Australasian Health Facility Guidelines

Part B - Health Facility Briefing and Planning

0350 – Small Rural Hospitals / Multipurpose Services (MPS)

Revision 8.0
June 2021

COPYRIGHT AND DISCLAIMER

Australasian Health Facility Guidelines

Website: http://www.healthfacilityguidelines.com.au

Email: HI-AusHFGteam@health.nsw.gov.au

The AusHFG are an initiative of the Australasian Health Infrastructure Alliance (AHIA). AHIA membership is comprised of representatives from government health infrastructure planning and delivery entities in all jurisdictions in Australia and New Zealand.

Disclaimer

AHIA gives no warranty or guarantee that the information in the AusHFG is correct, complete or otherwise suitable for use. AHIA shall not be liable for any loss howsoever caused whether due to negligence or otherwise arising from the use of or reliance on this information.

AHIA recommends that those seeking to rely on the information in the AusHFG obtain their own independent expert advice.

Index

01 INTRODUCTION

1.1 PREAMBLE

This Health Planning Unit (HPU) has been developed by the Australasian Health Infrastructure Alliance (AHIA). This revision has been informed by an extensive consultation process that was completed in 2020.

The document is intended to be used by design teams, project managers and end users to facilitate the process of planning and design.

Revision 8 of this HPU was broadened to incorporate small rural hospitals rather than only Multipurpose Services (MPS) given some jurisdictions do not have MPS facilities or only have a small number in operation.

1.2 INTRODUCTION

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;
- Part B: Section 90: Standard Components, Room Data and Room Layout Sheets;
- Part C: Design for Access, Mobility, Safety and Security; and
- Part D: Infection Prevention and Control.

MPS provide integrated health and residential aged care services to regional and remote communities where there is an insufficient catchment population to sustain separate services. Services usually include emergency treatment, inpatient care, ambulatory care and community health. It is a legislative requirement for an MPS to include a residential aged care component (Aged Care Subsidy Principles 2014 made under the Aged Care Act 1997).

Small rural hospitals vary significantly in size and service capability. This HPU is focused on small hospitals in rural and remote areas with small staff numbers who are frequently covering multiple service areas and managing a variety of patient types. This largely aligns with the Australian Hospital peer group Category ‘Public Acute Group D’ which incorporates small hospitals with between 200-2000 acute separations including a high proportion of sub and non-acute patient days.

This document outlines key planning and design considerations relating to small rural hospitals and MPS. The following AusHFG HPUs may also need to be referenced for more detailed planning and design guidance relating to specific clinical services:

- HPU 140 Allied Health / Therapy Unit;
- HPU 155 Ambulatory Care & Community Health;
- HPU 280 Oral Health Unit;
- HPU 300 Emergency Unit;
- HPU 440 Medical Imaging Unit;
- HPU 490 Hospital Mortuary / Autopsy Unit;
- HPU 510 Maternity Unit;
- HPU 520 Operating Unit;
- HPU 550 Pathology Unit; and
- HPU 620 Renal Dialysis Unit.

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'.

Planning and design processes must include consideration of the local cultural context through engagement with local cultural groups. The facility should celebrate the local cultural heritage of the area and provide a welcoming environment that meets the needs of all people.

1.3 POLICY FRAMEWORK

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 and resources include:

- Australian Commission on Safety and Quality in Health Care, 2017, National Safety and Quality Health Service Standards (NSQHS) - Guide for Multi-Purpose Services and Small Hospitals 2017.
- Australian Government Department of Health, Multi-Purpose Services (MPS) Program: https://www.health.gov.au/initiatives-and-programs/multi-purpose-services-mps-program
- NSW Government Agency for Clinical Innovation (ACI), Living Well in a Multipurpose Service: https://www.aci.health.nsw.gov.au/resources/rural-health/multipurpose-service-model-of-care-project/living-well-in-multipurpose-service

1.4 DESCRIPTION

1.4.1 Definition of Health Planning Unit

Small rural hospitals and MPS facilities vary depending on the range of services to be provided, community and cultural characteristics, patient / resident profile and size of the proposed facility. This will be guided by clinical services planning including the projected service capacity requirements and role delineation / clinical service capability to be delivered.

As these facilities represent a central health and community centre for the local community and surrounds, there is the potential for a broad range of services to be accommodated on site. Partnerships may be established with external service providers and options should be explored at the planning stage with local community involvement and consultation.

Services typically include:

- emergency, urgent care service or other alternative model;
- inpatient care;
- a range of ambulatory care and community health services; and
- associated support services.

Services commonly collocated on site include general practice (GP) services including after-hours services, community support services, ambulance; and services delivered by NGOs and other organisations serving the community.

1.4.2 MPS Model

The MPS brings together a range of health and residential aged care services in a single location under 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.

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 provided by non-government residential aged care providers; and
- difficulty in sustaining stand-alone health, community and residential aged care services.

1.4.3 Patient and Client Characteristics

The range of people attending a small rural hospital or MPS may be diverse given the nature of the service delivery model. These may include:

- older people with varying levels of dependency;
- people with dementia;
- people with a disability who require residential care that is not available elsewhere;
- people and carers / 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, maternity or postnatal services;
- children and adolescents including short stay paediatric care (refer to section 2.2.3);
- people with Aboriginal, Torres Strait Islander and / or Maori heritage;
- people from culturally and linguistically diverse backgrounds;
- people with acute behavioural disturbances which may be caused by mental health disorders; drug and alcohol related problems; or medical issues (e.g. dementia or delirium); and
- people requiring a recurring day procedure such as renal dialysis, chemotherapy, aphaeresis or other transfusions.

