Part B – Health Facility Briefing & Design

115 Inpatient Unit – Long Term Care (LTC)

iHFG

International Health Facility Guidelines

2025

Table of Contents

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115 Inpatient Unit – Long-Term Care (LTC)

1 Executive Summary

This Functional Planning Unit (FPU) covers the requirements of the Inpatient Unit – Long-term care. Patients who require an extended stay in hospital beyond the standard recovery and rehabilitation period are suitable for admission to this type of Unit. These patients may consist of a range of age groups, health conditions and treatment requirements, therefore the Unit needs to be designed with the flexibility to adapt and cater to a variety of patients.

The LTC Unit may be a stand-alone facility or part of a hospital or aged care facility. This Unit will address the needs of patients for their ongoing rehabilitation and clinical care to partial self-care. As patients are in this Unit for an extended period of time, it is imperative to ensure it is designed with a residential and non-clinical approach, creating a welcoming and safe environment. Patients will require lockable storage for their belongings and amenities such as a laundry facility.

The Inpatient Unit – Long-term requires multiple activity areas, both indoor and outdoor which can provide space, equipment and storage for a range of social and recreational activities. The provision of a covered outdoor space is particularly important for the mental and physical wellbeing of these long-term care patients.

Environmental factors including acoustic insulation, natural light and privacy requirements need to be addressed to ensure a comfortable and safe environment for patients and visitors.

The LTC may also be referred to as “Slow Stream Rehabilitation”. A form of Long-Term Care for ventilated patients is also referred to as Long-Term Ventilated or LTV.

This FPU describes the minimum requirements for support spaces of a typical Inpatient Unit – Long-term care at Role Delineation Levels 3 to 6. The Schedules of Accommodation are provided using references to Standard Components (typical room templates).

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

2 Introduction

The primary function of the Long-Term Care Unit (LTC) is to provide appropriate accommodation and continued care and treatment for inpatients whose stay is expected to be extended. Patients requiring Long-Term Care may comprise of medical, surgical or rehabilitation patients who are not independent enough to return home and can also include palliative care patients. Long-Term Care units provide the following services:

- Accommodation related services including meals, cleaning and laundry
- Personal care services such as activities of daily living
- Rehabilitation and Allied Health services
- Medical and therapy services

Services provided within the Unit may include Occupational Therapy, Physiotherapy, Psychology, Speech Pathology and Social Work in conjunction with general medical treatment, depending on the Clinical Service Plan.

The extended care stay period will depend on the facility's Service Plan and patients' condition. However, "extended care" typically refers to a patient's hospital stay period extending beyond the average length of stay in an acute Inpatient Unit or acute Rehabilitation Unit setting (which may be more than 4 days). Most LTC facilities cater for patients staying between 2 weeks to several years.

The LTC must also provide facilities and conditions to meet the needs of patients and visitors as well as the workplace requirements of staff. Patients requiring long-term care may be from a wide range of age groups, although the majority tend to be older persons.

3 Functional and Planning Considerations

Operational Models

The LTC Unit will operate on a 24-hour basis. The delivery of clinical care and personal care services will be dependent on the Scope of Services and Operational Policy, as well as the selection of patients, number of beds available and the Models of Care to be adopted.

Models of Care

The Model of Care will reflect the range and acuity of patients.

The focus of care is on maintaining the patient's autonomy within their recognised abilities and functions. Self-care and management is promoted, with the provision of clinical care and continuous therapy as needed.

A comprehensive care plan consisting of individualised patient goals and a multidisciplinary assessment is usually created, outlining treatment, medical and surgical interventions and assistance with Activities of Daily Living (ADL) requirements. The aim is to maximise the patient's independence, physical function and potential for improvement in overall health.

A typical Model of Care involves arrangements for patient transfers from external hospitals' acute settings to a more appropriate LTC setting. Typically, patients may stay in a hospital environment during their acute treatment period, including any acute Rehabilitation. Then, if required, they may be transferred to a LTC facility for their ongoing care.

LTC may include patients who have similar health care needs as those in a Rehabilitation Inpatient Unit, however, these patients require a longer period of stay. Another point of differentiation with a typical Rehabilitation Inpatient Unit is that LTC can also accommodate patients who may not have a likely chance of recovery due to their age, condition or a particular type of disability.

Levels of Care

The levels of care will range from ongoing rehabilitation nursing with specialist care, to either a progression to intermediate care and partial self-care prior to discharge, or transfer to other facilities.

The LTC Unit also caters for patients who may never fully recover or improve, with compromised bodily functions such as breathing, eating, etc. This may include End of Life care for severely disabled patients, and Palliative Care for patients who have a terminal illness.

Planning Models

Within the context of the broader health system, the LTC Unit may be provided as a stand-alone facility within a community or part of a larger facility.

