

# Australasian Health Facility Guidelines

Part B - Health Facility Briefing and Planning 0350 - Multipurpose Service Unit



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## **Australasian Health Facility Guidelines**

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## **Australasian Health Facility Guidelines**

## Index

01 INTRODUCTION	4
01.01 Preamble	4
01.02 Introduction	4
01.03 Policy Framework	4
01.04 Description	5
02 PLANNING	7
02.01 Operational Models	7
02.02 Operational Policies	8
02.03 Planning Models	10
02.04 Functional Areas	10
02.05 Functional Relationships	13
03 DESIGN	14
03.01 Accessibility	14
03.02 Parking	14
03.03 Disaster Planning	14
03.04 Infection Control	14
03.05 Environmental Considerations	14
03.06 Space Standards and Components	16
03.07 Safety and Security	17
03.08 Finishes	18
03.09 Fixtures, Fittings & Equipment	18
03.10 Building Service Requirements	18
04 COMPONENTS OF THE UNIT	20
04.01 Standard Components	20
04.02 Non-Standard Components	20
AX APPENDICES	25
AX.01 Schedule of Accommodation	25
AX.02 Functional Relationships / Diagrams	28
AX.03 Checklists	28
AX.04 References	29
AX.05 Further Reading	30
AX 06 Other References	30

## 01 INTRODUCTION

#### 01.01 Preamble

#### **PURPOSE OF GUIDELINE**

This Health Planning Unit (HPU) has been developed for use by the design team, project managers and end users to facilitate the process of planning and design.

The Multipurpose Service HPU was originally developed for NSW Health and subsequently issued for Australasian use. This revision has been developed through an extensive review and consultation process.

#### 01.02 Introduction

#### **GENERAL**

This document should be read in conjunction with the Australasian Health Facility Guidelines (AusHFG) generic requirements and Standard Components described in:

- Part A: Introduction and Instructions for Use;
- Part B: Section 80 General Requirements and Section 90 Standard Components, Room Data Sheets and Room Layout Sheets;
- Part C: Design for Access, Mobility, OHS and Security;
- · Part D: Infection Prevention and Control; and
- Part E: Building Services and Environmental Design.

Multipurpose Services provide a wide range of services to communities in rural and remote areas, and provide an opportunity to deliver integrated care in partnership with both private providers and NGO service partners.

Services usually include primary and community health services and inpatient care. It is a legislative requirement for Multipurpose Services to include a residential aged care component.

Throughout this HPU, the Multipurpose Service facility will be referred to as an MPS. For the purposes of this document residential aged care service users will be referred to as 'residents', and those receiving inpatient, primary health or community health care as 'patients'.

This HPU outlines specific requirements for the planning and design of an MPS. As MPS facilities may contain services that are more comprehensively outlined in other HPUs, the following HPUs will address service specific needs and are available in Part B:

- · HPU 250 Ambulatory Mental Health Unit;
- HPU 490 Hospital Mortuary / Autopsy Unit;
- HPU 140 Rehabilitation/ Allied Health;
- · HPU 620 Renal Dialysis Unit:
- HPU 155 Ambulatory Care Unit;
- HPU 280 Oral Health Unit:
- · HPU 300 Emergency Unit; and
- HPU 255 Community Health.

## 01.03 Policy Framework

#### **SPECIFIC POLICIES AND GUIDELINES**

Before undertaking a project, planners and project personnel are encouraged to familiarise themselves with individual jurisdiction plans, policies, service specific guidelines and reports.

State and territory specific policy information is contained in the References and Further Reading sections of this HPU. Relevant policies include:

- Australian Government, 2013, Flexible Care Subsidy Principles 1997;
- Australian Government, 2012, Aged Care (Amount of Flexible Care Subsidy Multi-Purpose Services) Determination 2011 (No. 1);

- Commonwealth Department of Health and Ageing, 2002, Ageing in place a guide for providers of residential aged care;
- · Commonwealth of Australia, 2012, Living Longer. Living Better; and
- Office of Parliamentary Counsel, 2013, Aged Care Act 1997 (amended).

## 01.04 Description

#### **DEFINITION OF HEALTH PLANNING UNIT**

MPS facilities vary depending on the range of services to be provided, community and cultural characteristics, patient profile and size of the proposed facility.

As an MPS represents a central health and community centre for the local community and surrounds, there is the potential for a broad range of services to be based and accommodated.

Options can be explored at the planning stage with local community involvement and consultation. The MPS will deliver residential aged care services, and may include: emergency services:

- inpatient care:
- · a range of community and primary health care services;
- a collocated general practice (GP), including after-hours services;
- · a collocated ambulance service; and
- · services delivered by NGOs and other organisations serving the community.

#### **MODELS OF CARE**

An MPS is an integrated health and aged care service. The MPS program aims to provide a flexible and integrated approach to health and aged care service delivery in small rural communities.

The MPS brings together a range of health and aged care services in a single location with a single management structure. An MPS is not solely a hospital, residential aged care accommodation or community health service, but a combination of these services. Other services such as ambulance and Home and Community Care (HACC) may choose to be part of the MPS.

The MPS model is generally suitable for small rural communities where there is:

- an ageing population;
- a lack of, or limited, residential aged care accommodation; and
- · difficulty in sustaining stand-alone health, community and aged care services.

Services within an MPS tend to be designed around 'clusters' and 'zones' to maximise effective and efficient care delivery while ensuring resident, patient and staff security. Refer to the Functional Areas section in this document for further information.

#### PATIENT AND CLIENT CHARACTERISTICS

The range of those attending an MPS may be diverse given the very nature of the service delivery model. The MPS may include:

- aged persons with varying levels of dependency;
- · people with dementia;
- people and families requiring respite and/or palliative care services;
- patients requiring short term inpatient care for treatment, observation, recovery, or as a 'step down' facility prior to post procedure discharge:
- mothers attending for antenatal or post natal services;
- children and adolescents;
- · people with Aboriginal heritage;
- · people from culturally and linguistically diverse backgrounds;
- people with mental health disorders and/or drug and alcohol related problems; and
- people requiring a recurring day procedure such as renal dialysis, chemotherapy, aphaeresis or other transfusions.

Broad consumer consultation is required to underpin service planning for the MPS.

#### PRIMARY CARE/COMMUNITY SERVICES

The primary care and community support care cluster may need to accommodate a range of services including:

- health and social agencies from state and/or Commonwealth such as HACC and aged care assessment teams (ACAT);
- GPs and visiting medical specialist services;
- mental health, and drug and alcohol services;
- rehabilitation / allied health services:
- · aged care day services;
- telehealth (e.g. telepsychiatry);
- · health education and promotion;
- dental, podiatry and pathology services;
- Aboriginal health services;
- women's, men's and children's health services;
- · pharmacy services;
- · medical imaging services; and
- Meals on Wheels.

## 02 PLANNING

## 02.01 Operational Models

#### **HOURS OF OPERATION**

The hours of operation will vary across zones within the MPS. It is important collocate all 24 hour operating services to improve efficiency and security (i.e. the residential areas should be contiguous with inpatient beds and emergency service areas).

Where emergency service does not provide a 24 hour seven day service, alternative arrangements will be established to manage after-hours emergencies.

Residential aged care and inpatient beds will operate 24 hours, seven days a week.

Community services will usually be restricted to a base set of up to 12 hours a day, five days a week. There may be some evening and Saturday usage. Visiting medical specialists and GP after-hours clinics will regularly provide services outside normal business hours including weekend clinics in the primary health and community health zone.

#### INPATIENT ACCOMMODATION

The MPS will have inpatient beds available for:

- patients requiring observation following medical or minor surgical procedures in the MPS, or as transfers ('step-down') from other centres;
- · postnatal care;
- · respite care; and
- · palliative care.

The extent of this need will be determined in the clinical service plan.

#### RESIDENTIAL CARE ACCOMMODATION

Facilities for high and low level care and respite care may be integrated or designed as distinct clusters:

- · high level care: requiring assistance with mobility, washing, eating and other everyday tasks; and
- low level care: minimal assistance required with everyday activities; still able to enjoy significant degrees of independence.

This accommodation will generally be provided as single bed rooms with dedicated ensuites and provide sufficient space to accommodate the residents' personal belongings. Some shared rooms may be provided to meet specific cultural and social needs of residents including couples.

However, rooms should not accommodate more than two residents (Department of Health and Ageing, Aged Care Certification Guidelines).

## **AMBULANCE SERVICES**

Ambulance services are an important and integral service provider especially in rural and remote areas. Increasingly, partnering initiatives are being implemented between ambulance services and MPS facilities to improve the care delivered to local communities.

A covered ambulance bay will be required but provision of a collocated ambulance station may be reflected in the service plan.

Members of the ambulance service should be involved throughout the capital planning process to provide input into operational policies and space requirements to deliver their service components.