02 PLANNING

2.1 OPERATIONAL MODELS

2.1.1 Hours of Operation

The hours of operation will vary across zones within small rural hospitals and MPS facilities. It is important to collocate all 24-hour operating services to improve efficiency and security. In MPS, the residential areas should be contiguous with inpatient beds and emergency service areas.

Where emergency care does not provide a 24-hour, seven day a week service, alternative arrangements will need to 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 based around normal business hours, however some evening and Saturday services may be provided. Community group programs are frequently delivered after hours. Visiting medical specialists and GP after-hours clinics also regularly provide services outside normal business hours including weekend clinics in the ambulatory care and community health zone. Access to these services after hours will require consideration to ensure the provision of optimal safety and security for patients / residents, staff and visiting clinicians.

2.1.2 Emergency Assessment / Treatment

For MPS and small rural hospitals emergency treatment services will be provided in line with local service need with reference to the levels of service defined by the Australasian College for Emergency Medicine (ACEM). Depending on local requirements, alternative models may be considered such as urgent care services, nurse practitioner models and remote GP services.

Services will be part of a regional Emergency Medicine Network for access to emergency specialist support, advice and training. Telehealth is a routine part of this service and a telehealth camera is routinely provided at each resuscitation bay to facilitate this model of care.

2.1.3 Inpatient Accommodation

Inpatient beds are usually provided for:

- general medical and surgical patients, for example patients presenting with an acute exacerbation of a chronic condition; patients requiring observation following minor surgical procedures and patients transferred from other centres to recover prior to discharge (”step down”);
- postnatal care;
- palliative care;
- respite care (note that this may be provided within inpatient and residential care areas and the design should support flexible use of both zones for respite services depending on demand with easy access to relevant support areas within the residential care zone); and
- low intensity rehabilitation.

Depending on the service profile, other types of patients may be managed. The total number of beds required will be determined in the clinical service plan.

2.1.4 Ambulatory Care, Primary Health Care and Community Support Services

The ambulatory care and community health zone may accommodate a range of services in addition to general outpatient and community health services. These include:

- health and social agencies from state and / r Commonwealth such as Commonwealth Home Support Program (CHSP) and Aged Care Assessment Teams (ACAT);
- GPs and visiting medical specialist services;
- mental health, and drug and alcohol services;
- aged care day services;
- antenatal and postnatal care;
- medical day only services (e.g. infusion services);
- allied health services;
- low intensity rehabilitation;
- podiatry;
- oral health;
- renal dialysis;
- pathology including specimen collection services (some small rural hospitals may include a pathology laboratory);
- pharmacy;
- medical imaging;
- Aboriginal health services;
- women's, men's and children's health services;
- health education and promotion; and
- mobile services e.g. BreastScreen, MRI and dental services.

2.1.5 Residential Care Accommodation

MPS facilities will provide permanent and respite residential aged care services, and temporary residential care for people with a disability where no alternative facilities are available.

The model of care is focused on person centred care, not as patients in hospital but as people living in their home. The focus is on provision of a homelike environment with access to lifestyle, leisure and activity options, optimal nutrition and maximising independence to promote wellness.

A significant proportion of residents within MPS facilities will have dementia. Patient centred care models are particularly important for residents with dementia to increase engagement in meaningful activity, improve mood and reduce agitation, depression and disruptive behaviours. Refer to Section 2.3.4 for further information.

The NSW Agency for Clinical Innovation identifies the following eight principles of care for residents living in MPS facilities, and provides a toolkit to assist with their implementation:

- respect for rights as an individual;
- informed and involved;
- participates in assessment and care planning;
- lives in a homelike environment;
- access to meaningful recreation activities;

- a positive dining experience;
- access to multidisciplinary services; and
- expertise in aged care.

For further information refer to:

- https://www.aci.health.nsw.gov.au/resources/rural-health/multipurpose-service-model-of-care-project/living-well-in-multipurpose-service.

Residential aged care facilities are required to support 'ageing in place' whereby residents can remain in the same facility and room as their care needs change. This includes inpatient care where appropriate. 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 for two residents may be provided to meet specific cultural and social needs of residents including couples.

2.1.6 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 small rural hospitals / MPS facilities to improve and integrate the care delivered to local communities.

A covered ambulance bay will be required. Refer to jurisdictional specific requirements relating to vehicle and stretcher specifications, ensuring that the parking bay dimensions are sufficient to accommodate the vehicle and the patient trolley that is removed from the rear of the vehicle. A level, undercover surface to push a stretcher into the emergency treatment area will be required with visual privacy from the public. Ambulance services will also require access to write up areas within the emergency department.

Provision of a collocated ambulance station may be reflected in the service plan. Some MPS services may provide a hospital-based ambulance service that is delivered by MPS staff.

Stakeholders from the ambulance service should be involved throughout the capital planning process to advise on operational policies and facility requirements to support their service.