The typical permutations are a:

- Unit of a Hospital (General or Specialised or Rehabilitation Hospital)
- Unit of a Nursing Home
- stand-alone facility

This FPU only describes the Unit's requirements. If LTC is provided as a stand-alone facility, it will require all supporting facilities similar to a Hospital, at a minimum RDL 3.

The catchment population and scope of services of the LTC Unit will determine its' size and relationships with other hospitals.

The recommended manageable size of the Unit is 25 beds, and no more than 30 beds plus/minus 2 (similar to an IPU). With consideration of the type of patients admitted to a LTC Unit, it should include a minimum of 20% single bedrooms, although a higher percentage would be preferred. Shared rooms, if any, should only accommodate up to 2 beds.

Functional Areas

The LTC Unit will consist of a number of functional areas as listed below:

- Entrance/ Reception which may be shared with adjoining Units
  - Reception
  - Waiting Areas
  - Consult/ Examination Room/s
- Patient/ Activities/ Therapy Areas
  - Patient Bedrooms and Ensuites
  - Dining Area which could also be used for therapy activities
  - Pantry/ Servery, co-located with Dining facilities
  - Lounge and Activities areas with access to outdoor areas
  - Gymnasium (optional)
  - Activities of Daily Living (ADL) rooms such as ADL Bathroom, Kitchen (optional)
  - Treatment Room
  - Patient Laundry
  - Stores for patient belongings, activity materials, linen
  - Sitting alcoves along corridors for patients to rest

The following areas will be dependent on the Service Plan and customised for the patient conditions being treated.

- Clinical Support Areas
  - Cleaners' Room
  - Clean Utility/ Medication Room
  - Dirty Utility
  - Disposal Room
  - Staff Station
  - Stores for equipment, consumable stock, files, stationery and patient property
- Staff Areas
  - Offices for administration, management and clinical staff
  - Clinical Handover room which may be co-located with the Staff Station
  - Meeting Room/s
  - Staff Room
  - Staff Toilets, Shower and Lockers

The above areas are briefly described below.

Entrance/ Reception

Patients, family and visitors have direct access to the Facility through the Entrance. It should be easily accessible and provide sufficient shelter and weather protection for either a minibus used to transfer patients or for patients' private vehicles.

There should be provision for an intercom and CCTV that is viewable between the Entrance and the Reception including the Staff Station. The Entry should include waiting areas for visitors either outside or inside the Unit.

A Consult/ Examination Room at the entry allows medical, nursing, allied health and support staff to interview patients, relatives or carers and examine patients as necessary.

Patient Areas

Patient areas will include:

Bedrooms

Two types of patient bedrooms should be provided in a LTC Unit. For non-ventilated patients requiring long term medical care, or those requiring long term rehabilitation, regular bedrooms similar to a standard inpatient unit are sufficient. For ventilated patients, bedrooms should be similar to a high dependency patient room with ceiling mounted pendants. A 50:50 allocation of these two types of patient bedrooms is recommended however, the final configuration is subject to the facility's clinical services plan.

Patient bedrooms could be single or a maximum of double occupancy. The ratio of these types of rooms will vary based on the scope of the clinical services plan. However, no less than 20% of beds should be provided as single inpatient bedrooms. A higher percentage is preferred or double occupancy is best suited for Long-Term Ventilated (LTV) patients.

Just as in any Inpatient Unit, a minimum of 2 negative pressure isolation rooms are required for up to 30 beds.

Given the long stay nature of these patients, regular patient rooms should be equipped and fitted to enable functionality of a space that feels like home, including opportunities for patients to personalise spaces such as a notice board and display shelves. A pleasant external outlook is necessary from each room.

The areas of the Unit with LTV patients should be equipped with a Mobile X-ray to minimise the need to move the patients. Also, depending on the clinical services plan, the provision of a small, dedicated Medical Imaging Unit may be considered to support the LTV patients.

Ensuites/ Toilets

Each Bedroom is to have access to an Ensuite including a toilet, shower and hand basin. Ensuites shall provide sufficient space for the manoeuvring of a wheelchair and various types of mobility devices. Considerations must be made to enable assistance aids to be fitted permanently or according to patient needs including transfer benches, commodes, grab rails and shower stools.

For facilities which cater for patients who are permanently confined to bed, the minimum provision of ensuites is 2 per 25 beds, and 1 in each isolation room. For other patient types, the minimum provision is 1 ensuite per bedroom.

Toilets must also be located throughout the facility near communal areas and close to outdoor spaces.

Dining Area and Servery/ Kitchen

Patients who are not permanently bedridden will generally be encouraged to have meals in a common Dining Area. The Dining Room should be of a size to sufficiently seat all patients. Tables should be height adjustable and movable to accommodate for patients in wheelchairs and using other mobility aids.