#### **OUTDOOR AREAS**

Level, attractive, secure and easily accessible outdoor areas will be needed for residents. A minimum of about 100m2 in garden surroundings is recommended, the scale similar to a backyard. Landscaping should include local plant species.

A small courtyard may be suitable for patients in inpatient beds.

Outdoor furniture, fixtures and features should be provided to enable a range of outdoor activities including sitting, socialising, eating, strolling and gardening on raised beds. Sheltered shaded areas will provide protection from the sun, wind and rain. A small lockable garden shed will also be needed.

The needs of those with dementia will require special attention. Meandering paths should be provided and tree / shrub plantings will not impede lines of sight and resident observation. Ideally, these paths should provide a "destination". Paths should be wide enough to accommodate a resident and carer.

Perimeter fencing, while ensuring privacy and the security of residents, should be carefully selected in order to maintain a home-like environment and not obstruct view of surrounding activities and topography. Fences may be softened by treatments including hedges.

For further information refer to Alzheimer's Australia SA Inc., 2010, Gardens that Care: Planning Outdoor Environments for People with Dementia.

## 02.02 Operational Policies

#### **GENERAL**

Operational policies and service guidelines will vary between MPS units and between jurisdictions. They should be developed in consultation with stakeholders and reflect current and anticipated future practices. For further information refer to Part B: Section 80 General Requirements.

#### **FOOD SERVICES**

Food services models (cook fresh, cook chill, cook freeze) will need to be established so suitable kitchen and/or storage facilities can be provided.

Regardless of the planned food service system, some cooking facilities (oven, cooktop, microwave) and storage will be required within the kitchen to cater for individual needs, functions and in case deliveries are disrupted (e.g. flood).

It is essential that the food service has the flexibility to offer long term residents with a choice of meals and accommodate individual preferences. A common dining area will be provided to encourage residents to interact.

If a Meals on Wheels service is part of the planned MPS, this service will need to be accommodated as part of the kitchen design. This includes both storage and meals collection by volunteer services.

#### **LAUNDRY SERVICES**

It is assumed that clean laundry, sheets, towels etc. will be provided to the facility by an external supplier. In most instances, laundry for residents will be undertaken on-site as part of the overall service provided by support services staff.

#### **MAINTENANCE**

Maintenance services required by an MPS encompass general engineering and grounds management. Whether maintenance services are provided by staff or an external service, some facilities should be provided for equipment/tool storage and some on-site maintenance activities.

#### **MANAGEMENT OF DEATHS**

A mortuary must be included in the MPS where there is no local funeral director service. The mortuary will consist of a cool room and an adjacent parking space that is able to accommodate a funeral director vehicle. These facilities will be located in the service area of the MPS and allow for the discrete loading of the vehicle from the rear. It is expected that viewing of the deceased will occur in bedrooms.

Isolated MPS facilities may be cut-off for periods of time due to adverse weather conditions. A mortuary is therefore essential to manage deceased persons appropriately.

Cultural expectations and requirements associated with death and last rites in the community served by the MPS must also be considered. For example, the Aboriginal community might hold vigil over a seriously ill family member. Large numbers of people are common.

Cool rooms must be capable of accommodating bariatric cadavers safely.

#### MANAGEMENT OF MEDICAL EMERGENCIES

Clinical protocols will be available for initial treatment, stabilisation and observation of acutely ill persons prior to referral and transfer to a health service with a higher level of service. Critical care telehealth cameras are used for liaison and assessment purposes.

# MANAGEMENT OF SPECIFIC PATIENT/ CLIENT GROUPS Children

Children requiring short-term observation may be treated at the MPS. Those requiring acute treatment or inpatient care will generally be transferred to a nominated health service.

#### **Sexual Assault**

Victims of sexual assault who present to the MPS will be assessed by nursing staff. Nursing staff will then liaise within the LHD on-call service. Those requiring forensic examination will be transferred to the nominated health service.

#### Mental health

Many small towns and communities utilise stakeholders including health services, police, ambulance services and other community based organisations to develop protocols to assist manage those with mental health conditions.

In most cases, an MPS will not have an acute mental health unit located nearby and police may bring the client to the facility. Where the client is significantly agitated or violent, police should transfer the individual to a nominated centre with the resources and facilities to manage the patient safety.

Mental health clients presenting with mental health conditions will be assessed by nursing staff in a resuscitation/assessment/ holding bay. Staff will often use telehealth systems to link to a nominated centre for specialist advice regarding treatment. This is usually done in an interview/ meeting room so privacy is achieved. The patient is then discharged for management in the community or transferred to the nominated health centre for further assessment and admission.

#### **PHARMACY SERVICES**

A larger and wider range of pharmaceuticals (such as vaccines and snake antivenin) may be held to manage a range of events and conditions particular to the local rural or remote area. Pharmaceuticals should be stored in the clean utility room.

If an MPS provides chemotherapy services, consideration will need to be given to the supply and storage of cytotoxic medications.

Responsibility for the provision of medications for residents needs to be determined early in the planning process. Where the resident is responsible, allowance will be to be made to provide suitable storage for residents' medicines which will typically be provided by a local pharmacy. This may include storage systems such as blister packs, plastic 'packettes' (sachets) or 'dosette' boxes and/or storage of medications in patient bedrooms.

An MPS may also provide a range of pharmacy services to communities where no local pharmacy exists. In this instance a separate pharmacy store should be provided with a counter to a public corridor for the issue of prescription medications to the public. Storage will need to be carefully assessed along with the consideration of security issues with particular regard to theft, money handling etc.

Refer to local jurisdiction policies and to Pharmacy (HPU 560) for further information.

The provision of opioid dependency (or methadone) programs may be provided. Its location adjacent or near to ED with a discrete counter, will facilitate dispensing.

For further information refer to:

- · HPU 560 Pharmacy Unit; and
- Department of Health and Ageing, 2012, Guiding principles for medication management in residential aged care facilities.

#### THERAPY / REHABILITATION

Facilities suitable for ongoing rehabilitation (e.g. physiotherapy, occupational therapy) may be required as part of the services profile.

If rehabilitation facilities are needed, this space needs to be flexible to accommodate a range of additional functions such as antenatal classes, healthy lifestyle programs and other community based activities.

#### STERILIZING SERVICES

Where possible, disposable consumables and instruments should be used to reduce the requirement for reprocessing. Where instrument sterilization is required (e.g. oral health services), staff will generally bring sterile instruments with them and return items to the main health service centre for sterilization in line with local operational protocols.

#### **STORAGE - EQUIPMENT**

Equipment such as hoists, an ECG machine, and resuscitation trolley are best stored in or near point of use. A central equipment store will be needed for walking aids, commodes, shower chairs, slings and bed accessories.

Increasingly residents and their visitors may have their own electric wheelchairs and scooters. Provision for the parking and recharging of these vehicles ("gophers") is needed.

#### STORAGE - GENERAL BULK

The remoteness of some MPS facilities may necessitate the holding of larger than usual stock levels.

The bulk store will hold sterile consumables and related supplies and be located near the loading bay. The range of vehicles delivering supplies needs to be identified as part of the planning phase. The loading bay will be a secure area with authorised access only, and ideally CCTV-monitored particularly for out-of-hours deliveries.

Supplies will be decanted to local holding points (e.g. clean utility room).

#### **WASTE MANAGEMENT**

Operational policies associated with the management of all waste should be developed prior to the planning and design for waste holding areas.

A secured external waste bay is recommended to hold the following items:

- · general bagged waste in mobile garbage bins of identified sizes;
- · separate receptacles for glass, paper and plastics if recycling is practiced; and
- separate secure, air-conditioned bay for clinical waste holding.

#### **OFFICE SPACE**

The provision of office space should be in line with jurisdictional policies.

## 02.03 Planning Models

#### **LOCATION**

The design will facilitate secure access between separate facilities after normal business hours. This access arrangement may also facilitate visits between residents in both facilities (e.g. of an MPS is built on a site with an existing residential aged care unit).

#### **BUILDING SOLUTION**

A single storey building is assumed and eliminates the need for lifts and fire stairs. Where a two-storey building is unavoidable, every attempt should be made to limit residents having to access upper floors. The emergency, inpatient and residential areas should be located at ground level.

Design of residential facilities in particular, should be domestic in scale and appearance. Building design should be cognisant of the topography while providing optimal protection from extreme weather conditions (heat, cold, wind, and storms). Ideally, the application of solutions that can be sustained is ideal. For example "hi-tech" solutions may not be easily maintainable in rural and remote environments owing to access to spare parts or skilled technicians.

#### **CONFIGURATION**

An MPS facility is a complicated configuration of clinical and domestic spatial relationships. The MPS design should reflect the local topography and vantage Design and layout considerations include:

- collocating services operating 24 hours including acute, residential and emergency services to enable flexible staff cover, particularly after-hours;
- · collocating clinical support so that duplication is reduced;
- · minimising travel distances;
- avoiding long corridors (especially for areas providing dementia care). Where they cannot be avoided, resting spaces should be provided;
- · circulation corridors should facilitate staff observation and reflect work flows; and
- staff safety and security, especially during periods of low staffing levels (overnight and weekends), to ensure staff are not working in isolation from their colleagues.