2.1.7 Virtual Models of Care / Telehealth

Virtual models of care or telehealth are increasingly being implemented across all health services and are particularly beneficial for patients / residents living in rural and remote areas in improving their access to care. This may include time limited acute encounters through to ongoing episodes or series of care, e.g. for the management of chronic conditions. In addition, advances in cameras, monitoring devices and apps are better at enabling remote monitoring of patients / residents.

Fixed telehealth units / critical care cameras in resuscitation areas and mobile telehealth units in inpatient and residential units are commonly provided for assessment and liaison with expert clinicians located in other networked health services. This enables more patients / residents to be managed locally, potentially avoiding the need to be transferred to another facility, and promotes the upskilling of staff.

Fixed or mobile telehealth units are also required across other patient care areas and staff may undertake remote consultations to provide care for patients in their place of residence. Virtual group activities are also increasingly being provided, e.g. for allied health / therapy classes. These services often require 360-degree cameras and sufficient space to demonstrate exercises or activities.

Some services may provide facilities for patients to attend their local rural hospital for follow up specialist appointments via telehealth with clinicians located in other facilities e.g. metropolitan or large regional hospitals. This model minimises patient travel where large geographical distances are involved and where patients may not have reliable internet access, or the appropriate devices required to support telehealth services from their home.

Videoconferencing facilities should be accessible to residents as part of the social support model to enable residents to remain connected to their family and community, as well as allowing family members to be involved in case conferences.

2.1.8 Workforce

Small rural hospitals often provide the same level of service / role delineation as services in metropolitan areas, however they commonly have smaller bed numbers and therefore the staffing requirements are smaller. It is important that project teams confirm the future staffing profile for the facility to inform planning and design requirements. The design of the facility must consider staff health and wellbeing and support them to work efficiently and safely with particular attention to:

- minimising travel distances for staff working across multiple areas within the facility:
- ensuring optimal staff safety and that staff are not working in isolation, particularly during periods of low staffing, e.g. overnight;
- optimising observation of clinical areas;
- centralising support areas where appropriate;
- appropriate allocation of work areas and amenities for visiting clinicians;
- aligning area allocations with the projected staffing profile; and
- consideration of staff accommodation requirements.

2.2 OPERATIONAL POLICIES

2.2.1 General

Operational policies have a major impact upon the planning and design, and capital and recurrent costs of health facilities. Project teams should review their design proposals with these in mind and be able to demonstrate that the capital and recurrent cost implications of proposed operational policies have been fully considered.

Design solutions should support future changes to operational practices, as well as changes to the clinical case mix, models of care and technology. This includes consideration of the increasing provision of virtual models of care.

Operational policies may have site-wide application or be unit-specific. A list of general operational policies that may apply can be found in Part B: Section 80: General Requirements.

2.2.2 Management of Medical Emergencies

Clinical protocols will be available for initial assessment, 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.

2.2.3 Management of Specific Patient / Client Groups

Children

The majority of small rural hospitals including MPS will not provide planned overnight paediatric admissions, however children do access emergency service areas.

Children requiring short-term observation may be treated at a small rural hospital / MPS. Those requiring acute treatment or inpatient care will generally be transferred to a nominated health service, however some small rural hospitals may accommodate short stay paediatric inpatient care in consultation with the central / hub paediatric team through telehealth support.

Where short term inpatient care is provided, paediatric patients (and if required, a parent) should be accommodated to ensure staff station oversight and separation from adult activity flows and associated distressing sights and sounds. Emergency departments will require child safe areas to be provided where possible. Refer to relevant jurisdictional policies regarding the safe and secure management of paediatric patients.

Sexual Assault

Victims of sexual assault who present to a small rural hospital / MPS will be assessed by nursing staff. Staff will then implement protocols in line with their local jurisdictional / networked model for forensic services. This may involve the patient being transferred to a designated examination site. Depending on jurisdictional policies. some remote services may provide sexual assault services by appropriately trained General Practitioners or nursing staff through the use of pre-prepared standardised examination packs and lockable storage.

Patients Presenting with Acute Behavioural Disturbance

Acute behavioural disturbance may be caused by a range of conditions, including general medical conditions (e.g. brain injury, dementia, delirium), intoxication / substance misuse and mental health conditions. When assessing and managing these patients, the safety of the patient, staff and others is the priority.

Many small towns and communities utilise stakeholders including health services, police, ambulance services and other community-based organisations, to develop collective protocols to manage patients presenting with these conditions.

Patients presenting with behaviours of concern 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. The patient is then discharged for management in the community or transferred to the nominated health centre for further assessment and admission. All small rural hospitals including MPS should include an interview room that is designed to provide a de-escalation / low stimulus environment to safely manage patients. This room may require an anti-ligature design depending on the outcome of a risk assessment.

In some cases, transfer of the patient may be delayed resulting in an extended stay. In such cases, an acute inpatient bedroom may be used so the patient can rest and, in some cases, be ‘specialled’ by nursing staff. This room will be a general inpatient room however, it will be located closest to a staff station so routine supervision is easier. Access to the attached ensuite may need to be controlled by staff.

In most cases, small rural hospitals and MPS facilities will not have an acute mental health unit located nearby and police may bring the client to the facility for assessment. Police may be requested to support the health service in safe transfer or management of the client for optimal client, staff and community safety. Consultation with mental health services, police and ambulance should be undertaken to confirm local protocols, partnerships and associated facility requirements.