A Servery/ Kitchen should be located adjacent to the Dining Area for serving of meals. A beverage bay accessible to patients should be co-located to the meal service area. Hand washing and toilet facilities must be located near the entry/ exit point of the Dining Area. Wall and floor surfaces of the Dining Area and Servery/ Kitchen should be impervious and easy to clean.

The Dining Area may be used for other activities when not in use for meals, such as painting or craft work.

Lounge/ Activity Areas

Lounge and Activity Areas may be located adjacent to Dining Areas to provide a larger space when required. At least two separate social spaces are required, one for quiet activities and one for noisier recreational activities. Activity rooms may be provided as multi-function spaces for flexible use. Access to the external areas from these rooms is desirable, as well as floor to ceiling windows and doors to facilitate the transition between spaces. Activity Areas should have hard impervious, easy to clean flooring.

Lounge Area floors may be finished using carpet with hypoallergenic properties, suitable for asthmatic patients. Lounge Areas should be fitted and equipped to enable a range of indoor and relaxing activities, including a television set, music player, bookshelves, storage for indoor card and board games.

Multi-function Activities Rooms

Separate social spaces shall be provided for quiet and noisy activities. Activities Rooms may be provided as multi-function spaces for flexibility of use including arts and craft activities, music and TV areas. Access to an external area for use in all types of weather from at least one Activities Room is desirable. The spaces involving wet activities shall include:

- Handwashing
- Workbenches/ Tables (movable)
- Storage and Displays
- Bench and sink

Gymnasium

The Gymnasium is a space for patients to undertake indoor exercise activities or ongoing rehabilitation therapy under staff supervision. The room may include a range of exercise equipment, suitable for the therapy needs of the patients.

Occupational Therapy Room/s

The Occupational Therapy Rooms are large rooms or workshops for a range of activities including table based, arts, crafts, and woodworking. The Occupational Therapy rooms may be located adjacent to rehabilitation therapy areas, with ready access to waiting and amenities areas.

Fittings and Equipment required in this area may include:

- Benches with inset sink, wheelchair accessible
- Shelving for storage of equipment or tools
- Tables, adjustable height
- Chairs, adjustable height
- Hand-washing basin with liquid soap and paper towel fittings
- Pin board and whiteboard for displays
- Sufficient power outlets for equipment or tools to be used in activity areas

Courtyard/ Garden Areas

External Courtyard, secure Terrace and Garden areas for long-term patients are recommended, for both mental and physical health. External areas should provide a covered space for patient use in case of inclement weather. Secure storage for activity equipment and access to toilet facilities near the Courtyard/ Garden areas should be considered.

Garden beds may be elevated to a suitable height and be surrounded by comfortable and adequate seating to enable close enjoyment and increased functionality.

Staff Station

The Staff Station should be located with direct visual supervision of the bedrooms with patients who are long-term ventilated (LTV). Alternatively, write-up stations, located directly outside LTV patient rooms are also acceptable. One nurse per two patient rooms (either single or double occupancy) should be provided as in the case of HDU.

For standard bedrooms for non-LTV patients, visibility along the inpatient corridors is required.

The Staff Station should also have good visibility of common areas such as Activity, Lounge, Dining, Gymnasium etc. and of other Long-Term Care (LTC) patients. Patient information should be secured, and records may be electronic. View to the courtyards and gardens should be provided either directly or via the Lounge or Dining areas.

Clinical Support Areas

Support Areas include:

- Cleaners' Room
- Clean and Dirty Utilities
- Disposal Room
- Medication Room
- Storage for linen, consumable supplies, equipment for activities, daily living aids, files, patient property, stationery and a resuscitation trolley

Staff Areas

Staff Areas will consist of:

- Offices and workstations for the Unit manager and senior personnel, required for administrative as well as clinical functions
- Staff Room
- Staff Station and clinical handover room
- Toilets, Shower and Lockers

Access to workstations for support staff, visiting medical and allied health staff should be considered in an area discrete from the Staff Station.