## 02.04 Functional Areas

#### **FUNCTIONAL ZONES**

The MPS will comprise a number of interlinking zones and the composition of each zone will vary for each MPS depending on the service profile.

Zones should be arranged with regard to operational hours to maximise safety and security of patients, residents and staff. This arrangement will also enable building services, such as air-handling and security/ access, to be managed most effectively. Zones within the MPS will include:

- entry / reception / waiting area;
- · treatment and imaging area;
- · primary/ ambulatory care area;
- · residential areas:
- · inpatient areas;
- clinical support areas;
- · non-clinical support areas and mortuary; and
- staff amenities.

Optional areas such as staff residential accommodation for visiting staff, those living remotely and visiting students.

#### **ENTRY / RECEPTION / WAITING AREAS**

This zone will include the main public entry to the facility, a reception, waiting space including a play area and public amenities. The waiting areas will serve emergency services area and primary/ ambulatory care areas.

In small facilities with limited staff numbers (especially after-hours), the staff station and reception may be integrated if it allows for staff observation of clinical areas.

The reception should oversee the main entry and waiting areas and monitor and direct traffic to the primary/ ambulatory care areas and inpatient areas.

The zone may also include the office for the site manager in a discrete location.

Access to an outdoor area from the waiting area is desirable. This space can also be used as flexible waiting space during periods of high demand.

#### **PRIMARY / AMBULATORY CARE AREAS**

The primary care area will comprise a range of shared and bookable consult, interview and treatment rooms. Numbers will be based on an analysis of projected activity. In addition, the area may contain an activity room, gym, and other meeting rooms. Office space for related staff will usually be collocated.

Should oral health services be provided, this service will be located within this zone. Where service provision is low, a treatment room may be provided that can accommodate the needs of both oral health and other services may be an option. The room details for this space are detailed in the non-standard components of HPU 280 Oral Health Unit.

Rooms will generally not be service specific, with the exception of hearing assessment rooms, and dental and ophthalmology rooms which have specific requirements.

Storage in lockable cupboards nearby these rooms can provide space for service specific equipment and supplies.

A patient toilet may be provided in this zone for services requiring discrete access to a toilet.

The larger rooms, such as the activity room, should be located so it can manage large numbers of visitors without causing disruption to other collocated rooms such as interview rooms.

## **EMERGENCY SERVICES AREA**

This zone will be accessed by patients from two controlled points including the main entry and ambulance entry. Staff will need a line of sight over both entrances.

The area will comprise:

- · triage room; and
- resuscitation/ treatment/ holding room.

Provision of a critical care camera may be provided within the resuscitation/ treatment/ holding room to facilitate consultation with medical staff in other centres prior to transfer.

This space should be easily observable by staff.

A separate quiet area (a meeting room) will be required if videoconferencing is utilised to link with other centres for assessment and consultation services such as mental health, oncology etc. Equipment should ideally be placed on a mobile trolley for easy positioning and stored in a lockable cupboard.

The area requires ready access clinical support spaces including utilities.

A decontamination shower, usually located near the ambulance bay, will be provided in case of contamination, particularly chemical contamination arising from agricultural activities.

The emergency treatment area should be designed to prevent unauthorised access to residential and other areas. It must have two points of access/egress to avoid entrapment, particularly after-hours.

#### **INPATIENT CARE AREA**

This area will consist of bedrooms and ensuites. Inpatient bedrooms will be adjacent to the staff station and have ready access to utilities and bays for storage of equipment and linen.

Consideration may also be given to the ability of spaces to transition from inpatient to residential care as demands change over time.

Ideally, these patients will have access to an outdoor area.

Where respite beds are provided, they should have easy access to day areas located within the residential area.

#### **RESIDENTIAL AGED CARE**

The MPS will accommodate a wide range of aged persons who may require high care, low care and respite or dementia care accommodation. This cluster should be planned and designed to adapt and support a range of care requirements as detailed in the Services Plan. Facilities will comprise:

- · bedrooms and dedicated ensuites:
- lounge / activity/ dining rooms, incorporating kitchenette so residents can make their own refreshments;
- · access to alternate lounge/ sitting areas;
- · access to a bathroom; and
- a range of storage for resident property, equipment and linen.

Where a bathroom is provided, the bath should be height-adjustable with space to use a resident hoist. Alternatively a mobile bath may be used that can be brought to the residents' bedroom.

Outdoor space will be accessed from the main lounge/dining area and will be easily supervised by staff. Staff will access the clinical support area for utility and related rooms.

While some residents may wish to maintain their independence a separate entrance is not recommended, as staff must be aware of where residents are at any given time.

#### **CLINICAL SUPPORT AREAS**

This zone will provide shared support for all clinical/ residential areas located within the MPS and may include:

- staff station:
- medical imaging room and CR image reader bench space;
- pathology bay:
- clean utility room, including medications;
- · dirty utility room; and
- bay linen.

The location of the medical imaging room will need to provide access to patients and residents from all clinical areas of the facility.

The location of rooms such as dirty utility rooms will ideally ensure that dirty equipment does not travel through public areas.

#### SUPPORT AREA AND MORTUARY

These areas will usually include:

- · kitchen including cold and dry storage;
- storage for clinical supplies etc.;
- mortuary including body holding and access to a car space;
- waste holding:
- · cleaners room; and
- laundry, including separate areas for the storage for clean and dirty linen.

Shared rooms, such as cleaners rooms, should be located centrally to reduce travel distances.

#### **STAFF AMENITIES**

Staff amenities will include a staff room, property bay, toilets and shower. These amenities will be located so staff can move easily to and from patient care areas. Ideally staff will have access to an outdoor courtyard. The staff room is an important amenity in a small facility providing a place for the staff to meet for breaks, discuss their day and offer support. Such informal communication is an essential aspect of building a united

#### **Australasian Health Facility Guidelines**

team and fostering collaboration. Staff rooms should be sized to enable use by a majority of the staff on duty during meal breaks.

Staff lockers may be stored within a dedicated bay or located in the staff room.

## 02.05 Functional Relationships

#### **EXTERNAL**

An MPS is usually located on a stand-alone site and collocations are limited. Where an existing residential aged care facility or ambulance station exists, attempts should be made to collocate the MPS.

#### **INTERNAL**

Ideally, patients/residents being transported in and around the facility should not need to travel through public areas or primary care area.

Staff working in the primary care area should not have to travel through public areas to reach support rooms such as a dirty utility room. Where this unavoidable there may be justification for a sub-dirty utility room. The kitchen and clinical areas should not be located near the mortuary.

Refer to the Functional Relationship Diagram in the Appendices for further information.

## 03 DESIGN

## 03.01 Accessibility

#### **EXTERNAL**

Vehicular access to the MPS site should be streamed to separate staff and visitor parking from access for deliveries, ambulances and funeral director vehicles.

A single point of public entry to the facility should be provided. An ambulance entry will be provided for emergency vehicles.

A discreet entry to the mortuary will be required.

Should an ambulance station be collocated, a separate and secure staff entry point will be provided.

#### **INTERNAL**

Links between the various zones should be discrete and restrict unauthorised access by residents and the public, including the need to secure some areas after-hours.

## 03.02 Parking

The MPS should provide visitor and staff parking.

Consultation with the community and partner services and agencies may highlight the need for parking to accommodate a community bus both overnight and during the day; mobile library vehicles and screening service buses. Access to power (usually Phase 3) may also be needed to support mobile screening services.

A secure service vehicle compound may be considered and will depend on an assessment of risk. For further information regarding staff parking, refer to Part C: Section 790, Safety and Security Precautions.

## 03.03 Disaster Planning

A store for disaster equipment will be provided within the airlock of the ambulance entry to the emergency services zone.

In the case of fire, a water supply may be needed for firefighting including associated pumps particularly in areas with no reticulated water supply. Water tanks where installed need to be secured against damage, vandalism, theft etc.

For information regarding general disaster planning/natural disaster information refer to local jurisdiction disaster management plans and to:

- · Part C: Design for Access, Mobility, OHS and Security, Space Standards and Dimensions; and
- Part B: Section 80 General Requirements.

#### 03.04 Infection Control

Hand basins have been omitted from the residential care bedrooms to promote a domestic environment but staff will need access to hand hygiene options in alcoves outside bedrooms, and/ or hand basins in ensuites. Single bedded room/s will be provided for patients requiring isolation.

For further information refer to Part D: Infection Prevention and Control.

