

# **Part B – Health Facility Briefing & Design**

## **105 Inpatient Unit - Bariatric**



iHFG

# **International Health Facility Guidelines**

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## 1 Introduction

### *Description*

The Bariatric Inpatient Unit is a specially designed, staffed and equipped service of a healthcare facility to provide support, rehabilitation, monitoring and treatment of the obese patient(s) in a controlled multi-disciplined inpatient environment.

Obesity is the medical term for being overweight with excessive amount of body fat that increases the risk of developing various health problems. The Body Mass Index (BMI) is usually used to determine if a person is obese or not.

The indications for a bariatric patient who in turn require admission to a bariatric unit are as follows:

BMI: The Body Mass Index (BMI) is a simple index given by the weight-for-height measurements of a person in (kg/m<sup>2</sup>)

- Have BMI of >40kg/m<sup>2</sup> with or without comorbidities
- or,
- Have BMI of 30-34.9 kg/m<sup>2</sup> with at least two of the below comorbidities:
    - Life threatening cardiopulmonary problems such as coronary artery disease (CAD), type 2 diabetes mellitus (T2DM), obstructive sleep apnea, obesity hypoventilation syndrome, Pickwickian syndrome, non-alcoholic fatty acid disease, non-alcoholic steatohepatitis, hypertension, dyslipidemia, asthma, severe urinary incontinence, debilitating arthritis, or obesity related cardiomyopathy
    - Other obesity induced physical problems that affect daily activity such as musculoskeletal or neurologic problems precluding or severely interfering with employment, ambulation, and infertility in females

Bariatric procedures shall be an option for select patients with clinical obesity when less invasive methods of weight loss have failed, and the patient is at high risk for obesity associated morbidity or mortality.

Patients shall be assessed to determine suitability for bariatric procedures in conjunction with:

- Multidisciplinary obesity management teams including specialists in obesity evaluation and management, such as bariatric surgeons, psychologists, and nutritionists
- Specialists in the fields of common comorbidity's such as endocrinology, pulmonology, gastroenterology, cardiology, and orthopedics should be consulted and involved in the complex care management process of bariatric patients
- An extensive and thorough pre-operative assessment process should be undertaken to ensure patients are informed as to the risks of bariatric procedures but also to ensure that the psychological and emotional needs of patients are appropriately managed

Common evidence based bariatric surgeries/ procedures likely to require inpatient admissions are listed below:

- Adjustable gastric banding
- Biliopancreatic diversion
- Duodenal switch
- Gastric bypass
- Laparoscopic gastric plication
- Roux-en-Y gastric bypass
- Sleeve gastrectomy

## **Facility Requirements**

Bariatric surgeries shall only be performed in hospital settings where a fully equipped intensive care unit is available and post-operative care requirements can be adequately met.

All healthcare facilities providing surgical healthcare to bariatric patients will have the provisions to stabilize and transfer bariatric patients through the immediate availability of ventilators and haemodynamic monitoring equipment.

## **2 Functional & Planning Considerations**

### **Models of Care**

The Bariatric Inpatient Unit can be operated as a stand-alone Unit or as a designated area of an inpatient unit. A stand - alone Bariatric Inpatient Unit may accommodate pre and post-surgical patient(s) or patients with chronic disease and related co-morbidities.

Some examples of a stand-alone Bariatric Inpatient Unit may include:

- Bariatric Surgery Unit which provides care for obese patients undergoing weight loss surgery such as gastric banding or gastric bypass
- Bariatric Rehabilitation Unit to assist obese individuals who are committed to weight loss through a variety of supported services such as education, exercise planning , counselling and dietician consultation.

### **Levels of Care**

The levels of care in the Unit will range from high acute and special care such as High Dependency with a progression to rehabilitative care while working towards discharge. Bariatric patients requiring 24-hour medical intervention should be transferred to a critical care unit such as ICU or CCU.

### **Bed Numbers**

The preferred maximum number of patients in a stand-alone Bariatric Inpatient Unit is 12 for intermediate and more dependent patients to 20 patient beds for mostly ambulant/ self-caring patients. The smaller number of patients would support a higher staff to patient ratio. More patient bedroom accommodation may be provided as required by the Clinical Service Planning document supported by the operational policies and guidelines for the proposed service.

The number of patient beds in a Bariatric Inpatient Unit if integrated in an Inpatient Unit should be determined by the endorsed clinical service plan, operational policies and guidelines. This Guideline discusses the requirements of an integrated 6 single bedroom Bariatric Inpatient Unit. The clustering of bariatric patient bedrooms is preferred for ease of patient management, their comfort and adjacency to bariatric equipment storage and physical therapy spaces.

Single bedrooms are recommended to allow for gender separation, support patient dignity, as well as provide patients and their visitors with personal individual private space. This Guideline discusses the requirements of a Bariatric Inpatient Unit with single bedroom provisions.

Where shared bedrooms are provided, the room spatial allowance should be sized accordingly. Each shared patient bedroom should be provided with adjacent separate shower and well anchored toilet and adequate space for bariatric equipment as well as maneuvering space for patient lifters and staff. Supporting a patient's privacy and dignity is a critical consideration when designing a shared bedroom space.

