total Areas												**1452.6**	

Please note the following:

- Areas noted in Schedules of Accommodation take precedence over all other areas noted in the FPU
- Rooms indicated in the schedule reflect the typical arrangement according to the bed numbers
- 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
- All the areas shown in the SOA follow the No-Gap system described elsewhere in these Guidelines
- Lounge areas are only required when facility includes shared bedrooms and serve to provide family members a waiting area if patients are not ready to receive them. If the facility has only single be rooms, then lounge areas inside units are not required at all; and an outside waiting area is optional
- Class N Isolation rooms are not subject to Clinical Services Plan or demand. They are mandatory and must be provided in accordance with this FPU.

1.7 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, 0540 Paediatric / Adolescent Unit, 2016; refer to website: https://healthfacilityguidelines.com.au/health-planning-units
- DH (Department of Health) (UK), Health Building Note 23 Hospital accommodation for children and young people, 2004, refer to website: https://www.england.nhs.uk/wp-content/uploads/2021/05/HBN_23.pdf
- DOH (Ministry of Health – UAE), Unified Healthcare Professional Qualification Requirements, 2017, refer to website: https://www.haad.ae/HAAD/LinkClick.aspx?fileticket=2K19llpB6jc%3d&tabid=927
- Guidelines for Design and Construction of Health Care Facilities; The Facility Guidelines Institute, 2014 Edition; refer to website www.fgiguidelines.org
- International Health Facility Guideline (iHFG), refer to website: www.healthdesign.com.au/ihfg
- NFPA, National Fire Protected Association, refer to website: https://www.nfpa.org/
- Nurse/Midwife: Patient Ratios, ANMF, Australian Nursing and Midwifery Federation, 2016; refer to website: http://www.anmfvic.asn.au/~/media/f06f12244fbb4522af619e1d5304d71d.ashx