Palliative Care

Patients receiving palliative care are commonly managed in small rural hospitals / MPS. A number of inpatient beds may be designed to better support these patients including the option for a carer / family member to sleep within the room.

Access to a family lounge, including beverage bay, is required to support families, as is ease of access to outdoor space.

A multi-faith spiritual care room may be provided in some small rural hospitals.

2.2.4 Management of Deaths

A body hold area (cool room or refrigerated cabinets) is usually required in a small rural hospital / MPS given funeral directors are not consistently available in rural and remote areas; facilities may be cut-off for periods of time due to adverse weather conditions; and for Coroner's cases, bodies often need to be held for extended periods of time until Police arrive. However, alternative arrangements may be considered depending on the local context, acknowledging that these facilities are expensive to operate and are often not used for lengthy periods of time. Body hold facilities must be capable of accommodating bariatric persons in death safely and should be able to be turned off when not use.

An adjacent parking space, that is able to accommodate a funeral director vehicle, will be required. These facilities will be located in the service area of the MPS and allow for the discrete loading of the vehicle from the rear. The location of the body hold area should also minimise transfer distances from clinical areas and cross over with public areas.

For most facilities, it is expected that viewing of the deceased will occur in bedrooms, however the preferred arrangement should be confirmed with consideration of local cultural requirements.

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

2.2.5 Medical Imaging

The service model for medical imaging and modalities to be provided will require confirmation early in the planning process based on the scope of clinical services, projected imaging demand and available workforce. Some facilities may establish a partnership with a local imaging service.

Access to general x-ray is commonly provided in all small rural hospitals and MPS. Facilities with access to a radiographer on site (i.e. based at the facility or providing a visiting outpatient service) and sufficient activity may provide a fixed x-ray unit, however for services where a remote operator model is in place, as provided at many MPS facilities, a mobile x-ray unit is recommended.

Ultrasound, dental x-ray and CT may also be provided depending on service requirements.

Digital radiography (DR) systems are recommended where new imaging services are being established given computed radiography (CR) is becoming outdated, the capital and service costs for DR have significantly reduced, and DR provides more efficient image acquisition.

2.2.6 Pathology

Specimen collection services may be provided in some facilities, usually as part of the ambulatory care zone.

Point of care pathology testing will be required in the emergency areas and will require access to a pathology bay including bench for analysers, centrifuge, fridge for storage of specimens, and disposal of pathology waste.

Pathology laboratories are not included in MPS facilities, however they may be provided in small rural hospitals that deliver surgical and maternity services.

Consideration should also be given to requirements for refrigerated blood products depending on service requirements.

2.2.7 Pharmacy Services

The model for pharmacy services will require confirmation early in the planning process. Most small rural hospitals are supported by the district's central pharmacy rather than by a dedicated pharmacy unit on site, however this will depend on the defined level of service to be provided. Some facilities may establish a partnership with a local pharmacy service, particularly for residents.

A larger and wider range of pharmaceuticals (such as vaccines and snake antivenin) may be held compared with regional and metropolitan hospitals. These are often required to manage a range of events and conditions particular to the local rural or remote area. All medications need to be securely stored in line with local jurisdictional policies with safe access for staff and appropriate temperature control. Refrigerators used to store medications and vaccines will need to be linked to the Building Maintenance System (BMS). Refrigerators storing vaccines may be located in various places across the facility.

If chemotherapy services are provided, consideration will need to be given to the supply and storage of cytotoxic medications.

In MPS facilities responsibility for the administration of medications for residents needs to be determined early in the planning process. Where the resident is responsible and able, allowance will 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 resident bedrooms.

A small rural hospital / 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.

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

For further information refer to:

- HPU 560 Pharmacy Unit;
- Australian Commission on Safety and Quality in Health Care, 2017, National Safety and Quality Health Service Standards (NSQHS) - Guide for Multi-Purpose Services and Small Hospitals 2017 – Medication Safety Standard; and
- local jurisdictional policies.

2.2.8 Allied Health

Allied health services will be provided at all MPS and small rural hospitals. These may be delivered by allied health staff based at the facility, through visiting services and / or a virtual service which may include an on-site allied health assistant to support patients. Services will be provided for inpatients, outpatients and residents.

The following allied health areas are recommended as a minimum requirement:

- access to multipurpose consultation / interview rooms;
- gymnasium area including curtained treatment cubicle/s to accommodate an electric height adjustable treatment bed, and equipment which may include parallel bars, exercise bike, equipment trolley with weights and stair unit;
- 12 metres length to allow appropriate assessment of a patient's gait / walking capacity (this is usually provided via a corridor with minimal passing traffic):

- store room; and
- staff work areas.

Gymnasium space is often flexibly used by other services such as antenatal classes, healthy lifestyle programs and other community-based activities and therefore needs to be designed to support a range of activities.

2.2.9 Sterilising Services

Where possible, disposable consumables and instruments should be used to reduce the requirement for reprocessing.

Where instrument sterilisation is required (e.g. oral health services), staff will generally bring sterile reusable medical devices (RMDs) with them and be responsible for returning items to the main health service centre for sterilisation in line with local operational protocols. Appropriate facilities for initial decontamination of instruments prior to transfer for offsite reprocessing may be required. This may include a clean-up zone with a washer-disinfector to comply with AS/NZS 4187:2014: Reprocessing of reusable medical devices in health service organisations.