### **Functional Areas**

The Bariatric Inpatient Unit will consist of the following Functional Areas:

- Entry/ Reception with:
  - Waiting Areas (may be shared with adjoining Units)
  - Meeting Room
- Inpatient areas:

- Patient Bedrooms
- Ensuites
- Lounge
- Sitting Alcoves
- Gymnasium
- Clinical Support areas:
  - Cleaner's Room
  - Clean Utility
  - Dirty Utility
  - Disposal
  - Store rooms
- Staff offices and amenities:
  - Offices and Workstations
  - Meeting Room (optional)
  - Staff Room
  - Toilets and lockers

### **Entry/ Reception Area**

#### **Waiting Area**

Patient and visitor waiting areas should be located close to the Bariatric Inpatient Unit. Obese and morbidly obese patients may also have obese family member; and this should be taken into consideration when designing waiting areas to support a Bariatric Inpatient Unit.

The waiting area should be provided with general seating and a minimum of suitable 20% bariatric seating to accommodate up to a seating weight of 270 kg, bariatric furniture width, height and depth are larger and will impact on the space and volume of seating that will fit into a space. Wheelchair spaces should be allocated to accommodate the width and depth of bariatric wheelchairs and provided with power outlets for charging of mobility equipment.

For smaller units, the waiting area may be shared with a co-located FPU. If shared, the obese only sections in the waiting area should be avoided. Discretely incorporated bariatric rated two-seaters or built-in double seats which can also be used by the general public may be included in the design of the waiting area.

#### **Meeting/ Multi-Purpose Room**

A Meeting Room is used for staff and patient/ family conference and case conferences. This room may also be used as a Group Room for specific patient education such as health, lifestyle, and nutrition education. This room should be located close to the main entrance of the unit with a second access from the unit. This will allow easy access for family and visitors without entering the unit and ease of access by patients during individual or group meetings.

### **Inpatient Areas**

#### **Patient Bedroom**

All bedroom accommodations shall comply with the Standard Components. The bedroom should allow for more than one carer at any time as well as equipment movement. Patient equipment for lifting and mobility support equipment requires adequate space for safe movement of patients and assisting staff.

Manual handling is a major cause of injury to staff and patients in Bariatric Inpatient Units. Overhead lifters such as ceiling mounted patient lifters is recommended for all patient bedrooms. Where all bedrooms cannot be provided with ceiling mounted lifters, 50% of the bedrooms are to have ceiling mounted lifters and mobile lifters are to be used for other bedrooms and patients. The maximum weight capacity of the bariatric ceiling mounted lifters will be determined by the facility's operational policies and guidelines. It would be recommended that at least one ceiling mounted lifter in a bedroom has the capacity to support a maximum weight of 450 kg.

#### **Patient Ensuite**

The patient ensuite is to be directly accessible from the bedrooms.

Ceiling mounted lifter connected to the bedroom lifter track is recommended for all patient ensuites. Where all ensuites cannot be provided with ceiling mounted lifters from the bedroom to the ensuite, 50% of the ensuites are to have ceiling mounted lifters from the bedroom to the ensuite. At least one bedroom to the ensuite is to be provided with a ceiling mounted lifter track with a maximum weight capacity of 450 kilograms.

### Lounge Room

The lounge room should be provided within the patient area of the unit. Television and other entertainment and reading materials may be provided. Bariatric seating and space for bariatric wheelchairs with power outlets for charging of equipment is essential.

### Sitting Alcove

Patient sitting alcoves along the corridor may be provided to allow patients to rest while mobilising around the unit. This alcove may also function as a space for informal conversation between patients and staff, support staff or between patients. The alcove is an alternative patient sitting area to the Lounge Room.

The nook may be provided with bariatric chairs or bariatric rated built-in seating.

### Gymnasium

A gymnasium specifically designed for obese patients may be provided within the Unit depending on operational policies or guidelines. The gymnasium will be equipped with gym equipment which can support weights between 250 to 500 kg. The patients will be assessed, and a program developed that is able to support increased planned and supervised activities supported as part of the overall clinical multi-disciplined team management plan for the patient(s).

The gym may be equipped with wider plinth examination couches, stationary bikes, row machines, arm ergometers, elliptical machines, treadmills, and strength training equipment depending on the services provided by the facility. Group education may also be undertaken in this area.

Ceiling mounted lifters may be installed in this area to support the weight of obese patients to assist them with transfer or self-rising from sitting position as well as support the patient during assisted mobilisation. The gymnasium should include additional space for holding mobile lifting equipment, mobility equipment and bariatric wheelchairs.

## Clinical Support Areas

### Storage

Bariatric equipment should be stored as close as possible to patient areas to encourage their utilisation regularly. The locating of patient manual handling equipment close to or in a patients bedroom should assist with staff utilisation to support the patient and provide a safer environment.

Bariatric equipment tends to be larger and subsequently requires more space both in depth and width for each item, larger storage areas or additional smaller storage bays should be considered in a Bariatric Inpatient Unit. Where built-in overhead lifters are not provided in all patient bedrooms, the location and number of storage bays for lifting equipment should be determined early in the design phase of the project.

## Functional Relationships

### External Relationships

For Bariatric Inpatient Units, the principal concept of external planning should be to integrate the planning of the facility to create a safe and dignified entry and exit to the unit.