#### 03.05 Environmental Considerations

#### **ACOUSTICS**

Noise is a constant source of complaint from residents and may even be detrimental to their condition. Account should be taken of potential noise sources both within the facility, such as equipment, trolleys, disturbed or noisy residents and from outside the unit, such as deliveries, traffic, offices, meeting rooms,

etc. Nurse call systems should minimise constant and annoying noise while still notifying staff when their assistance is required.

Deliveries may occur after-hours. The noise associated with delivery trucks and the off-loading of supplies (e.g. gas bottles) is particularly disturbing. The design of the unit should locate bedrooms away from the services yard and delivery point is crucial.

Strategies may include the use of:

- masonry walls may be employed for serviceability and reduction in acoustic transmission;
- · acoustic ceiling tiles; and
- carpet.

#### LIGHTING

The lighting system for an MPS facility should be designed to:

- maximise the use of daylight throughout the facility including use of skylights;
- be domestic in residential areas, including corridors, and positioned to eliminate the possibility
  of glare while still being suitable for reading tasks and handicrafts. The use of surface-mounted
  fluorescent fittings should be avoided; their ambience is not conducive to a domestic setting. Wall
  lights, recessed down-lights and wall-mounted up-lighting create a more pleasant atmosphere
  and de-institutionalise the facility. Large switches should be included in all light switches to
  facilitate use by residents with arthritis;
- provide night lighting at 400 millimetres from the floor in residential and inpatient areas to ensure appropriate night vision especially for residents walking to and from the toilet. A night light in the ensuite can be helpful;
- connect to a photoelectric cell at all external doors and lighting in car parks and courtyards to assist maintaining security after dark. Lighting must be sufficient for facial recognition where CCTV cameras are installed. Lighting controls must be inside the facility in a secure location;
- comply with normal health care standards in inpatient areas; and
- · be easy to clean and maintain.

#### PRIVACY AND OBSERVATION

One of the major conflicts in residential and resident accommodation design is to allow both residents/ residents and staff to be able to see each other while also ensuring resident/resident privacy. The different styles of design offer varying degrees of visibility/observation. Observation and visibility also have security implications, e.g. access control.

Factors that can improve privacy include:

- · locating the bed so that the resident is not in full line of sight from the door;
- · providing bed screens so that a resident undergoing treatment is protected from view; and
- locating the ensuite so that privacy and safety are maintained for residents. Residents should see
  the ensuite from their bed.

It is proposed that the following parameters be used when developing the design of the various clusters:

- spaces allocated for inpatient care and observation should be adjacent or close to the staff station for continual observation. It is assumed that acutely ill adults and children will be held in the treatment/resuscitation area under continual observation while a transfer is organised to a higher centre; and
- residential spaces should maximise privacy while allowing for regular contact as required as well as immediate contact via a nurse call system.

The design should take into consideration the ability of the proposed number of staff to manage the residential and inpatient areas after-hours.

#### INTERIOR DÉCOR

The selected décor should reflect the age of residents. Special consideration should be given to the cultural needs of the local multicultural population and Aboriginal communities. Reflecting cultural requirements in the design of the unit may encourage attendance and use of the MPS by the target population. Consider the following:

• some colours, particularly the bold primaries and green should be avoided, particularly in areas where clinical observation occurs;

- extremes of colour and patterns such as bold checks/stripes should not be used;
- there should be clearly discernible difference between wall and floor finishes; and
- persons with dementia can be assisted with path-finding and orientation by using signal colours to
  encourage a particular direction to follow, continuity of floor coverings with changes in pattern or
  colour and conspicuous joints to be avoided and to identify key amenities (e.g. a purple door can
  denote a bedroom while a yellow door can denote a bathroom or toilet). A toilet seat, with a colour
  different to that of the walls and cistern can promote easy access.

#### **ENVIRONMENTAL SUSTAINABILITY**

The planning, design and development of the MPS will target a four star Green Star rating as detailed in the Green Star Rating Tools for healthcare buildings developed by the Green Building Council of Australia (GBCA). Each jurisdiction is likely to have a different approach and local policies will apply. It is suggested that consideration be given to a wide range of factors including:

- · building orientation;
- · water usage and harvesting;
- use of outdoor areas to mitigate heat/cold loads;
- building materials to absorb or repel heat and cold as required;
- · passive air-conditioning capacities;
- · sun shading to reduce air-conditioning loads;
- · impacts of shallow and deep building mass design;
- · recycling capacities across a full range of waste products; and
- types of energy to be used and how energy is to be generated and procured.

Applying environmental sustainability solutions may require additional consideration in remote locations. These considerations may include maintenance and servicing accessibility, fluctuations in power supply, maintenance of gutters and downpipes and water pressure.

For information regarding the Green Star Rating Tool see Green Building Council of Australia (GBCA), 2009, Green Star Rating Tool - Healthcare v1.

## 03.06 Space Standards and Components

#### **ERGONOMICS**

Facilities should be designed and built in such a way that residents and patients, staff and visitors are not exposed to avoidable risk of injury.

The management of bariatric residents will be considered as part of a facility design. This has implications for room sizes, equipment choices and other design features where spatial allowances are critical. For more details refer to Section 730.12 in Part C: Section 730, Human Engineering.

#### **HUMAN ENGINEERING**

Human engineering covers those aspects of design that permit effective, safe and dignified use of facilities by all people including those with disabilities.

For more details refer to Part C: Section 790, Safety and Security Precautions.

#### SIGNAGE AND WAYFINDING

The MPS will attract a diverse group of people in terms of residents, patients, visitors, staff and visiting personnel. The general use of symbolic signage is recommended for ease of recognition and understanding, especially for non-English speaking visitors.

Other cues to assist path-finding include: distinctive door colours, cutting designs into vinyl and carpeted areas, different wall colours to denote changes in zones, and distinctive lighting patterns.

Dementia patients may also benefit from strategies that promote recognition, such as allocating motifs, design features or fabric to individual clusters.

Wall-mounted signage should provide contrasting backgrounds to the adjacent wall colour. Ceiling-mounted suspended signage may be used but whichever is selected, it must be clearly visible to people in wheelchairs.

Refer to Department of Health, NSW, 2009, Technical Series 2 - Wayfinding for Health Facilities.

## **ACCESS AND MOBILITY**

For relevant information regarding access and mobility refer to:

- · Part C: Section 730, Human Engineering; and
- Standards Australia, 2010, AS 1428 (Set) 2010 Design for access and mobility Set (SAI Global).

#### **DOORS**

Doorways must be sufficiently wide and high to permit the manoeuvring of beds, wheelchairs, trolleys and equipment without risk of damage to the doorway or the item being moved, and without creating manual handling risks.

Perimeter doors, and some internal doors, should allow good visibility of persons or possible obstructions on the other side. Observation panels can be used.

Doors leading from activity rooms should allow easy access to garden areas and walking paths.

Screened doorways are a requirement in rural facilities to manage both insects and snakes.

Bedroom doors, particularly adjoining doors, should be painted in different colours or with some other means of identification for residents. For privacy of all residents, and to meet cultural sensitivities of Aboriginal communities, bedroom doors should be staggered across corridors to ensure they do not open directly opposite one another.

Doors to staff-only areas, or rooms that staff do not wish residents to enter, should be painted in the same colour as the walls.

The needs of residents/residents, visitors and staff with disabilities need to be considered with provision of hold-open or delayed closing devices. Heavy doors that are difficult to for aged and/or disabled person to open should be avoided.

For more information also refer to Part C: Design for Access, Mobility, OHS and Security, Space Standards and Dimensions.

#### **WINDOWS**

The design and number of windows should maximise natural light.

Other considerations include:

- all windows should open to allow residents access to fresh air during temperate periods. This is of
  particular relevance for older residents who express a preference for natural ventilation, however,
  the extent of the opening should be restricted;
- · all opening windows must be fitted with insect screens;
- the height of the window sills should enable residents who are seated or in their beds to be able to see views to the outside:
- glare and excessive heat gain or loss needs to be controlled;
- · outside lighting can be used to provide an outlook at night;
- · maintaining the security and privacy of residents; and
- safety glass should be installed in areas where there is a high risk of damage.

#### WINDOW TREATMENTS

Windows may require either or both external and internal treatments.

Options for consideration include sun shading, blinds and curtains. These may be for resident and patient comfort, light control, privacy, to produce a home-like atmosphere and for energy conservation. Fabrics and materials must meet fire safety requirements.

Pull-down cords should be avoided as a potential safety risk to children and residents with cognitive impairment.

## 03.07 Safety and Security

## **SAFETY**

Enhance safety through design, the methods of construction and use of materials, and also through choice of the fittings, fixtures and equipment.

For further information refer to:

- Part C: Design for Access, Mobility, OHS and Security, Space Standards and Dimensions; and
- Department of Health and Ageing, 2000, The Guide: Implementing Occupational Health and Safety in Residential Aged Care.

#### 03.08 Finishes

#### **GENERAL**

Finishes in this context refer to walls, floors, windows and ceilings.

Refer to Part C: Section 710, Space Standards and Dimensions.