Some oral health services in small rural hospitals may provide on-site reprocessing, however this should be based on a cost benefit analysis of reprocessing options and the ability of the service to meet the relevant Australian Standards.

Facilities providing maternity services may need to consider bottle washer-disinfectors if not using single use baby bottles. Reprocessing of breast pumps will also require consideration.

Where ultrasound devices are used (e.g. bladder scanner, vascular doppler), the transducers will require reprocessing. This may be performed at the point of care or in a separate room with unidirectional dirty to clean workflows. Refer to: Australian College for Infection Prevention and Control (ACIPC) & Australasian Society for Ultrasound in Medicine (ASUM) 2017, Guidelines for Reprocessing Ultrasound Transducers.

2.2.10 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. However, 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).

The central kitchen for the facility should be designed to support a range of food services models given this may change over time.

For MPS facilities, it is essential that the food service has the flexibility to offer long term residents a choice of meals and accommodates individual preferences. Dining areas will be provided to encourage residents to interact and may be decentralised to provide a more domestic scale rather than one large dining room. The provision of a domestic kitchen within the residential care area is recommended to promote interaction with family and friends, engagement in meaningful activities and access to cooking smells which can help to promote appetite and quality of life.

A balanced approach between safety and accessibility within the domestic kitchen needs to be considered based on the outcomes of a risk assessment. Access for residents with disabilities needs to be provided and the kitchen should be securable after hours.

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.

Where breast milk requires refrigeration and/or formula is being prepared, compliance with separate storage and labelling must be considered in line with jurisdictional policies. Consideration also needs to be given to the storage of enteral feeding.

2.2.11 Laundry Services

Clean laundry, sheets, towels etc. are commonly provided to the facility by an external supplier, however some facilities may launder their own linen on site. Consideration needs to be given to the storage of clean and dirty linen.

In most instances, laundry for residents will be undertaken on-site. This may be provided by support services staff, external private provider (in-reach), or local aged care staff.

Washing of some clinical devices, e.g. slings, may occur on site where supported by local jurisdictional policies. This will require a dedicated commercial grade washing machine and compliance with laundry standards and will be separate to the laundry provided for residential care. Refer to AS/NZS 4146: 2000: Laundry practice and local jurisdictional policies. For some jurisdictions, on-site laundering of clinical devices is not recommended given the cost associated with dedicated plant room and equipment and associated ongoing maintenance to ensure compliance with standards. Where possible, the centralisation of these services is recommended.

Laundry areas must be designed to support optimal dirty to clean flows.

2.2.12 Maintenance

Maintenance services required by a small rural hospital / MPS encompass general engineering and grounds management. Whether maintenance services are provided by health staff or an external service, some facilities should be provided for equipment / tool storage and some on-site maintenance activities. Access to work areas for administrative activities also requires consideration.

Compliance with Work Health and Safety legislation is essential, including in relation to hazardous chemicals and access points for maintenance staff.

2.2.13 Storage - Equipment

Equipment such as hoists, an ECG machine, resuscitation trolley and computers on wheels are best stored in or near point of use. An appropriately sized central equipment store will be needed for walking aids, commodes, shower chairs, slings and bed accessories. This must be designed to support safe access to equipment and will include consideration of items requiring repair and / or cleaning. Recharging of some equipment items will be required while being stored.

An equipment loan pool is often provided in small rural hospitals and MPS for the short-term hire of mobility aids, equipment and assistive devices for patient use at home on discharge. Equipment is usually provided for a short-term period to enable patients to safely return home or remain at home. The location of this store is important for ease of equipment pick up and return. Refer to HPU 140 Allied Health / Therapy Unit for further information.

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

Consideration needs to be given to appropriate environmental control for storage areas, depending on the location of the facility. This may include pest control or considerations relating to humidity and mould control.

2.2.14 Storage – General Bulk

The remoteness of some MPS facilities may necessitate the holding of larger than usual stock levels. Delivery cycles will require confirmation to ensure the provision of appropriately sized storage areas.

The bulk store will hold 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-monitoring particularly for out-of-hours deliveries.

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

All sterile stock must be stored in line with AS/NZS 4187 including appropriate temperature and humidity control and in a vermin proof environment.

2.2.15 Waste Management

Operational policies associated with the management of all waste should be developed prior to the planning and design for waste holding areas. This will need to consider the number of waste and recycling streams and the frequency of collection cycles.

Appropriate storage is recommended to hold the following items at the point of generation (clinical units and administrative areas) and point of disposal (waste bay):

- clinical and related wastes (depending on service requirements some small rural hospitals will require consideration of anatomical and cytotoxic waste);
- general waste; and
- recycling, paper, cardboard, and other specialist recycling streams, such as PVC, plastics, organics, and e-waste, depending on local jurisdictional policies.

Where there are significant waste volumes, the waste bay may need to allow space for a baler (cardboard and packaging materials) and / or on-site treatment, such as organics dehydrators / composters.

A separate secure bay will be required for clinical and sharps waste holding. This may need to be air-conditioned if collection cycles are infrequent.

The level of security required will be informed by a risk assessment and by any local regulatory requirements.