The Unit should have discreet patient access from Emergency Unit, Operating Unit, Critical Care areas and Imaging Department away from public traffic. Easy access to public lifts and shorter walking travel distances from the lift to the Unit is important to assist ambulant bariatric patients who have planned admission and discharge to walk to/from the Unit independently. The provision of seating areas for short resting breaks on the walking route should be considered.

### Internal Relationships

The Bariatric Inpatient Unit should be designed so that the patient occupied areas form the core of the unit with direct access and observation of staff. Utility and storage areas should be accessible

from both patient and staff work areas. Where a Bariatric Inpatient Unit is a designated as part of another unit, these shared areas should be easily accessible and functional to both units.

### 3 Functional Relationship Diagram

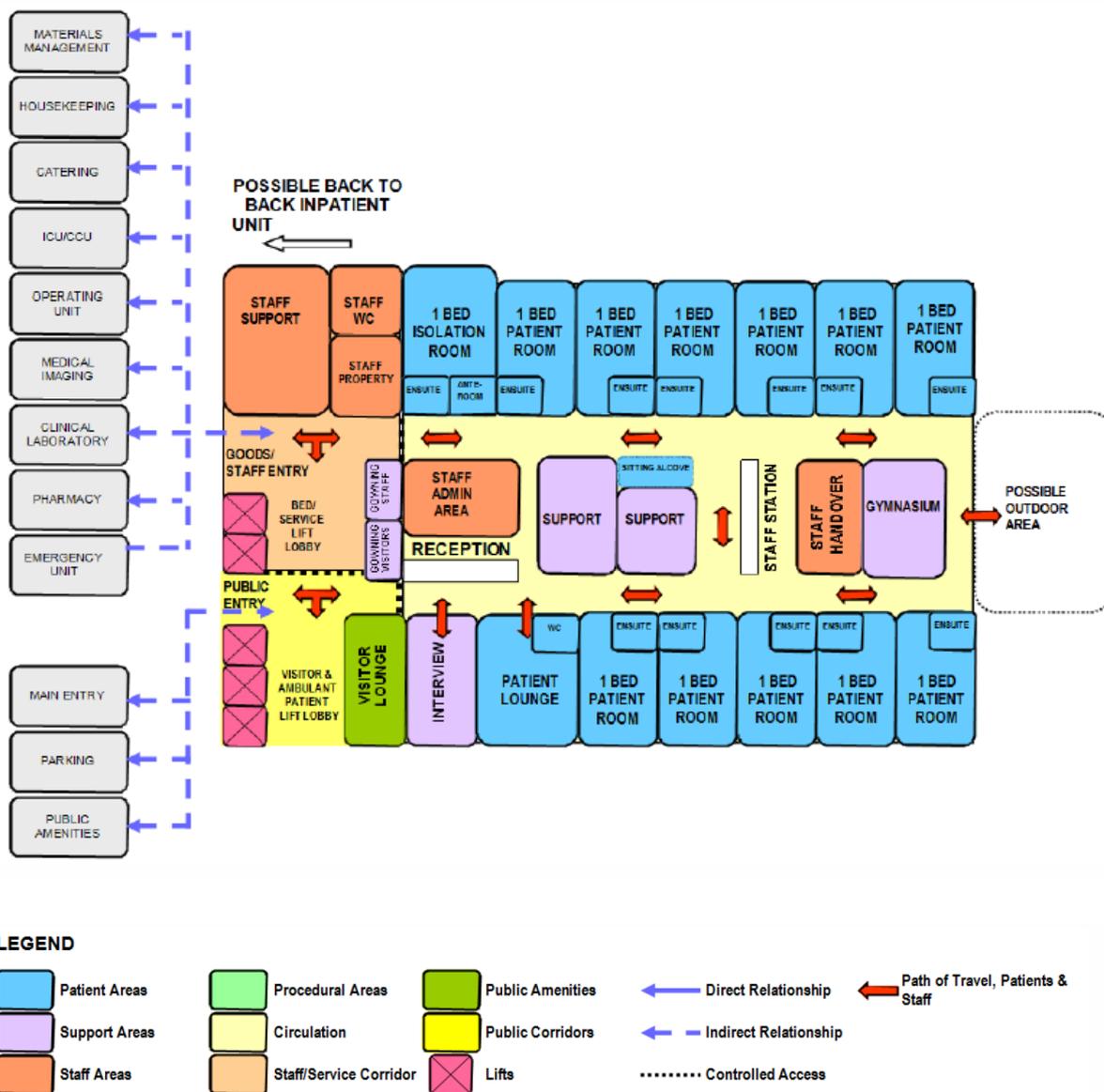
The Bariatric Unit is an important functional component of the hospital, connected with many clinical and operational support unit. Correct functional relationships will promote delivery of service that are efficient in terms of management, cost, and human resources.

External relationships outlined in the diagram below includes:

- 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.

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 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
- Personal Protective Equipment Bays located at entry for both Staff and Visitors for infection control during ward isolation.