#### **FLOOR FINISHES**

Floor coverings must:

- · be durable:
- be noise-absorbent with enhanced acoustic properties;
- · not retain odours from spills;
- · be easily cleaned and maintained;
- enable residents with walking aids to move with ease;
- · enable residents with shuffling gaits to walk with ease;
- be subtle in tone as glaring contrasts are challenging for those with Parkinson's disease who have limited depth perception;
- allow for easy movement of trolleys and mobile equipment:
- allow for the easy movement of patients being transferred by staff in wheelchairs, commodes, hoists and beds:
- be comfortable and cushioned underfoot (particularly for staff walking long distances); and
- · meet fire rating indices.

Carpet is considered to be a more 'domestic' in nature than other materials of resilient finish such as linoleum, vinyl and rubber but there are many products available that achieve a non-institutional ambience in residential aged care environments.

With regard to carpet finishes, it must not:

- · hinder the movement of mobile equipment; or
- be located in areas where body substance spills are likely.

Given the population of patients and residents using the facility, shiny floor surfaces should be avoided as should significant changes in floor colours.

Non-slip flooring must be provided in wet areas.

### **CEILING FINISHES**

Selection of ceiling finishes shall satisfy design, acoustics, durability and security requirements and meet the criteria for satisfactory fire index ratings. In most areas, acoustic tiles will provide a suitable finish.

## 03.09 Fixtures, Fittings & Equipment

The Room Data and Room Layout Sheets in the Australasian Health Facility Guidelines contain standard rooms as described in this HPU.

For further detailed information refer to the Room Data Sheets (RDS) and Room Layout Sheets (RLS), and to:

- · Part C: Section 710, Design for Access, Mobility, OHS and Security; and
- Part F: Section 680 Furniture Fittings and Equipment.

## 03.10 Building Service Requirements

## **COMMUNICATION SYSTEMS**

Planning communication systems in MPS units will need to consider:

- a nurse call system including nurse call, staff assist and emergency call functions;
- · duress systems;
- · alarm systems where necessary;
- resident and patient monitoring including movement detection;

- telephone services for residents, patients, staff and visitors. The extent of provision, location, type (i.e. fixed or portable) and charging will need to be addressed by the operational policies;
- · computer and internet access for staff;
- laptop computer and tablet Wi-Fi connectivity for residents in rooms and around the unit; and
- teleconferencing or telehealth facilities that are used for staff education, management and clinical services

#### **TELEHEALTH**

Guidelines covering room layout, room design, lighting and the viewing environment are included for information. Consider options for:

- a critical care camera in resuscitation emergency rooms;
- videoconferencing links with other agencies such as a meeting/ interview room designated for mental health assessments and follow-up consultations; and
- telephone conferencing from any phone nominated with the capacity for hands free operation.

Mobile telehealth systems may provide a flexible solution in the MPS setting.

#### **MEDICAL AND OTHER GASES**

Provide:

- · piped gases and suction to resuscitation and inpatient areas;
- portable medical gases (oxygen and medical air) in cylinders on easily moveable trolleys available for use in residential and subacute areas;
- adequate storage facilities for portable gas cylinders providing separation of filled and empty cylinders; and
- mobile suction units on trolleys that can be easily taken to the bedside as required.

LPG tanks will be required in areas with no piped gas. These tanks will be located outside and be secured from unauthorised access.

#### **AIR HANDLING**

Where possible, design features should maximise the use of natural cooling and heating.

Air-conditioning will be provided throughout the MPS. Evaporative type systems do not cope where ambient temperatures are above 40oC. The use of bore water in many rural areas causes considerable corrosion to the plant.

A mixture of ducted systems to the general areas and split unit systems to residential areas (that can be individually controlled) should be considered.

Individual air-conditioning units must be secured and not accessible to the general public.

Should clinical waste removal be infrequent (exceeding 48 hours), the waste will need to be cooled.

#### **POWER SUPPLY**

Rural areas are prone to failures in the electrical grid system. MPS facilities must have emergency generators with sufficient capacity to service lighting and essential power requirements.

In addition to the standard services requiring emergency power supply, emergency power points must supply electrically assisted beds and lounge chairs.

Emergency generators must be secure and start automatically. Manual start controls should be located within the building so staff are not required to go outside to turn on the emergency power.

## 04 COMPONENTS OF THE UNIT

## 04.01 Standard Components

Rooms / spaces are defined as:

- standard components (SC) which refer to rooms / spaces for which room data sheets, room layout sheets (drawings) and textual description have been developed;
- standard components derived rooms are rooms, based on a SC but they vary in size. In these instances, the standard component will form the broad room 'brief' and room size and contents will be scaled to meet the service requirement;
- non-standard components which are unique rooms that are usually service-specific and not common.

The standard component types are listed in the attached Schedule of Accommodation.

The current Standard Components can be found at: <a href="www.healthfacilityguidelines.com.au/standard-components">www.healthfacilityguidelines.com.au/standard-components</a>

## 04.02 Non-Standard Components

Information relating to Non-Standard Components is detailed below.

#### **ACTIVITY ROOM**

## **Description and Function**

The activity room provides a large space that can be used for community and resident activities (e.g. bingo and craft groups). This room will have tables and chairs suitable for use by the aged and/or disabled. In addition, storage will be provided within the room so that equipment can be put away and secured when not in use.

The room will be lockable so it can be secured when not in use.

## **Location and Relationships**

This room will be located on the perimeter of the primary/ ambulatory care zone but be accessible from the residential zone. As large groups may use this space, it should be located close to the entry/ reception/ waiting zone so groups can come and go easily and with minimal disruption.

A beverage bay and toilets should be located nearby.

#### Considerations

An external outlook and views is desirable.

Equipment selected for the room should be easily moved so that the room might be used for other functions.

## AIRLOCK - AMBULANCE ENTRY

#### **Description and Function**

This airlock will be sized to include a lockable cupboard to be used for storage of equipment used in disaster situations. This storage will be lockable.

#### **AMBULANCE BAY**

## **Description and Function**

The ambulance entry should not be directly into the treatment area but via an alcove or corridor, to facilitate elective transfers in and out of the MPS also being undertaken in this area.

This area should comply with the design requirements of the relevant state or territory ambulance service. Design specifications will be required for the canopy height, width of driveway, preferred access (side or rear decanting/loading patterns), lighting and signage.

The bay will also accommodate an outdoor decontamination shower.

#### **Location and Relationships**

A covered ambulance bay shall provide direct access into the emergency area.

Officers may also be transferring patients to and from other inpatient and residential zones within the MPS so internal travel routes to these areas needs to be considered in the design.

#### Considerations

Should an ambulance service be collocated, additional space will be required.

#### **RESIDENTIAL BEDROOM - INCLUDING 'SPECIAL'**

#### **Description and Function**

Personal living / bedroom space for residents. Some double rooms or connected rooms may be provided for use by couples.

Size and configuration should permit residents to bring in personal belongings and furniture from home to personalise their rooms and also to park and charge their own wheelchair.

Ideally the rooms should have views but no direct access to the outdoors unless a secure courtyard is oversighted by staff.

## **Location and Relationships**

Direct access to the ensuite from inside the room will be required.

#### Considerations

The following features can create the desired environment:

- domestic fittings such as a wall unit to hold personal belongings and a television;
- · wardrobe with drawers and hanging space and mirror;
- electric height adjustable beds which may be used in conjunction with a crash mat where a resident is at-risk of falls:
- personal items of furniture such as a bedside table and armchair;
- · drapes and soft furnishings consistent with fire safety requirements; and
- low window sill heights (no higher than 600 millimetres above finished floor level) to permit views to outdoor areas from bed and chair.

Rooms used for the care of bariatric residents will require bariatric specific furniture and fittings.

#### QUIET SITTING AREAS AND ROOMS

Small home-like spaces are proposed for the use of residents for quiet contemplation and activities, or as discreet semi-private areas with family and friends. An outlook is desirable.

#### **THERAPY AREA**

#### **Description and Function**

This space will be required for MPSs that provide a dedicated physiotherapy, diversion therapy and/or occupational therapy service. For facilities that provide an intermittent service other spaces, such as the conference/meeting rooms, consult and interview rooms may be adequate.

#### **Location and Relationships**

The following points should be addressed:

- · ready access from main entry and clinic areas:
- · ready access to an accessible toilet;
- ready access to cold water and other refreshments if residents are in the unit for any extended time: and
- access to a rest area between treatments.

#### Considerations

Storage cupboards may be needed to hold equipment when not in use.

#### TRIAGE ROOM

#### **Description and Function**

Used by nursing staff to interview and examine patients who present for emergency care. The room will contain a desk with PC, two visitor chairs, and an examination couch. The room will also include limited clinical supplies and equipment (e.g. diagnostics).