2.3 PLANNING MODELS

2.3.1 Location

The preferred location of the new or redeveloped facility should be informed by the following key principles:

- optimal site access including ease of wayfinding and access for patients, residents, staff and community;
- optimal opportunities for service integration and minimising travel distances;
- ability to achieve secure after-hours access between separate facilities (this may include access to and from existing facilities on site, e.g. an existing residential aged care unit);
- maximises connection to the external environment and opportunities for views, as well as access to outdoor space for priority services;
- provides a strong identity for the facility;
- considers local environmental risks, e.g. bushfire and flood risks; and
- considers future expansion requirements.

Where a helicopter landing site (HLS) is required, its location on site and connection to the hospital via easy trolley access will need to be considered early in the planning process in consultation with local helicopter retrieval services.

2.3.2 Building Solution

A single storey building promotes ease of access to services, optimises access to outdoor space for relevant services 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, humidity and storms).

The provision of sustainable solutions is important. For example, “hi-tech” solutions may not be easily maintainable in rural and remote environments due to the limited access to spare parts or skilled technicians. Existing contractual arrangements for equipment acquisition and maintenance should be taken into consideration.

2.3.3 Configuration

Design and layout considerations include:

- collocating services operating 24 hours including acute, emergency and residential 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 care for older people who are frail and / or may have dementia). 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.

Services tend to be designed around ‘clusters’ and ‘zones’ to maximise effective and efficient care delivery while ensuring resident, patient and staff security. This includes consideration of zonal arrangements that are adaptable and can best support pandemic preparedness. Refer to Section 3.4.

2.3.4 Design Principles to Support People with Dementia

In 2018, dementia was recorded as the second leading cause of death in Australia (ABS 2018). It is estimated that the number of people living with dementia in Australia is projected to increase from 459,000 in 2020 to 1.076 million by 2058 (Dementia Australia, 2018). These figures demonstrate the quantity of support services and accommodation that will be required over time 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 facility 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:

- 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 with their own lounge / dining areas to provide a more domestic scale;
- provision of secure internal areas to keep confused residents safe;
- well-maintained secure outdoor areas with paving and shading for outdoor activities including purposeful walking for confused residents who may like to spend extended periods of time out 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.
- avoid glare from windows and shadows and utilise high gloss paint which can reduce the impact of shadowing;
- provide clear symbolic signage;
- provide appropriate floor coverings and related features;
- avoid long corridors – in which those with dementia find themselves 'stuck' and unable to move;
- provide non-shiny surfaces on walls and floors - a matt finish is preferred;
- discrete barriers to minimise frustration; and
- disguise staff-only doors.

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

For further informationn refer to:

- Fleming R & Bennett KA, 2017, Environmental Assessment Tool, Dementia Training Australia.
- NSW Agency for Clinical Innovation, 2014, Aged Health Network – 'Key Principles for Improving Healthcare Environments for People with Dementia'
- Victorian Department of Health & Human Services. Dementia Friendly Environments: https://www2.health.vic.gov.au/ageing-and-aged-care/dementia-friendly-environments.
- Dementia Australia: https://www.dementia.org.au/.

2.4 FUNCTIONAL AREAS

2.4.1 Functional Zones

The facility will comprise a number of interlinking zones and the composition of each zone will vary for each small rural hospital / 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 may include:

- entry / reception / waiting;
- emergency / urgent care (or other alternative model)
- primary / ambulatory care;
- inpatient areas;
- residential areas;
- outdoor areas;
- clinical support;
- non-clinical support; and
- staff work areas and amenities.

Optional areas may include staff residential accommodation for visiting staff, those living remotely and visiting students.

The zones should be arranged to prevent the unauthorised access of visitors and patients to other parts of the facility. While these zones may not be locked down at all times, staff may choose to restrict access where there are particular patient issues to manage.

2.4.2 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 also commonly serve the primary / ambulatory care areas, depending on the size of the facility.

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 site manager should be located in close proximity to this area 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. Consideration needs to be given to the provision of culturally appropriate areas to accommodate large groups with access to outdoor areas.

2.4.3 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 a gym / activity room, and other meeting rooms. Work / administration areas 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. Operational protocols will be in place to ensure infection prevention and control requirements are met. 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, dental, podiatry and ophthalmology rooms which have specific requirements. A child and family health clinic room/s are also commonly provided and will have specific fit out needs including weighing scales, measuring equipment and may include a vaccine fridge.

Storage areas should be located within the facility, close to clinical areas to minimise travel distances and ensure appropriate environmental conditions are met. Consideration also needs to be given to ease of access to parking for the transport of equipment and consumables to the community.

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 they can manage large numbers of visitors without causing disruption to other collocated rooms such as interview rooms.

Planning will also need to take into consideration services requiring separate access e.g. needle & syringe exchange services and methadone dosing services, where provided, so that privacy is maintained and there is minimal impact on other services.

Refer to HPU 155 Ambulatory Care and Community Health services for further information.

2.4.4 Emergency / Urgent Care Area

The design requirements of this area will depend on the proposed service model. Alternative models may be considered depending on local requirements, such as urgent care services, nurse practitioner models, first aid stations and remote GP services.

Where a defined emergency assessment and treatment service is provided, it will need to 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 of a:

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

Additional treatment bays may be provided depending on projected capacity requirements.