## 4 Design Considerations

### General

The facility design, layout, access, finishes, furniture, fitting and building services may potentially influence the management of bariatric patient. The design of the Unit should respond to a variety of health care requirements of the obese patient. Some of these requirements include:

- Larger space requirement to accommodate special bariatric equipment
- Establish an accessible path from the health facility entrance to this department by accommodating for a 990mm by 1250mm wide wheelchair with a 1800mm turning circle
- Structural and other architectural design considerations to accommodate ceiling mounted equipment e.g. patient lifters, toilet bowl fixation, vanity anchoring, grab rail support etc.
- Positioning of patient handling and mobilising equipment in patient spaces such as bedrooms, bathrooms, ensuites and lounge areas
- Climate control requirements – individual room sensors
- Modified care practices to suit patient needs
- OHS&S of patients and staff

- Evacuation path plans
- Ingress and egress requirements for doorways, corridors, and lifts
- Infection prevention and control
- Provide Dialysis outlets at the rate of 1 for up to 12, and 2 for up to 20 rooms. Thereafter, provide pro-rate rounded up.

For further guidelines, refer to Part C – Access, Mobility and OH&S for corridor widths for bariatric patients.

## ***Environmental Considerations***

### **Acoustics**

The Bariatric 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 location of noisy areas or activity away from quiet areas including patient bedrooms and selection of sound absorbing materials and finishes.

### **Natural Light**

Natural light and views should be available from the Unit for the benefit of staff and patients. Windows are an important aspect of sensory orientation, and all bedrooms should have windows to reinforce day/ night orientation.

### **Privacy**

The design of the Unit should be able to support the privacy of patients. The functional design should consider the potential physical exposure of patient's bodies when utilising mobility and lifting equipment.

Additionally, design should consider the placement of cubicle tracks in relation to ceiling mounted lift tracks. This is imperative for privacy curtain placement as the lift track commonly runs from bed to bathroom. Each bed shall be provided with curtains to ensure privacy of patients undergoing treatment in both private and shared inpatient rooms.

## ***Space Standards and Components***

### **Accessibility - External**

Ramps and handrails should be available at entrances of the facility to assist bariatric and other less ambulant patients to access the facility. The access path from the car park to the hospital entrance should accommodate the turning radius of bariatric wheelchairs.

Where bariatric beds with built-in weighing scales are not utilised or available bariatric bed weighing scale should be located in close proximity to areas of initial admission if not directly to the Bariatric Inpatient Unit e.g. Emergency Departments.

### **Accessibility – Internal**

At least one facility lift should accommodate a patient on a bariatric bed with attending staff. Lifts should be designed with increased door clearance and weight capacity to accommodate the larger size of the transport equipment and the patient's weight. In new facilities without existing building restrictions, bariatric rated lifts should be located with other patient lifts and not in the service zone where its primary function is for transport of large and heavy medical equipment.

Review of access points to other areas of the facility such as inpatient rooms, treatment rooms, operating suites, and other areas where bariatric patients may be treated.

Diagnostic equipment purchases should consider the imaging needs of bariatric patients e.g. X-ray table weight limits, MRI and CT table weight limits and diameter of the CT bore.

Outpatient departments should allow for a reasonable number of bariatric compliant consultation rooms and toilets. As a minimum one should be provided per facility.

### **Doorways and Corridors**

Wider doorway standards shall apply in inpatient rooms, surgical suites, and diagnostic and treatment rooms, where bariatric patients are treated. To accommodate bariatric wheelchairs a

1140 mm doorway opening is required. Corridors should be wide enough to accommodate patient beds and turning circles when being used for patient transport.

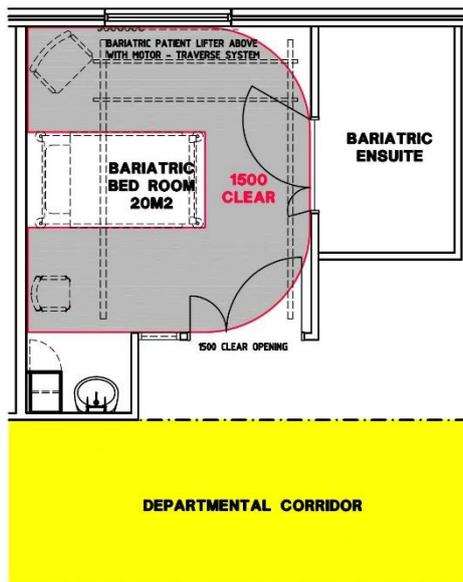
### Ergonomics

Occupational Health and Safety (OH&S) requirements must be adhered to in the design process to ensure the health and safety of the end users. Refer to Part C – Access, Mobility + OH&S for further information.