Functional Relationships

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

External

The LTC Unit has close links to other support units or clinical units as follows:

- Mandatory Service Units including Inpatient Pharmacy, Catering, Linen Service, Waste Management and Administration
- Optional Rehabilitation Unit services including Physiotherapy, Occupational Therapy, Hydrotherapy and Allied Health Services
- Optional diagnostic facilities such as Medical Imaging
- Optional Day Surgery/ Procedure Unit for minor procedures
- Optional clinical Laboratory (or may be outsourced)

Internal

Optimum internal relationships include:

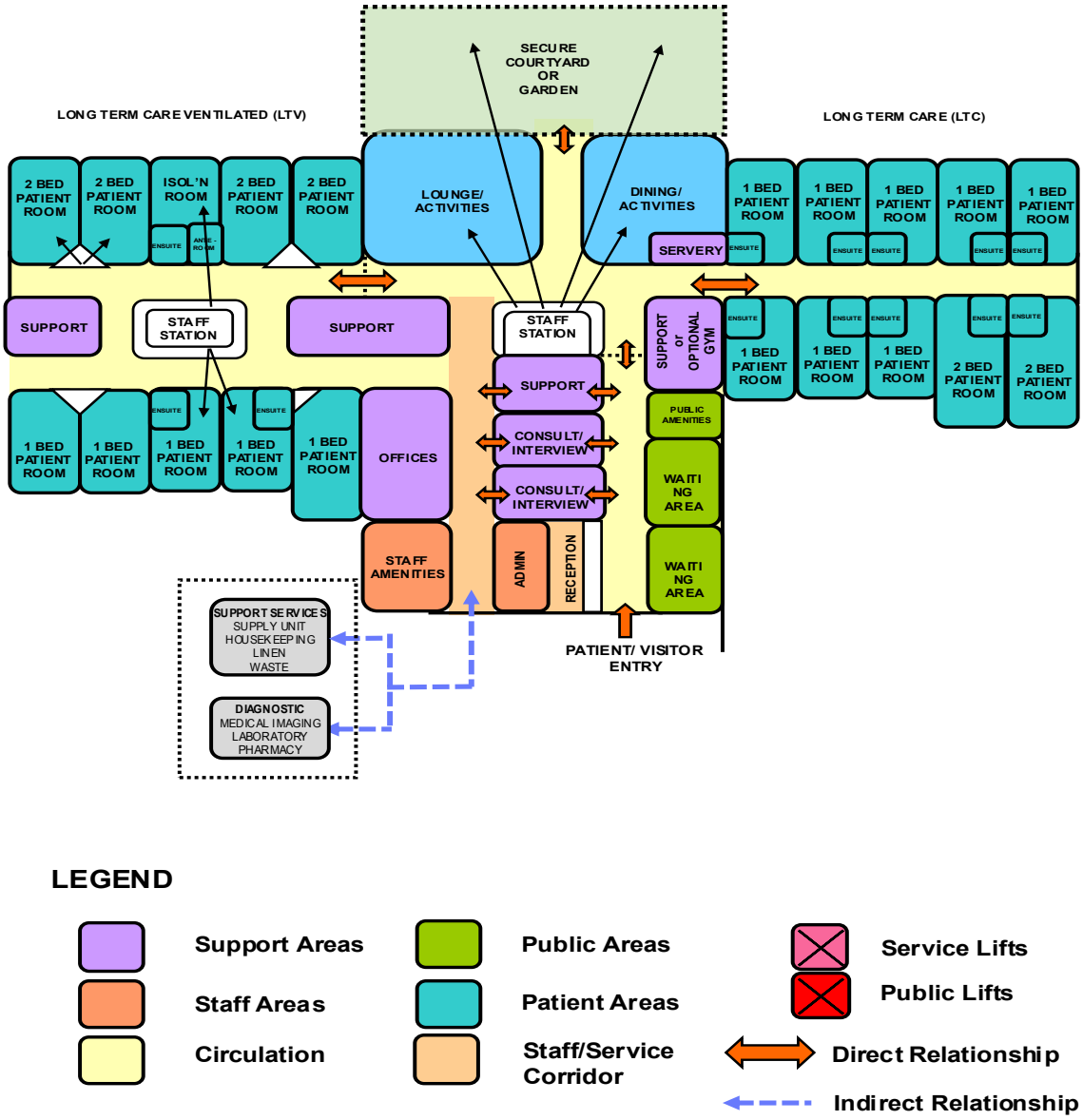
- Reception at the entrance of the Unit with Waiting areas and access to Consult rooms
- Patient occupied areas on the perimeter with 100% access to windows
- Dining, Lounge and Activities located preferably adjacent to a Courtyard or Garden
- The Staff Station and support areas with good observation of patient bedrooms and activity areas
- Utility and storage areas with ready access to both patient and staff work areas
- Staff Offices and amenities located away from patient areas
- Public Areas should be on the outer edge of the Unit

- Ambulance Service for patient transfers

Functional Relationship Diagram

These relationships between the various components within the Long-term Care Unit are best described by the Functional Relationships Diagram below.