Provision of a critical care camera will be required 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.

The emergency / urgent care area needs to comply with safety requirements for children including visual and auditory safety.

Planning for these areas should also reference contemporary guidelines regarding COVID-19 / other pandemics and the need to isolate infectious patients. A separate quiet area (interview room) will be required This room should include a secondary access point, and minimal furniture and fittings so it provides a ‘low stimulus’ environment for patients presenting with behaviours of concern that may be caused by a range of conditions. Anti-ligature requirements will depend on the outcome of a risk assessment. Equipment, e.g. for telehealth to link with other centres for assessment and consultation, should ideally be placed on a mobile trolley for easy positioning and stored in a lockable cupboard.

Flexible-use treatment spaces should be provided to manage a range of patient presentations.

A sub-wait area is required, separate to the main facility waiting area, for patient privacy.

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.

Where an after-hours GP service is provided, it is commonly collocated with this zone.

2.4.5 Inpatient Care Area

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

Ideally, inpatients will have access to an outdoor area, as noted in section 2.4.7.

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

2.4.6 Residential Aged Care

MPS facilities will provide residential aged care that will accommodate a wide range of older people including respite and dementia care accommodation. Facilities will support ‘ageing in place’ and a person-centred model of care through the delivery of a homelike environment, as described in Section 2.1.5.

Facilities will comprise of:

- bedrooms and dedicated ensuites;
- lounge / activity/ dining rooms, incorporating kitchenette as described at Section 2.2.10;
- access to alternate lounge / sitting areas; and
- a range of support areas.

Where a separate 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' ensuite.

Residents' ensuites should be directly visibly from the bed. Consideration may be given to the provision of a sliding door to the ensuite given they are easier for the resident to access / manoeuvre around and take up less space within the room when being opened and closed. These should be provided as an externally mounted sliding door rather than a cavity slider for infection control reasons. Sliding doors are able to be left open as a visual cue.

Outdoor space will be accessed from the main lounge / dining area and will be easily supervised by staff.

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.

Design features of the residential care areas 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;
- inclusion of a range of lighting options and strategies to support residents with visual impairments as noted under Section 3.5.2;
- inclusion of openable windows as noted under Section 3.6.6;
- consideration of some rooms being interconnected for couples residing in the facility. These can then be flexibly set up as a bedroom with interconnecting lounge:
- acoustic management to minimise noise, including insulation in ceiling cavities to achieve better acoustic performance;
- 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 self- development practices.

The following should be incorporated in the planing process to support the establishment of a home-like environment:

- 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 (ensuring they are easily cleanable / washable);
- 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;
- provision of small scale living areas where residents can meet with one another or visitors:

- 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 with proven cleaning methods rather than choosing more institutional floor coverings;
- curtains, blinds, cushions, furniture covers and wall hangings (ensuring they are easily cleanable / washable). 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 and reminiscent of home including bedside lampshades, bed heads, televisions, bookshelves and soft furnishings (ensuring they are easily cleanable / washable);
- 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 a small activity room when not required for private family functions.

For further information refer to:

- https://aci.health.nsw.gov.au/resources/rural-health/multipurpose-service-model-of-care-project/living-well-in-multipurpose-service.
- Queensland Health. Design Guidelines for Queensland Residential Aged Care Facilities: https://www.health.qld.gov.au/__data/assets/pdf_file/0025/151099/qh-gdl-374-8.pdf
- Fleming R & Bennett KA, 2017, Environmental Assessment Tool, Dementia Training Australia.
- Victorian Department of Health & Human Services. Dementia Friendly Environments: https://www2.health.vic.gov.au/ageing-and-aged-care/dementia-friendly-environments
- The Eden Alternative in Care Communities: https://www.edenalt.org/the-eden-alternative-in-care-communities/
- Section 2.3.4

2.4.7 Outdoor Areas

Dedicated, level, attractive, secure and easily accessible outdoor areas will be needed for residents. The scale of this area should be similar to a backyard. Landscaping should include disguised fencing, local plant species and local cultural requirements.

Outdoor furniture, fixtures and features should be provided to enable a range of outdoor activities including sitting, socialising, eating, strolling and gardening. Examples to be considered include the provision of raised vegetable gardens and chicken coups. Sheltered, shaded areas will provide protection from the sun, wind and rain and should also consider the provision of screened areas to keep out insects. A small lockable garden shed will also be needed. This may include tools that can be safely used by residents.

The needs of those with dementia will require special attention. Meandering paths should be provided, and tree / shrub plantings should 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, and mobility devices such as scooters.

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.
- Department of Health & Human Services, Victoria. 'Garden design and outdoor spaces' checklist: https://www2.health.vic.gov.au/ageing-and-aged-care/dementia-friendly-environments/strategies-checklists-tools/outdoors-checklist.
- Dementia Australia: https://www.dementia.org.au/.

Outdoor areas need to be secure so that external access into these areas is not possible. Separate outdoor areas may be considered for other services, for example, a small courtyard may be suitable for patients in inpatient beds.

The design of outdoor areas should be undertaken in consultation with local cultural representatives and community gardening groups. For example, a 'healing garden' may be provided to support Indigenous patients, and visitors.

Access to appropriate outdoor areas for the assessment of a patient / resident's mobility and balance on uneven surfaces should be carefully considered.