#### **Location and Relationships**

Located so that staff have a line of site of both ambulance and ambulant patient entries while still providing privacy from public areas such as waiting and reception. Locate resuscitation bay nearby.

#### X-RAY ROOM - MOBILE

#### **Description and Function**

This space is used to take images and store the mobile x-ray unit. The room may also include a curtained area so that patients can change.

## **Location and Relationships**

The room may be accessed by patient attending for emergency care, planned ambulatory care and by inpatients and residents. The location should provide access by all of these groups. Collocate with the CR Reader bay.

#### Considerations

A CR unit is a more cost effective solution and when combined with a CR reader, images can be converted to a digital form for reading and storage.

The room will need to accommodate an inpatient bed should inpatients/ residents be transported on their bed.

Shielding may not be required and will be dependent on the service volumes. Refer to jurisdictional requirements for radiation safety and shielding requirements.

#### **CR READER BAY**

#### **Description and Function**

A space to store a table top CR reader used to convert images to the digital form. This will make the images electronic so that the can be read remotely and stored electronically. This unit will need power and data.

#### **Location and Relationships**

Collocate with the x-ray room.

## **ENSUITE - RESIDENTIAL**

#### **Description and Function**

The ensuite will be consistent with the Standard Component but include:

- toilets should be located in the centre of the mounting wall to allow for full assistance from staff, with drop-down grab rails on either side;
- the height of the toilet should be approximately 60 millimetres higher than standard height to facilitate easier access by residents. This increase in height can be achieved by using a standard bowl with an elevated seat;
- · tap ware and other fittings should be easy for residents to use; and
- grab rails should be located near and parallel to the doorways of ensuites as this is the first point
  of contact for residents as they enter. Doors should open outwards and staff must be able to
  unlock the door from outside.

## **LOUNGE - RESIDENT**

## **Description and Function**

A lounge area where residents may read, watch TV, participate in activities and entertain visitors. Comfortable seating, suitable for the aged/disabled, is needed along with domestic style storage for books, magazines etc. The space may also need to accommodate residents in wheelchairs and large mobile air comfort "princess" chairs.

#### **Location and Relationships**

The lounge may be collocated with the dining area. Ideally patients should be able to see this space when they exit their rooms. This space will also provide access to an outdoor courtyard.

#### RESIDENT LOUNGE/ MULTIPURPOSE ROOM

#### **Description and Function**

A multipurpose area where residents may meet with their family and friends for a catch-up, a meal or a special event. It will include lounge chairs and a small dining room and chairs.

#### **Location and Relationships**

The lounge will be located ideally in a separate location from the main lounge/ dining areas. Ideally, a nice outlook is desirable.

#### **DINING - RESIDENTIAL**

#### **Description and Function**

A dining area, used by residents and their family and friends for meals and recreational/diversional therapy activities. The room should be sized to accommodate all residents in addition to visitors and staff who may be assisting with feeding. Small tables seating up to six should be provided, rather than long benches. The furniture should be suitable for the aged/ disabled. Tables with a recessed edge to accommodate large air comfort chairs and wheelchairs should be considered.

#### **Location and Relationships**

Collocate the kitchenette.

#### **KITCHENETTE**

#### **Description and Function**

The kitchenette will provide storage, bench space, a refrigerator, a boiling water/ chill water unit and sink. This space will be used by staff, residents and their visitors to prepare drinks and snacks (e.g. birthday cake).

#### **Location and Relationships**

Located in the dining area.

#### **Considerations**

A safety mechanism may be needed on the boiling water unit to prevent injury. An alternative is provision of a kettle as this is easily recognised by residents.

#### **KITCHEN**

## **Description and Function**

A kitchen used to produce patient meals for those in overnight accommodation. The size and scale will be dependent on the model used (cook-chill or fresh cook).

#### **Location and Relationships**

The kitchen should be located in the support zone nearby the loading bay so that foodstuffs etc. can be delivered and waste removed easily.

## Considerations

Clean and dirty flows will have to be managed to ensure food safety is maximised. Large kitchen items, such as island benches, are moveable.

Carving knives should be stored in a lockable draw.

#### STORE - DIRTY AND CLEAN LINEN

## **Description and Function**

Two separate storage areas – clean and dirty, will be required to:

- · store some clean linen prior to it being decanted to bay-linen; and
- · store dirty linen before it collected by the linen contractor.

#### **Location and Relationships**

These rooms should be located in the support zone nearby the loading bay so that foodstuffs etc. can be delivered and waste removed easily.

#### **LAUNDRY**

#### **Description and Function**

A laundry will be needed so that resident clothing can be washed, dried and ironed. The room will be organised to facilitate a dirty to clean flow where dirty linen is held, then washed in washing machines. The clean linen is then either hung on the clothesline or dried in commercial driers. The linen is then ironed and/or sorted ready for return to residents. This is normally done on a purpose designed trolley with compartments.

#### **Location and Relationships**

These rooms should be located in the support zone near the loading bay so that linen can be delivered and dirty linen removed easily. If clothes are hung on a line, direct access from the laundry to this line will be needed.

#### Considerations

Manual handling should be considered when selecting equipment and storage solutions so injury is avoided. Access will be provided to a small write-up area where a significant in-house laundry service is provided.

#### STORE - FLAMMABLE

## **Description and Function**

A lockable store for flammable chemicals etc. Size will be dependent on materials needing to be stored.

#### **Location and Relationships**

Located in the service compound.

#### STORE - MEDICAL GASES

### **Description and Function**

This store should be locked and accessed by authorised staff only. Bottles should be separated (i.e. empty and full bottles).

#### **Location and Relationships**

Located in the service compound.

## WASTE HOLDING - GENERAL AND CLINICAL

## **Description and Function**

This space will be located outside in an area that is easily accessible by waste management services. General and clinical waste will be separated. Bins will be located in a lockable caged area. The location for clinical waste will depend on the solution (i.e. stored in an air conditioned room or frozen).

#### **Location and Relationships**

Easily accessed from the support zone and waste trucks. Considerations An area will also be needed to wash bins. This area should be bunded to prevent run off of waste.

## **AX APPENDICES**

## **AX.01 Schedule of Accommodation**

A Schedule of Accommodation is detailed below.

The 'Room/ Space' column describes each room or space within the Unit. Some rooms are identified as 'Standard Components' (SC) or as having a corresponding room which can be derived from a SC. These rooms are described as 'Standard Components –Derived' (SC-D). The 'SD/SD-C' column identifies these rooms and relevant room codes and names are provided.

All other rooms are non-standard and will need to be briefed using relevant functional and operational information provided in this HPU.

In some cases, Room/ Spaces are described as 'Optional' or 'o'. Inclusion of this Room/ Space will be dependent on a range of factors such as operational policies or clinical services planning.

#### **ENTRY / RECEPTION**

AusHFG Room Code	Room / Space	SC / SC-D	Qty x m2	Remarks
AIRLE-10	Airlock - Entry, 10m2	Yes	1 x 10	
WAIT-10	Waiting	Yes	1 x 18	Single waiting zone to support ED, Ambulatory Care and acute/ residential areas The size of waiting area is indicative only and the space allocation will be dependent on service types and volumes. In selected jurisdictions, a separate waiting area may be provided if a GP service is collocated with the MPS.
PLAP-10	Play Area - Paediatric	Yes	1 x 10	As above
RECL-10	Reception / Clerical	Yes	1 x 9	1 staff member
BPH	Bay - Public Telephone	Yes	1 x 2	1 only phone
BVM-3	Bay – Vending Machines	Yes	1 x 3	Optional. Assumes 2 machines. Place in a location where noise generated by the machines is minimised.
WCAC	Toilet - Accessible, 6m2	Yes	1 x 6	Includes baby change
WCPU-3	Toilet - Public, 3m2	Yes	1 x 3	
OFF-2P	Office - 2 Person Shared, 12m2	Yes	1 x 12	General administration. Dependent on staffing profile.
OFF-S9	Office - Single Person, 9m2	Yes	1 x 12	Health Service Manager
STFS-20	Store - Files, 20m,2	Yes	1 x 20	Medical records shelving or compactus

#### PRIMARY / AMBULATORY CARE ZONE

AusHFG Room Code	Room / Space	SC / SC-D	Qty x m2	Remarks
CONS	Consult Room	Yes	14	Additional area for paediatrics/ maternity. Number will depend on service plan (Note: suggest all area sized at 14m2 as the numbers are usually low and this is a flexible size).
WCPT	Toilet - Patient, 4m2	Yes	1 x 4	Located near consult / treatment rooms. For public toilets use Toilet - Patient and toilets at entry /reception.
TRMT	Treatment Room	Yes	1 x 14	Optional. May be required for allied health treatment or wound care.
INTF	Interview Room	Yes	1 x 12	
MEET-L-30	Meeting Room, 30m2	Yes	1 x 30	Telehealth, video conferencing, staff education
0	Activity Room		1 x 50	Planned for education and community group activities.
BBEV-OP	Bay - Beverage, Open Plan, 4m2	Yes	1 x 4	
×	Office - Workstation, 5.5m2		5.5	No. dependent on staffing profile
8	Office - Workstation, 4.4m2		4.4	No. dependent on staffing profile
PROP-2	Property Bay - Staff	Yes	1 x 2	
STGN-9	Store - General	Yes	1 x 10	Or cupboards