Long Term Care Unit



External relationships outlined in the diagram include:

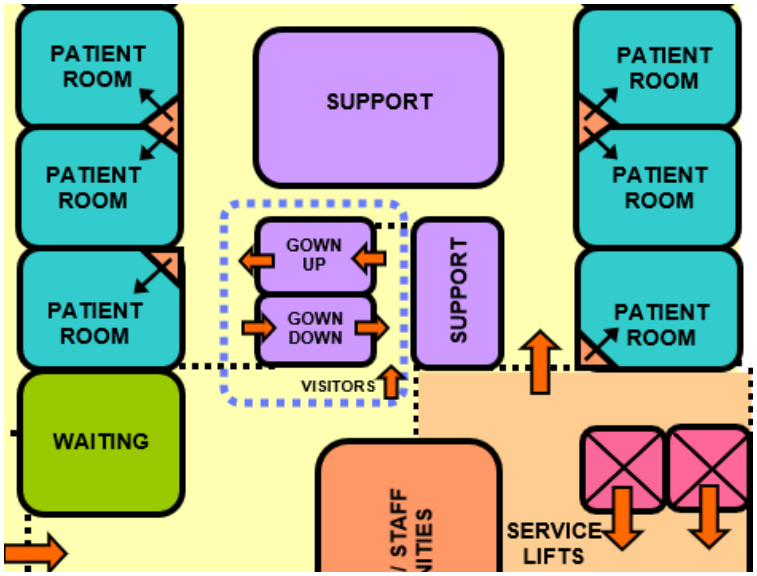
- Clear Goods/ Services/ Staff Entrance
  - Access to/ from key clinical units associated with patient arrivals/ transfers via service corridor
  - Access to/ from key diagnostic facilities via service corridor
  - Access to/ from Entry/ exit for staff
  - Access to/ from shared staff break and property areas via service corridor
  - Access to/ from Materials Management, 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, amenities, parking and cafeteria from the public corridor and lift

Internal relationships outlined in the diagram include:

- Bedrooms 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
- Patient Lounge located close to the Unit entry allowing relatives to visit patients without traversing the entire Unit
- Gymnasium located at the Unit perimeter
- Sitting alcove located in circulation corridor
- Reception located at Unit entry for control over entry corridor and security of the Unit
- Personal Protective Equipment Bays located at the entrance for both Staff and Visitors for infection control requirements during ward isolation

Optional PPE Entrance Module

In cases where the Unit is to be isolated due to an infectious disease outbreak such as a pandemic, there may be a requirement to include Gown-Up and Gown-Down rooms for visitors to access upon entry to and exit from the Unit.



4 Design Considerations

General

The design philosophy of the LTC Unit should convey a friendly and inviting environment and should encourage community members to participate in the care of the patients, where possible. At the same time, a safe environment needs to be promoted without compromise. Building design must be flexible and adaptable to enable the Unit to cater for varying patient and service needs.

The design of the LTC should reflect the Scope of Services and Operational Policy of the Facility, considering the levels and types of care to be provided. For example, some facilities may be optimised for elderly and frail patients whilst others may be optimised for particular disabilities or young or elderly patients.

The design of the Unit and external spaces should be residential in nature rather than formal or clinical. The LTC Unit will need to provide enough space for recreation and the treatment of patients. The design should:

- Create a therapeutic environment for patients which provides privacy, opportunities for recreation and self-expression
- Provide space for patient activities both indoor and outdoor
- Provide staff with opportunities to discreetly monitor and observe patients
- Provide a safe and secure environment for patients and staff including a minimum number of entry points and non-intrusive safety provisions
- Provide clear directional signage around the facility both internally and externally

Environmental Considerations

Acoustics

The LTC 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 activities, preferably placing them away from quiet areas including patient bedrooms.

Acoustic treatment will be required to the following areas:

- Patient Bedrooms
- Interview and Meeting rooms
- Lounge/ Dining and Activity rooms
- Therapy and 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 wellbeing 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/ Activity 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.

Privacy

The design of the LTC Unit needs to consider the contradictory requirement for staff visibility of patients while maintaining patient privacy. The Unit design and location of staff stations will offer varying degrees of visibility and privacy, and the level of observation required will be dependent on the patient acuity.

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
- Location of external courtyards or atriums facing bedroom windows to prevent others from being able to see into the bedrooms
- The location of doors to avoid patient exposure in Consult Rooms
- Discreet discussion spaces and non-public access to medical records

Space Standards and Components

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

Accessibility

All Waiting Areas, Meeting Rooms, Consult/ Examination and patient areas shall accommodate patients and visitors in a wheelchair.

The provision of at least one fully accessible Patient Bedroom with Ensuite in the general unit should be considered. Accessible bedrooms and Ensuites should enable normal activity for wheelchair dependent patients, as opposed to patients who are in a wheelchair due to their hospitalisation.