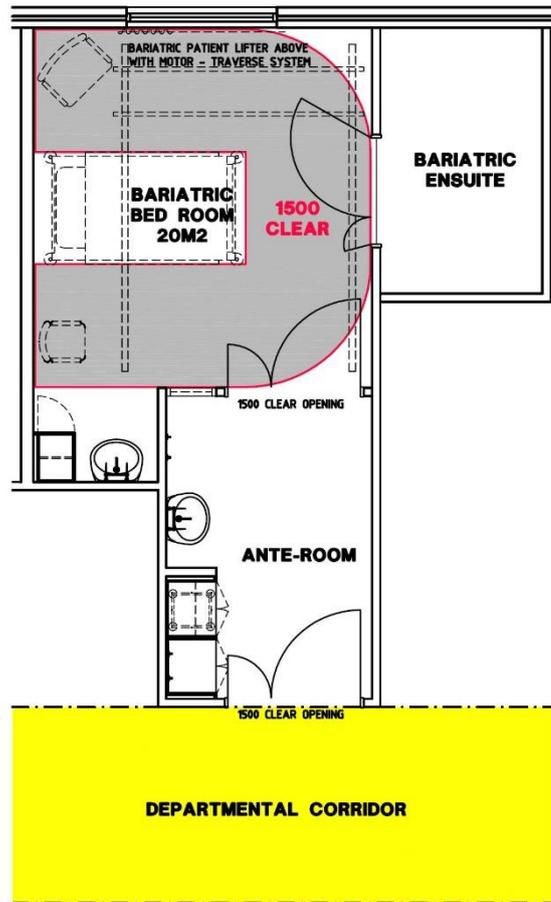
### Patient Bedrooms

A minimum clear dimension of 1500 mm is required between the sides and the foot of the bed from any wall or any fixed obstructions. Two configurations for Bariatric Bedrooms are shown below:

#### 1 Bedroom – Bariatric



1 Bedroom – Bariatric (Isolation)

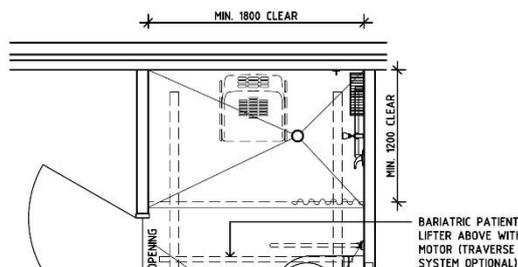


Note: The above images do not depict full room layout, rather required bedside clearances and possible configurations only

**Ensuite**

Ensuites should be sized to allow for staff assistance on two sides of the patient at the toilet and shower areas. The toilet pan should be floor fixed with bolts to the floor to support weights of up to 450 kg and to be mounted a minimum of 700 mm from the finished wall or any fixed obstruction to the centreline of the toilet. A clear space of 1100 mm should be provided on the opposite side of the toilet for wheelchair and commode access. Handrails, support rails and vanity basins should be fixed robustly to support the weight of the patients.

The dimension of the shower should be a minimum of 1200 mm by 1800 mm to allow for staff assistance. A Bariatric Ensuite configuration is shown below:



## ***Safety and Security***

Design of the facility and selection of furniture, fittings and equipment should ensure that users are not exposed to avoidable risks of injury.

Patient and visitor movements into and out of the Unit should be monitored to ensure safety of all users. Emergency call, staff assist call buttons and duress alarms should be installed in appropriate locations to alert other staff in the event of emergency.

Emergency evacuation path in the event of a bomb threat or fire should be established during the planning of the Bariatric Inpatient Unit. Evacuation routes should be established, and the Bariatric Inpatient Unit should be designed as close as possible to appropriate exits.

## ***Finishes***

Floor surfaces that reduce or absorb impact if a patient falls may not be sufficiently robust with moving wheeled bariatric equipment as this may result in indentations, marring and shearing of material and should be considered when specifying floor finish. Carpeted or padded vinyl floors may also contribute to excessive shear forces of push and pull on staff as a result of pulling/pushing bariatric patients on wheeled equipment. Floor transitions must be designed to prevent tripping hazards, bumps and strain on staff pushing/ pulling wheeled equipment.

In areas where clinical observation is critical such as bedrooms and treatment areas, colour selected must not impeded the accurate assessment of skin tones. Walls shall be painted with lead free colour.

## ***Furniture and Equipment***

All furniture and equipment for patient use must be bariatric rated to avoid incidences of breakage and injury to patient and staff.

### **Bariatric Bed**

Some bariatric beds now come with built-in scales to accurately weigh bed bound patients without transferring the patient to a weighing scale. Pressure relieving mattresses can prevent pressure points which may arise in the obese patients who have with difficulty in repositioning when either sitting in a chair or lying in bed.

### **Seating**

Bariatric rated reinforced chairs should be used in Bariatric Inpatient Units to avoid injury from broken furniture. Some patient chairs should have armrests and built-in seats should be provided with wall mounted reinforced handrails to assist in self-rising.

Bariatric Inpatient Units aim to maintain, support, educate and improve mobility, independence and the strength of patients while in the Unit. To assist patients and staff, patient handling equipment should be incorporated as a critical design component of the facility.

The provision of an appropriate lifting system is critical to the safe movement and supported mobility of patients and ensures safety of staff and support staff environment. Ceiling mounted lifters are recommended for all patient bedrooms. Where ceiling mounted lifters are provided, the

traverse lifter is preferred as they generally have higher weight capacity and allows for wider area coverage of the room.

A combination of different types and weight requirements of patient lifters and transferring equipment should be considered in this unit. Standing aids maybe adequate for independent patients but passive patient lifters may be required for less ambulant bariatric patients. Passive patient lifters are also utilised to lift a patient from floor if a patient has a fall and required assistance to stand or be transferred to a bed.

### **Fixtures and Fittings**

All fixtures must be bariatric compliant. Handrails along corridors should be reinforced to support mobilising patients.

It is recommended that toilet seats be floor mounted unless contraindicated by requirements of Accessibility Standards. Toilet and toilet seats should be able to withstand weight of up to 450 kg. Hand washing basin in ensuite should withstand downward static force of 450 kg at the edge of the sink.