#### TREATMENT AND IMAGING ZONE

AusHFG Room Code	Room / Space	SC / SC-D	Qty x m2	Remarks
à	Ambulance Bay		1	Assuming no station. Size will depend on number of vehicles. Consultation with ASNSW required.
5	Airlock - Ambulance Entry		1 x 12	Includes disaster store
	Resuscitation / Treatment / Holding		1 x 16	May be used for minor procedures. Increase to 32m2 if two spaces are needed.
	Triage Room		1 x 12	(3)
OFF-WI-3	Office - Write-Up, 3m2	Yes	1 x 3	NA SECTION AND ADDRESS OF THE PROPERTY OF THE
X.	X-Ray Room (Mobile)		1 x 14	Optional
	Bay - CR Reader		1 x 3	Optional +/- PACS viewing or bench
BMEQ-4	Bay - Mobile Equipment, 4m2	Yes	1 x 4	2
BRES	Bay - Resuscitation	Yes	1 x 1.5	Adjacent to Resuscitation/ Treatment/ Holding

## INPATIENT ZONE (4 BEDS)

AusHFG Room Code	Room / Space	SC / SC-D	Qty x m2	Remarks
1BR-SP-A	1 Bed Room - Special, 18m2	Yes	1 x 18	Management of bariatric patients
ENS-SP	Ensuite - Special, 6m2	Yes	1 x 6	Management of bariatric patients
1BR-ST	1 Bed Room, 15m2	Yes	3 x 15	
ENS-ST	Ensuite - Standard	Yes	3 x 5	
BHWS-PPE	Bay - Hand Washing - PPE	Yes	2 x 1.5	As per Part D. Locate outside of pair of 1 Bed Rooms.
BMEQ-4	Bay - Mobile Equipment, 4m2	Yes	1 x 4	

#### **RESIDENTIAL ZONE (12 BEDS)**

AusHFG Room Code	Room / Space	SC / SC-D	Qty x m2	Remarks
	1 Bed Room - Special (residential)		1 x 18	
67A	Ensuite - Super (residential)		1 x 6	
17. 15.	1 Bed Room (residential)		9 x 15	35 y
	2 Bed Room (residential)		1 x 25	Optional
ev.	Ensuite (residential)		10 x 5	2
77 50	Lounge - Resident		1 x 36	3m2 per resident
56	Dining - Resident		1 x 24	2m2 per resident
	Kitchenette		1 x 8	1m2 per resident, may be incorporated into dining area
	Resident Lounge/ Multipurpose Room		1 x 16	For family meals, gatherings and functions. May be booked by families
2	Sitting Area		2 x 6	
WCPT	Toilet - Patient, 4m2	Yes	1 x 4	Located adjacent to shared areas.
SPP	Store - Patient Property	Yes	1 x 8	Capacity will be consistent with the needs of residents' storage
STGN-9	Store - General	Yes	1 x 12	7.
BLIN	Bay - Linen	Yes	1 x 2	
BMEQ-4	Bay - Mobile Equipment, 4m2	Yes	2 x 4	

Bed room finishes should be in line with residential aged care requirements and not an acute hospital fit-out.

## CLINICAL SUPPORT ZONE

AusHFG Room Code	Room / Space	SC / SC-D	Qty x m2	Remarks
SSTN-14	Staff Station, 14m2	Yes	1 x 14	
OFF-S9	Office - Single Person, 9m2	Yes	1 x 9	Nursing Unit Manager
CLUR-14	Clean Utility, 14m2	Yes	1 x 14	
DTUR-12	Dirty Utility, 12m2	Yes	1 x 12	A second dirty utility may be required depending on the number of areas served and travel distances.
BLIN	Bay - Linen	Yes	1 x 2	
BPATH	Pathology Bay	Yes	1×3	Optional. Laboratory equipment, if required, may be located in the Resuscitation/ Treatment/ Holding areas along with a small refrigerator for specimen holding.

## SUPPORT ZONE AND MORTUARY

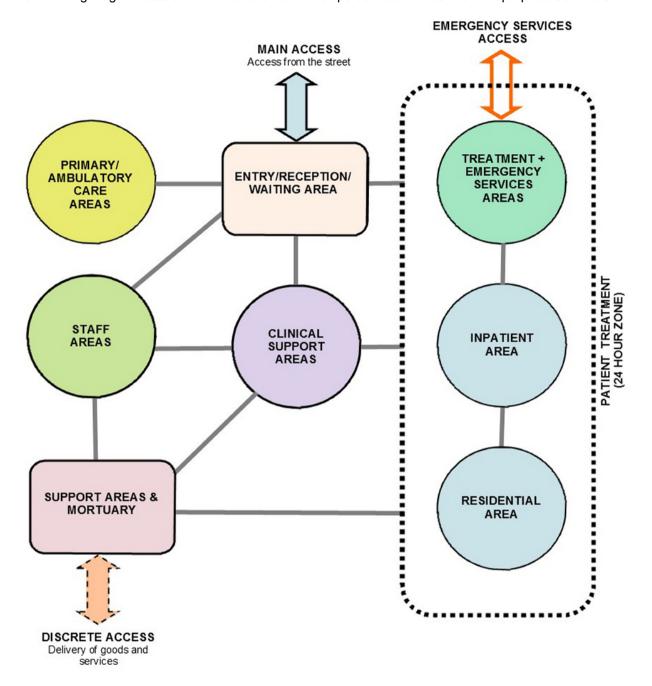
AusHFG Room Code	Room / Space	SC / SC-D	Qty x m2	Remarks
CLRM-10	Cleaner's Room, 10m2	Yes	1 x 10	
	Kitchen		1 x 40	
STBK-20	Store - Bulk	Yes	1 x 30	
STEQ-20	Store - Equipment, 20m2	Yes	1 x 20	
	Laundry		1 x 16	Services provided for residents
	Store - Dirty Linen		1 x 8	
8	Store - Clean Linen		1 x 4	
i.	Store - Flammables		1 x 6	
6	Store - Medical Gases		1 x 5	
e e	Waste holding - General, and recycling		1 x 10	P. Company of the Com
8	Waste holding - Clinical		1 x 10	
MOR-CS	Mortuary - Cool Store	Yes	1 x 14	Optional depending on site guidelines and processes (i.e. availability of funeral directors to receive the deceased)

## STAFF ZONE

AusHFG Room Code	Room / Space	SC / SC-D	Qty x m2	Remarks
OFF-S9	Office - Single Person, 9m2	Yes	1 x 9	Health Service Manager
SRM-18	Staff Room	Yes	1 x 20	Sized in conjunction with staff establishment, operational practice regarding meal times and number of staff on duty each shift. Includes beverage bay.
PROP-2	Property Bay - Staff	Yes	1 x 2	
SHST	Shower - Staff, 3m2	Yes	1 x 3	May be provided as part of the site staff facilities
WCST	Toilet - Staff, 3m2	Yes	2 x 3	

## AX.02 Functional Relationships / Diagrams

The following diagram sets out the functional relationships between zones in a Multipurpose Service Unit.



## **AX.03 Checklists**

For planning checklists, refer to Parts A, B, C and D of the Guidelines.

#### **AX.04 References**

- AHIA, 2010, AusHFG Part C: Design for Access, Mobility, OHS and Security, Space Standards and Dimensions, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW
- AHIA, 2010, AusHFG Part B: Section 80 General Requirements, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney NSW
- AHIA, 2010, AusHFG Part D: Infection Prevention and Control, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney NSW
- AHIA, 2010, AusHFG Part C: Section 730, Human Engineering, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW
- AHIA, 2010, AusHFG Part C: Section 710, Design for Access, Mobility, OHS and Security, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW
- AHIA, 2010, AusHFG Part C: Section 710, Space Standards and Dimensions, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW
- AHIA, 2010, AusHFG Part C: Section 790, Safety and Security Precautions, AHIA, AHIA, Sydney, NSW
- AHIA, 2010, AusHFG Part F: Section 680 Furniture Fittings and Equipment, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW
- AHIA, 2010, AusHFG Part B: HPU 250 Ambulatory Mental Health Unit, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW
- AHIA, 2013, AusHFG Part B: HPU 490 Hospital Mortuary / Autopsy Unit, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW AHIA, 2010;
- AusHFG Part B: HPU 140 Rehabilitation/ Allied Health, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney NSW AHIA, 2010, AusHFG Part B:
- HPU 620 Renal Dialysis Unit, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW AHIA, 2010, AusHFG Part B: HPU 155 Ambulatory Care Unit, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney NSW
- AHIA, 2014, AusHFG Part B: HPU 280 Oral Health Unit, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney NSW
- AHIA, 2014, AusHFG Part B: HPU 300 Emergency Unit, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney NSW
- AHIA, 2014, AusHFG Part B: HPU 255 Community Health, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney NSW
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- Alzheimer's Australia, 2013, Alzheimer's Australia Website, Scullin, ACT Australian Government, 2013, Flexible Care Subsidy Principles 1997, Australian Government, Canberra ACT Australian Government, 2012, Aged Care (Amount of Flexible Care Subsidy - Multi-Purpose Services)
   Determination 2011 (No. 1), Australian Government, Canberra ACT
- Commonwealth Department of Health and Ageing, 2002, Ageing in place a guide for providers of residential aged care, Commonwealth of Australia, Canberra ACT
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- Department of Health and Ageing, 0001, A collection of Dementia-related information in the Health website. Commonwealth of Australia. Canberra ACT
- Department of Health, NSW, 2009, Technical Series 2 Wayfinding for Health Facilities, Department of Health, NSW, North Sydney, NSW
- Eden Alternative, 2014, Eden Alternative Green Building Council of Australia (GBCA), 2009, Green Star Rating Tool Healthcare v1, Green Building Council of Australia (GBCA)