Doors

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

Ergonomics / OH&S

Ergonomic and Occupational Health and Safety (OHS) requirements must be considered in the design process and the selection of fittings and equipment in the Facility to ensure optimal operation of the LTC Unit and the health and safety of the staff, patients and visitors. Patients are likely to have assisted care requirements with a high demand on staff and mobility equipment.

Bed Spacing/ Clearances

The room sizes specified in these Guidelines are minimums and do not exclude the usage of larger rooms when necessary.

Standard components for fittings, furniture, mechanical and electrical services, nurse call systems as well as the clearances that they imply, must be met by all patient beds.

In single bedrooms there shall be a clearance of 1200mm available at one side and the foot of each bed and a minimum of 900mm clear on one side to allow for easy movement of equipment and beds. In multiple-bed rooms such as 2 bed rooms, the minimum distance between beds shall be 2900mm between the centrelines of beds and 1200mm at the foot of each bed.

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 room could either be a Clean Utility room incorporating medication storage or in 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 System
- A lockable steel cabinet/ safe for the storage of drugs of addiction/ controlled drugs
- A refrigerator, as required, to store restricted substances must be lockable or housed within a lockable storage area
- Controlled access by staff only with CCTV surveillance camera/s if required by the facility
- 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.

Safety and Security

The LTC Unit must provide a safe and secure environment for patients, employees, and visitors while remaining a non-threatening and supportive atmosphere for recovery. Long-term patients may require access to lockable storage for personal belongings, as well as a lockable room for property.

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

Security issues are important due to the rising occurrence 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 the provision of optimum observation for staff. The level of observation and visibility has security implications.

The perimeter of the Unit should be secured and consideration given to electronic access. Zones within the Unit may need to be lockable when not in use. After-hours access control requires consideration if areas are used by the public for classes, e.g. Gyms. Internally, all offices require lockable doors and all Storerooms for files, records and equipment should be lockable.

Finishes

Finishes including fabrics, floors, walls, and ceilings should create an environment that is relaxing and has a non-institutional appearance. Surface finishes should be impact resistant and easily cleaned. It is essential that floor finishes are non-slip and do not create resistance for patients using walking aids and wheelchairs.

The following factors should be considered when selecting finishes:

- purpose of rooms, functionality
- aesthetic appearance
- acoustic properties
- durability and resilience
- ease of cleaning/ infection control
- fire safety
- movement of equipment/ occupational health & 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.

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

Refer also to Part C of these Guidelines.

Fittings, Fixtures & 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
- 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 preferred in rooms used for isolation)

Patient Entertainment Systems

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

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 Unit should be air-conditioned with adjustable temperature and humidity in all Therapy Areas, Bedrooms, Consult and Interview/ Meeting Rooms for patient and staff comfort.

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

Medical Gases

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

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. For patients requiring high dependency care, medical gases provision should be in accordance with the Standard Component for High Dependency Room/ Bay in these Guidelines.

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

Hydraulics

Warm water and cold water is to be supplied to all areas accessed by patients within the Unit. This requirement includes all staff handwash basins and sinks located within patient accessible areas. Temperature of warm water should be maintained at 38^{o}C and shall not exceed 43^{o}C.

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

Refer to Part E – Engineering Services in these Guidelines.

Information Technology (IT) and Communications

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

- Health Information System (HIS)
- Electronic Health Records (EHR)
- Hand-held tablets and other smart devices
- Picture Archiving Communication System (PACS)
- Paging and personal telephones replacing some aspects of call systems/ DECT
- Data entry including scripts and investigation requests
- Bar coding for supplies, and X-rays/ Records 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 allied health care staff in a discreet manner at all times. Patient calls are to be registered at the Staff Stations and must be audible within the service areas of the Unit including Clean Utility and

Dirty Utility rooms. If calls are not answered the call system should escalate the call priority. The Nurse Call system may also use mobile paging systems or SMS to notify staff of a call.

Pneumatic Tube Systems

The Inpatient Unit may include a Pneumatic Tube Station (PTS), as determined by the facility's operational policy. If provided the PTS 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.

Infection Control

Handbasins

Handwashing facilities shall be provided in Therapy areas, Gymnasiums, Consult/Examination Rooms and located conveniently inside patient Bedrooms. Handbasins suitable for scrubbing procedures shall be provided for each Procedure and Treatment Room, as specified by the Standard Components. Where a handbasin is provided, there shall also be antiseptic liquid soap, disposable paper towels and waste bins.

Handwashing facilities shall not impact on minimum clear corridor widths.

At least one handwashing bay is to be conveniently accessible to the Staff Station.

Handbasins are to comply with Standard Components - Bay - Handwashing and Part D - Infection Control in 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 located so they are readily available for use at points of care, at the end of patient examination beds and in high traffic areas.

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

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 - Infection Control, 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 (plus/minus 2) beds. 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.