Wall reinforcements and additional wall fixings may be required for all sanitary grab rails as well as towel rails to efficiently support obese patient in self-rising. Where drop down grab rail is used, heavy duty rails are to be utilised with reinforced wall support to maintain the robustness and integrity of the rails.

Handheld shower heads are essential in the shower area with sufficient shower hose length to adequately reach areas for washing and be hung on a wall hook after use.

### **Structural Requirements**

Structural engineers must be consulted to calculate the static and dynamic load limit of equipment and persons in order to ensure appropriate floor and ceiling reinforcement.

Ceiling reinforcements will be required in areas with ceiling mounted lifters such as in patient bedrooms, ensuite and gymnasium.

### **Building Service Requirements**

#### **Nurse Call/ Emergency Call**

Nurse Call and Emergency Call facilities must be provided in all patient areas (e.g. bedrooms, toilets, showers, lounge room) and procedure areas in order for patients and staff to request urgent assistance. The individual call buttons should be provided next to each inpatient bed and will alert to a central module situated at or adjacent to the Staff Station.

Heating Ventilation and Air-conditioning (HVAC) Air-conditioning with temperature control is important in the nursing care of obese patients. Adjustable temperature control may be required to prevent patient overheating and reduce excessive perspiration.

The air temperature in inpatient areas should be maintained at 24 degrees or less. Relative humidity should be maintained between 30% to 60% and should be adjustable.

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

#### **Exhaust System**

Storage areas for floor-based patient lifters may require air-conditioning or exhaust system depending on the type of batteries to be charged to prevent noxious fumes accumulation in the room.

#### **Pneumatic Tube Systems**

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

### **Infection Control**

Standard precautions must be taken for all clients regardless of their diagnosis or presumed infectious status. Patient lifter slings and transferring devices can be a source of infection from

general use. Selected equipment should be easy to clean and comply with infection control requirements.

Hand washing facilities for staff within the Unit should be readily available. Where a hand wash basin is provided, there shall also be liquid soap and disposable paper towel dispenser, garbage bin and PPE equipment provided.

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

## 5 Standard Components of the Unit

### Standard Components

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

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

- Room Primary Information; includes briefed areas, occupancy, room description, relationships and special room requirements
- Building Fabric and Finishes; describes fabric and finishes for the room's ceiling, floor, walls, doors and glazing requirements
- Furniture and Fittings; lists all the fittings and furniture typically located in the room; Furniture and Fittings are identified with a group number indicating who is responsible for providing the item according to a widely accepted description as follows:

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

- Fixtures and Equipment; includes all the serviced equipment commonly located in the room along with the services required such as power, data, water supply and drainage; Fixtures and Equipment are also identified with a group number as above indicating who is responsible for provision
- Building Services - indicates the requirement for communications, power, HVAC (Heating, Ventilation and Air Conditioning), medical gases, nurse/ emergency call and lighting along with quantities and types where appropriate. Provision of all services items listed is mandatory.

The Room Layout Sheets (RLS's) are indicative plan layouts and elevations illustrating an example of a 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 by 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.

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



## 6 Schedule of Equipment (SOE)

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

Room/ Space	Standard Room Code	Item Description	Qty	Remarks
1 Bedroom - Bariatric	1br-ba-20-d	Air flowmeter	1	
1 Bedroom - Bariatric	1br-ba-20-d	Bed: bariatric, electric + mattress	1	with built-in scale and alternating pressure mattress (recommended)
1 Bedroom - Bariatric	1br-ba-20-d	Lifter: patient sling	1	optional, to patient lifter, bariatric capacity
1 Bedroom - Bariatric	1br-ba-20-d	Locker: bedside	1	
1 Bedroom - Bariatric	1br-ba-20-d	Oxygen flowmeter	1	
1 Bedroom - Bariatric	1br-ba-20-d	Patient lifter: ceiling mounted, track + cassette	1	optional, bariatric capacity, track may extend to Ensuite
1 Bedroom - Bariatric	1br-ba-20-d	Suction adapter	1	with bracket & suction bottle
1 Bedroom - Bariatric	1br-ba-20-d	Table: overbed	1	
1 Bedroom - Bariatric (Isolation)	1br-isn-28-d 1br-isp-28-d similar	Air flowmeter	1	
1 Bedroom - Bariatric (Isolation)	1br-isn-28-d 1br-isp-28-d similar	Bed: bariatric, electric + mattress	1	with built-in scale and alternating pressure mattress (recommended)
1 Bedroom - Bariatric (Isolation)	1br-isn-28-d 1br-isp-28-d similar	Infusion pump, single channel	1	optional
1 Bedroom - Bariatric (Isolation)	1br-isn-28-d 1br-isp-28-d similar	Lifter: patient sling	1	optional, to patient lifter, bariatric capacity
1 Bedroom - Bariatric (Isolation)	1br-isn-28-d 1br-isp-28-d similar	Locker: bedside	1	
1 Bedroom - Bariatric (Isolation)	1br-isn-28-d 1br-isp-28-d similar	Oxygen flowmeter	1	
1 Bedroom - Bariatric (Isolation)	1br-isn-28-d 1br-isp-28-d similar	Patient lifter: ceiling mounted, track + cassette	1	optional, bariatric capacity, track may extend to Ensuite
1 Bedroom - Bariatric (Isolation)	1br-isn-28-d 1br-isp-28-d similar	Suction adapter	1	with bracket & suction bottle
1 Bedroom - Bariatric (Isolation)	1br-isn-28-d 1br-isp-28-d similar	Table: overbed	1	