- Office of Parliamentary Counsel, 2013, Aged Care Act 1997 (amended), Australian Government, Canberra ACT Standards Australia, 2010, AS 1428 (Set) 2010 Design for access and mobility Set (SAI Global), Standards Australia, Sydney, NSW
- The King's Fund, 2013, Is your ward dementia friendly? EHE Environmental Assessment Tool, The King's Fund

## **AX.05 Further Reading**

Further reading relevant to this HPU include:

- Design Guidelines for Queensland Residential Aged Care Facilities, Queensland Health, 1999.
   www.health.qld.gov.au/cwamb/agedquide/13037.pdf
- Dementia sensitive design: http://www.dementiacare.com.au/dsd.html
- Small, specialised long stay units for the dementing: their role and effectiveness. Richard Fleming, John Bowles. First presented at the Alzheimer's Disease International Conference in Edinburgh, 1994;
- The State of our Public Hospitals, June 2006 Report, Section 4 Public Hospitals in Rural and Remote Areas, Australian Government, Department of Health and Ageing;
- Integrated Rural Health Services Generic Brief, Victorian Government Department of Human Services, June 2000;
- Integrated Health Care Centres, Health Facility Guidelines HPU 350, Victorian Government Department of Human Services, November 2004;
- Aged Care Working with People with Challenging Behaviours in Residential Aged Care Facilities, Document Number GL2006 014 Publication date 04-Sep-2006;
- Shields S, Norton L, In Pursuit of the Sunbeam A Practical Guide to Transformation from Institution to Household, Manhattan Retirement Foundation, Action Pact Press, July 2006;
- Commonwealth Department of Health and Aged Care, 2000. National Palliative Strategy. Canberra: Commonwealth Department of Health and Aged Care;
- NSW Health, NSW Palliative Care Strategic Framework, 2010 2013; and
- NSW Health, PD2010\_049 Multipurpose Services Policy and Operational Guidelines, 12 July 2010.

#### **AX.06 Other References**

## **RESIDENTIAL CARE - DESIGN PRINCIPLES**

It is an accepted requirement that residential aged care in MPS units be planned and designed to resemble a large home, based around the Household Model ("In Pursuit of the Sunbeam – A Practical Guide to Transformation from Institution to Household", July 2006) rather than a traditional hospital or institutional model. Pursuing a homelike environment for aged care residents is not merely about the physical environment but embraces many organisational factors including:

- ensuring residents are active participants in the operation of the service through formal (committee) and informal (attitudinal) parameters;
- enacting change processes to educate residents and staff to become active participants in the management process; and
- design features of the building including domestic scale facilities wherever possible.

The design features should include:

- · avoidance of long corridors with no resting spaces, labyrinth design and dead ends;
- careful selection of building materials, finishes, colours and furnishings to reflect the era expectations of residents;
- · maximisation of natural light and avoidance of shadows;
- acoustic management to minimise noise, including insulation in ceiling cavities to achieve better acoustic performance;
- · layout and choice of furniture so that it promotes interaction and independence; and

 opportunities for self-expression, including space for residents to personalise their individual rooms and keep personal mementos and items of furniture, practice contemplation and other selfdevelopment practices.

Factors that could be considered when attempting to create a household rather than a hospital should include:

- involvement of residents and their families in the relevant parts of the planning process especially those related to design and the choice of fixtures and fittings.
- locating residents' bedrooms adjacent to living areas so that domestic noises and smells greet residents on leaving their rooms. Residents can maintain privacy by closing their bedroom door if desired:
- ensure each bedroom and the living areas have a view to outdoor landscaped areas from a sitting position in the room;
- provide easy access to landscaped outdoor areas from bedrooms and living areas;
- consider domestic-type floor coverings and proven cleaning methods rather than choosing more institutional floor coverings;
- consider a full range of soft furnishings such as would be included in a home including curtains, blinds, cushions, furniture covers and wall hangings. These have the joint benefits of increasing the visual stimulation of the environment and dampening the acoustic levels;
- provide furniture choices that are domestic in nature including bedside lampshades for bedside and chair side lighting, bed heads, beds, chairs, televisions and beverage-making facilities;
- architecturally designed separation of those zones that require a Class 3a (BCA) rating and those that could attract a Class 9 rating so that a more domestic environment can be created; and
- provide a private function room (with access to an outdoor area) that can be used for birthday
  parties for residents or their family members, family conferences, religious functions and any
  other family gatherings. This space could be used as a music therapy room, a contemplation
  space; residents' meeting room or small activity room when not required for private family
  functions.

#### **FACILITIES FOR PATIENTS WITH DEMENTIA**

In 2010 dementia was recorded as the third leading cause of death in Australia. It is estimated that by 2050 the number of people living with dementia in Australia is projected to triple to more than 900,000. (Commonwealth 2013). These figures demonstrate the quantity of support services and accommodation that will be required overtime to support people with dementia and their families. Within many towns in rural and remote areas the MPS will be the only provider of such services.

In order to allow the person with dementia to remain close to family support, consideration must be given to designing the Unit to deliver such care. Current research demonstrates that the symptoms of dementia and confusion are reduced when people and surroundings remain constant. To this end it is recommended that the following points be considered when planning an MPS facility:

- zoning of spaces in the facility so that persons with dementia do not unduly disturb those
  residents who are astute, lucid and independent. This may be achieved by dividing the residential
  care cluster into separate bed room zones that share the same dining, kitchen and lounge
  spaces;
- provision of secure internal areas to keep confused residents safe;
- well-maintained secure outdoor areas with paving and shading for outdoor activities for purposeful walking for confused residents who may like to spend extended periods of time out of doors;
- design features to stimulate sensory recognition such as distinct colours for key areas, graphic
  signage, lighting key points (e.g. toilet bowl) and simplified way finding. These features can
  greatly assist persons with confusion and dementia to maintain their orientation. Glare from
  windows and shadows should be avoided. Utilising high gloss paint can reduce the impact of
  shadowing;
- clear symbolic signage:
- · appropriate floor coverings and related features;
- avoid long corridors in which those with dementia find themselves 'stuck' and unable to move;
- non-shiny surfaces on walls and floors a matt finish is preferred;
- · discrete barriers to minimise frustration; and
- disguised staff-only doors.

Planning and design must identify a safe evacuation point in case of fire.

#### **Australasian Health Facility Guidelines**

Much research is current underway through national collaborative research initiatives into the causes of dementia and determining the best means of supporting and managing persons with dementia. Developments in this area are evolving rapidly. Prior to commencing the planning for an MPS which is to accommodate persons with dementia, reference should be made to the following sites to ensure the project team is conversant with current methodologies and initiatives including alternatives to the medical treatment model such as the Eden Alternative (an organisation dedicated to improving the experience of aging and disability around the world), Alzheimer's Australia, and the Kings Fund, as follows:

- Alzheimer's Australia, 2013, Alzheimer's Australia Website http://www.fightdementia.org.au/
- Department of Health and Ageing, A collection of Dementia-related information in the Health website <a href="http://www.health.gov.au/internet/main/publishing.nsf/Content/portal-Dementia">http://www.health.gov.au/internet/main/publishing.nsf/Content/portal-Dementia</a>
- Eden Alternative, 2014, Eden Alternative http://www.edenalt.org/ and
- The King's Fund, 2013, Is your ward dementia friendly? EHE Environmental Assessment Tool <a href="http://www.kingsfund.org.uk/sites/files/kf/EHE-dementia-assessment-tool.pdf">http://www.kingsfund.org.uk/sites/files/kf/EHE-dementia-assessment-tool.pdf</a>