For further details relating to the Infection control refer to Part D – Infection Control of these Guidelines.

5 Components of the Unit

Standard Components

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

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

- Room Primary Information; includes Briefed Area, Occupancy, Room Description and relationships, and special room requirements.
- Building Fabric and Finishes; identifies the fabric and finishes required for the room 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 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 the provision of these items.
- 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 (RLSs) are indicative plan layouts and elevations illustrating an example of good design. The RLS indicated are designed 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 these Guidelines
- Minimum floor areas as shown in the schedule of accommodation
- Clearances and accessibility around various objects shown or implied
- Inclusion of all mandatory items identified in the RDS

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

Non-Standard Components

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

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.

6 Schedule of Equipment (SOE)

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

Room/ Space	
1 Bed Room, Room Code (1br-st-18-i)	
Bed: inpatient, electric, with foam mattress	Suction adapter
Locker: bedside	Table: overbed
Oxygen flowmeter	Air flowmeter
IV pole: mobile	
1 Bed Room - Large, Room Code (1br-lg-30-i)	
Air flowmeter	Oxygen flowmeter
Bed: inpatient, electric, with foam mattress	Suction adapter
Locker: bedside	Table: overbed
IV pole: mobile	Bassinet
1 Bed Room - Isolation, Room Code (1br-is-p-28-i, 1br-is-n-28-i)	
Air flowmeter	Locker: bedside
Bed: inpatient, electric, with foam mattress	Oxygen flowmeter
Infusion pump: single channel	Suction adapter
Table: overbed	IV pole: mobile

7 Schedule of Accommodation

The Schedule of Accommodation (SOA) provided below represents generic requirements for this unit. It identifies the rooms required along with the room quantities and the recommended room areas. The simple sum of the room areas is shown as the sub-total. 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). The circulation percentage represents the minimum recommended target area for internal corridors 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 such as the total number of beds and Treatment areas. Therefore, the SOA provided represents a limited sample based on an assumed unit size. 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 table below demonstrates the SOA for a 25 bed Long-term Care Unit for role delineations (RDL) 3 to 6 including typical rehabilitation and communal living areas.

Any proposed deviations from the mandatory requirements, justified by innovative and alternative operational models may be proposed within the departure forms included in Part A of these guidelines for consideration by the health authority for approval.

Long Term Care Unit with 25 Beds

In the sample SOA below, provision of Long-Term Care (LTC) beds to Long Term Ventilated care (LTV), beds is based on a 50/50 division with a minimum of 20% single bed rooms. The quantity and mix of LTC and LTV beds, single and double occupancy are subject to the Service Plan of the facility.

ROOM/ SPACE Unit Size	Standard Component Room Codes	RDL 3 - 6 Qty x m²		 25 Beds	Remarks
Entrance/ Reception					
Entry Lobby/Airlock	airle-10-i	1	x	10	Required for a stand-alone Unit
Reception/ Clerical	recl-10-i	1	x	10	
Waiting (Male/ Female)	wait-10-i	2	x	10	Separate Male and Female
Meeting Room - Small	meet-9-i similar	1	x	10	Interviews with family
Toilet - Public	wcpu-3-i	2	x	3	Separate Male and Female
Toilet - Accessible	wcac-i	1	x	6	
Consult/ Exam Room	cons-i	1	x	14	Required for a stand-alone Unit
Patient/ Activities/ Therapy Areas					
1 Bed Room - Standard	1br-st-18-i	12	x	18	Mix and number depend on service demand. Standard up to but not including HDU level
1 Bed Room - Large	1br-lg-30-i	1	x	30	May be used for special needs patients
2 Bed Room	2br-st-30-i	2	x	30	Mix and number depend on service demand
1 Bed Room -HDU	1br-icu-25-i similar	6	x	25	Optional
Ensuite - Standard	ens-st-i or ens-st-a-i	21	x	5	Directly accessible from each 1 Bed & 2 Bed rooms
1 Bed Room - Isolation - Negative Pressure	1br-is-n-18-i	2	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 and Isolation Bariatric room at 28m2 (1br-is-n-28-i).
Anteroom	anrm-i	2	x	6	
Ensuite - Super	ens-sp-i	2	x	6	For 1 Bed Room - Large. Special fittings required for bariatrics
Reporting Station	sstn-5-i	3	x	5	Reporting stations should be at a ratio of 1 per 2 HDU beds
ADL Kitchen	adlk-enc-i	1	x	12	Optional
ADL Bathroom	adlb-i	1	x	12	Optional
Dining / Activities Room	dinr-i similar	1	x	50	Based on 2m2 per patient
Pantry/ Servery	ptry-i similar	1	x	15	With serving counter
Gymnasium/ Multi-purpose Room	gyah-45-i	1	x	45	Optional, Size to suit service
Laundry - Patient	laun-pt-i	1	x	6	Depending on Service Plan and Patient types. Not required for HDU level patients
Lounge - Activities	lnac-55-i similar	1	x	50	Depending on Service Plan and Patient types. Not required for HDU level patients
Multi-function Activities Room	mac-20-i	1	x	20	Quiet activities
Occupational Therapy Room	oct-50-i similiar	1	x	20	Optional
Sitting Alcove	NS	3		2	Optional, locate along Corridors
Toilet - Patient	wcpt-i	1	x	4	Optional; locate adjacent to communal areas
Bathroom - Assisted	bath-i	1	x	16	
Treatment Room	trmt-14-i	1	x	14	Optional, Provide according to service demand
Support Areas					
Bay - Beverage, Enclosed	bbev-enc-i	1	x	5	
Bay - Handwashing, Type B	bhws-b-i	4	x	1	1 per 4 beds; 1 at entry, 1 near staff station; Refer to Part D
Bay - PPE	bppe-i	1	x	1.5	In addition to those required for isolation rooms. Refer to Part D - Infection Control
Bay - Linen	blin-i	2	x	2	Quantity and location to suit each facility
Bay - Meal Trolley	bmeq-4-i similar	1	x	4	Optional; depends on catering/ operational policies
Bay - Mobile Equipment	bmeq-4-i or bmeqe-4-i	1	x	4	Quantity, size dependent on equipment to be stored; opened or enclosed bay