## 7 Schedule of Accommodation

The Schedule of Accommodation (SOA) provided in the Appendices of this FPU represents generic requirements for this Unit. It identifies the rooms required along with the room quantities and the recommended room areas. The sum of the room areas is shown as the Sub Total as the Net Area. The total area comprises of the sub-total areas of these rooms plus an additional percentage of the sub-total applied as the circulation (corridors within the Unit). Circulation is represented as a percentage is the minimum recommended target area. Any external areas and optional rooms/ spaces are not included in the total areas in the SOA.

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

The Schedule of Accommodation are developed for particular levels of services known as Role Delineation Level (RDL) and numbered from 1 to 6. Applicable RDL's are noted in each SOA provided in the appendices and not necessarily all six RDL's are applicable. Refer to Part A for a full description of the RDL's.

The following should be considered in conjunction with the SOA/s provided in the Appendices of this FPU:

- Areas noted in Schedules of Accommodation take precedence over all other areas noted in this FPU
- Rooms indicated in the schedule reflect the typical arrangement according to the Role Delineation and/ or capacity required for the clinical service
- Exact requirements for room quantities and sizes reflect Key Planning Units (KPU) identified in the Service Plan and the Operational Policies of the Unit
- All areas shown in the SOA follow the No-Gap system described elsewhere in these Guidelines. Refer to Part B Preliminaries
- Room sizes indicated should be viewed as a minimum requirement; variations are acceptable to reflect the needs of individual Unit
- Staff and support rooms may be shared between Functional Planning Units dependent on location and accessibility to each unit and may provide scope to reduce duplication of facilities
- Offices to be provided according to the number of approved full-time positions within the Unit

Refer to Appendices I to IV for a limited sample of SOA's of the Inpatient Unit – Bariatric.

ROOM/ SPACE	Standard Component Room Codes	RDL 1 & 2			RDL 3 & 4			RDL 5/6			RDL 5/6			Remarks
		Qty	x	m <sup>2</sup>	Qty	x	m <sup>2</sup>	Qty	x	m <sup>2</sup>	Qty	x	m <sup>2</sup>	
<b>Entrance/ Reception Area</b>					<b>6 Beds</b>			<b>12 Beds</b>			<b>20 Beds</b>			<b>Required for stand-alone Unit only</b>
Waiting	WAIT-10-I WAIT-15-I							1	x	10	1	x	15	
Waiting - Family	WAIT-20-I WAIT-30-I							1	x	20	1	x	30	
Toilet - Public	WCPU-3-I							2	x	3	2	x	3	
Toilet - Accessible	WCAC-I							1	x	6	1	x	6	
Consult Room - Special	CONS-SP-I							1	x	16	1	x	16	
Meeting/ Multi-purpose Room	MEET-L-15-I MEET-L-18-I							1	x	15	1	x	18	May be used as a Group Room
<b>Sub Total</b>										<b>73</b>			<b>91</b>	
<b>Circulation %</b>										<b>32</b>			<b>32</b>	
<b>Area Total</b>										<b>96.36</b>			<b>120.12</b>	
<b>Patient Areas</b>														
1 Bedroom - Bariatric	1 BR-B-20-I				5	x	20	10	x	18	18	x	20	Provide at least one bedroom with 450 kg weight limit ceiling mounted patient lifter
1 Bedroom - Bariatric (Isolation)	1 BR-B-20-I				1	x	20	2	x	20	2	x	20	Provide ceiling mounted patient lifter
Anteroom	ANRM-I				1	x	6	2	x	6	2	x	6	
Ensuite - Bariatric	ENS-B-7-I				6	x	7	12	x	7	20	x	7	Provide at least one Ensuite with built-in patient lifter track
Bay - Handwashing, Type B	BHWS-B-I				1	x	1	1	x	1	3	x	1	To Unit entry
Bay - Handwashing, PPE	BHWS-PPE-I				2	x	1.5	3	x	1.5	5	x	1.5	Refer Part D - Infection Prevention and Control.
Lounge - Patient	LNPT-15-I LNPT-20-I LNPT-30-I				1	x	15	1	x	20	1	x	30	
Sitting Alcove	SA-2-I							1	x	2	2	x	2	Locate along corridors.
Gymnasium	GYAH-45-I							1	x	45	1	x	45	Optional. Dependent on operational policy.
Bay - Resuscitation Trolley	BRES-I				1	x	1.5	1	x	1.5	1	x	1.5	
Bay - Linen	BLIN-I				1	x	2	1	x	2	2	x	2	
Procedure Room	PROC-20-I							1	x	20	1	x	20	Optional. Dependent on operational policy and number of single room s