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ROOM/ SPACE Unit Size	Standard Component Room Codes	RDL 3 - 6 Qty x m²			Remarks
		25 Beds			
Bay - Resuscitation Trolley	bres-i	1	x	1.5	
Bay - Pneumatic Tube	bpts-i	1	x	1	Optional, Locate at Staff Station or under staff supervision
Clean Utility	clur-12-i	1	x	12	May be Interconnected with Medication Room
Medication Room	medr-10-i	1	x	10	May be Interconnected with Clean Utility
Clean Utility / Medication	clum-14-i	1	x	14	Optional if Clean Utility and Medication Room provided.
Dirty Utility	dtur-14-i	1	x	14	2 may be required to minimise travel distances
Disposal Room	disp-8-i	1	x	8	
Store - Equipment	steq-20-i	1	x	20	Size dependent on equipment to be stored
Store - General	stgn-14-i	1	x	14	Size as per service demand and operational policies
Store – Patient Property	stpp-i	1	x	8	
Cleaners' Room	clrm-6-i	1	x	6	Includes storage for dry goods
Staff Areas					
Staff Station	sstn-14-i	1	x	14	May include ward clerk; size dependant on qty of staff
Office - Clinical Handover	off-cln-i	1	x	15	May be collocated with Staff Station
Office - Single Person	off-s9-i	2	x	9	Unit Manager and clinical personnel as needed
Office – 2 Person, Shared	off-2p-i	2	x	12	Medical, Nursing, Allied Health, as needed
Store – Photocopy/Stationery	stps-8-i	1	x	8	
Store – Files	stfs-10-i	1	x	10	May be combined with Photocopy/ stationery
Meeting Room - Medium / Large	meet-l-15-i	1	x	15	Meetings, Tutorials; shared between 2 units
Staff Lounge (Male/ Female)	srm-15-i	2	x	15	Includes food preparation area
Property Bay - Staff	prop-2-i	2	x	2	Separated for male and female. Number of lockers depends on staff complement per shift
Toilet - Staff	wcst-i	2	x	3	Separate Male and Female
Sub Total		**1125**			
Circulation %		**35**			
Total Area		**1519**			

Please note the following:

- Areas noted in the Schedule of Accommodation take precedence over all other areas noted in the Standard Components.
- Rooms indicated in the schedule reflect the typical arrangement.
- All the 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.
- Exact requirements for room quantities and sizes shall reflect Key Planning Units (KPU) identified in the Clinical Service Plan and the Operational Policies of the Unit.
- Room sizes indicated should be viewed as a minimum requirement. Variations are acceptable to reflect the needs of individual Unit.
- Offices are to be provided according to the number of approved full-time positions within the Unit.

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8 Further Reading

In addition to Sections referenced in this FPU, i.e., Part C- Access, Mobility, Safety and Security, Part D - Infection Control, and Part E - Engineering Services, readers may find the following helpful:

- The Remedial model of care for older people: http://www. nursingtimes. net/a-new-model-of-care-for-the-older-person/5042747. article 2014
- Guidelines for Design and Construction of Residential Health, Care and Support Facilities; The Facility Guidelines Institute, 2018 Edition; refer to website: https://fgiguidelines.org/