Bay - Beverage	BBEV-OP-I				1	x	4	1	x	4	1	x	4	Open bay. 5 m2 if enclosed.
<b>Sub Total</b>							<b>194.5</b>			<b>351</b>			<b>606</b>	
<b>Circulation %</b>							<b>32</b>			<b>32</b>			<b>32</b>	
<b>Area Total</b>							<b>256.74</b>			<b>463.32</b>			<b>799.92</b>	
<b>Support Areas</b>														
Staff Station (Main)	SSTN-12-I SSTN-14-I SSTN-18-I				1	x	12	1	x	18	1	x	20	
Staff Station	SSTN-5-I							1	x	5	2	x	5	Optional. If decentralised Staff Station are required.
Clean Utility	CLUR-12-I CLUR-14-I				1	x	12	1	x	12	1	x	14	
Bay - Meal Trolley	BMT-4-I				1	x	4	1	x	4	1	x	4	
Dirty Utility	DTUR-10-I DTUR-12-I DTUR-14-I				1	x	10	1	x	12	1	x	14	
Disposal	DISP-8-I DISP-10-I							1	x	8	1	x	10	
Bay - Mobile Equipment	BMEQ-4-I				1	x	2	2	x	2	2	x	2	Sized to accommodate mobile patient lifter
Store - General	STGN-8-I STGN-12-I STGN-16-I				1	x	8	1	x	12	1	x	16	
Store - Equipment	SEQ-10-I SEQ-20-I SEQ-30-I				1	x	10	1	x	20	1	x	30	Sized to accommodate bariatric equipment
Cleaner's Room	CLRN-5-I				1	x	5	1	x	5	1	x	5	
<b>Sub Total</b>							<b>63</b>			<b>100</b>			<b>127</b>	
<b>Circulation %</b>							<b>32</b>			<b>32</b>			<b>32</b>	
<b>Area Total</b>							<b>83.16</b>			<b>132</b>			<b>167.64</b>	
<b>Staff Areas</b>														
Office - Clinical/ Handover	OFF-CLN-12-I OFF-CLN-I				1	x	15	1	x	15	1	x	15	Locate near Staff Station
Store - Photocopy/ Stationery	STPS-6-I STPS-8-I							1	x	6	1	x	8	
Store - Files	STFS-8-I							1	x	8	1	x	8	Optional
Office - Single Person, 9 m <sup>2</sup>	OFF-S9-I							1	x	9	1	x	9	NUM
Office - 3 Person Shared	OFF-2P-I							1	x	12	1	x	12	Allied Health or Medical staff.

Office - Workstation	OFF-WS-I				1	x	5.5	2	x	5.5	2	x	5.5	CNC, CNE. Shared office may also be provided.
Meeting Room	MEET-L-15-I MEET-L-20-I							1	x	15	1	x	20	For meetings, staff education, case discussion, teleconferencing etc.
Staff Room	SRM-15-I SRM-18-I							1	x	15	1	x	18	
Toilet - Staff	WCST-I							2	x	3	2	x	3	
Property Bay - Staff	PROP-2-I							2	x	2	2	x	2	Separate male/female locker areas
<b>Sub Total</b>							<b>20.5</b>			<b>93</b>			<b>103</b>	
<b>Circulation %</b>							<b>25</b>			<b>25</b>			<b>25</b>	
<b>Area Total</b>							<b>25.625</b>			<b>116.25</b>			<b>128.75</b>	
<b>Grand Total</b>							<b>365.525</b>			<b>807.93</b>			<b>1216.43</b>	

Please note the following:

- Areas noted in Schedules of Accommodation take precedence over all other areas noted in the FPU
- Rooms indicated in the schedule reflect the typical arrangement according to the Role Delineation
- Exact requirements for room quantities and sizes will reflect Key Planning Units identified in the Service Plan and the 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
- Office areas are to be provided according to the Unit role delineation and number of endorsed full time positions in the unit
- Staff and support rooms may be shared between Functional Planning Units dependent on location and accessibility to each unit and may provide scope to reduce duplication of facilities.

## 8 References and Further Reading

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

- ARJO. Guidebook for Architects and Planners, 2nd ed. ARJO Hospital Equipment A B (2005).
- Australasian Health Facility Guidelines. (AusHFG Version 4.0), 2012; refer to website [www.healthfacilitydesign.com.au](http://www.healthfacilitydesign.com.au)
- Australian Safety and Compensation Council (2009) Manual Handling Risks Associated with the Care, Treatment and Transportation of Bariatric (Severely Obese) Patients in Australia
- Cohen, M.H., Nelson, G.G., Green D.A., Leib, R., Matz, M.W., Thomas, P.A., et al and Borden, CA (ed) (2010) Patient Handling and Movement Assessments: A White Paper, The Facility Guidelines Institute.
- Guidelines for Design and Construction of Health Care Facilities, The Facility Guidelines Institute, 2010 Edition, refer to website [www.fgiguilines.org](http://www.fgiguilines.org)
- NSW Health (2005) Guidelines for the Management of Occupational Health and Safety (OHS) Issues Associated with the Management of Bariatric (Severely Obese) Patients, NSW Australia
- Wignall, D. (2008), 'Design as a Critical Tool in Bariatric Care', Journal of Diabetes Science and Technology, vol 2, issue 2, March, pp. 263-267.
- Victorian WorkCover Authority.3rd Edition (September 2007) Worksafe Victoria: A Guide to Designing Workplaces
- World Health Index (2017) <http://www.who.int>