Access to outdoor areas from waiting areas can also provide overflow options during periods of high demand and to meet local cultural requirements.

2.4.8 Clinical Support Areas

Support areas will be distributed between clinical zones to ensure proximal access for staff, whilst optimising spatial and operational efficiencies through sharing of support areas between zones.

Medical imaging modalities should be located on the periphery of emergency treatment areas to enable ease of access to inpatients and residents as required.

2.4.9 Support Areas

These areas will usually include:

- kitchen including cold and dry storage;
- storage for clinical supplies;
- body holding area with access to a car space;
- waste holding;
- cleaners' room; and
- laundry, including separate areas for the storage of clean and dirty linen.

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

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

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

The allocation of staff work areas and amenities should consider visiting students.

Strategies relating to the use of staff amenities during a pandemic should be considered through the use of alternative operational practices and adaptable facilities.

2.5 FUNCTIONAL RELATIONSHIPS

2.5.1 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.

2.5.2 Internal

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

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 is 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

3.1 ACCESSIBILITY

3.1.1 External

Vehicular access to the 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 body holding area will be required.

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

3.1.2 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.

3.2 PARKING

Visitor and staff parking will be required.

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 AusHFG Part C: Design for Access, Mobility, Safety and Security

3.3 DISASTER PLANNING

An easily accessible store for disaster equipment will be required in the emergency services zone. Disaster equipment requirements will depend on the role of facility.

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, Safety and Security; and
- Part B: Section 80 General Requirements.

3.4 INFECTION CONTROL

Consideration of infection prevention and control is essential in the design and operation of small hospitals / MPS. For clinical areas refer to AusHFG Part D: Infection Prevention and Control.

Consultation with infection prevention and control experts throughout the capital planning process is essential to advise on operational policies and facility requirements.

Reference should be made to contemporary guidelines regarding COVID-19 / other pandemics. This will include consideration of separated patient flows and access for screening / assessments that can be operationalised during pandemic periods.

The design of the residential aged care zones should respond to the National Health and Medical Research Council's Prevention and Control of Infection in Residential and Community Aged Care 2013. However, this document had been rescinded at the time of writing this HPU given the need for updated guidance in response to the COVID-19 pandemic.

The design of facilities must support best practice approaches to minimise the transmission of infection. This includes:

- the ability to effectively isolate or cohort residents in the event of an outbreak e.g. influenza, gastroenteritis, or a pandemic with designation of clean and contaminated zones. The provision of all single bedrooms with dedicated ensuites for residents supports this;
- consideration of work flows and HVAC systems throughout the building to minimise potential cross contamination between clean and dirty activities and to align with contemporary requirements relating to pandemic preparedness;
- the placement of fixtures such as clinical handwashing stations and dispensers for personal protective equipment (PPE) and alcohol-based hand rub to support infection control. Hand basins are not typically provided in residential care bedrooms to promote a domestic environment, but staff will need access to hand hygiene options in alcoves outside bedrooms. The National Construction Code states that 'one clinical hand washing basin is required for each 16 residents or part thereof' within a Class 9c (aged care) facility; and
- other planning and design requirements to optimise pandemic preparedness.

For further information refer to:

- AusHFG Part D: Infection Prevention and Control (2016);
- NHMRC 2019, Australian Guidelines for the Prevention and Control of Infection in Healthcare; and
- Australian Commission on Safety and Quality in Health Care, 2017, National Safety and Quality Health Service Standards (NSQHS) - Guide for Multi-Purpose Services and Small Hospitals 2017.

3.5 ENVIRONMENTAL CONSIDERATIONS

3.5.1 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 these areas.

Strategies may include the use of:

- masonry walls for serviceability and reduction in acoustic transmission;
- acoustic ceiling tiles; and
- carpet.

3.5.2 Lighting

The lighting system should be designed to:

- maximise the use of daylight throughout the facility including the 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 as 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. Night lighting should be able to be turned off with consideration of sensor lighting;
- 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.

3.5.3 Privacy and Observation

One of the major conflicts in resident accommodation design is to allow both residents and staff to be able to see each other while also ensuring 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 (bed screens must be able to be effectively cleaned, laundered and / or disposed of); and
- locating the ensuite so that privacy and safety are maintained for residents. Residents should see the ensuite from their bed.

The following principles should guide the design of the various zones:

- spaces allocated for inpatient care and observation should be adjacent or close to the staff station for continual observation. For smaller units all inpatient beds may be observed from the staff station, however for larger units the staff station will be located to provide oversight of patients requiring closer 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 care centre; and
- residential spaces should maximise privacy while allowing for regular face-to-face contact as required and immediate contact via a nurse call system.

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

3.5.4 Interior Decor

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 where relevant. Reflecting cultural requirements in the design of the unit may encourage attendance and use of the MPS by the target population.

Some colours, particularly the bold primaries and green should be avoided, particularly in areas where clinical observation occurs.

The interior design of the unit can have a major influence on people with visual impairments which can be further exacerbated by dementia. For example, a dark pattern on a floor covering may be perceived as a change in floor level or a hole in the floor, causing distress and potentially limiting mobility or resulting in falls. The following strategies should be considered to support residents and patients with visual impairments:

- persons with dementia can be assisted with path-finding and orientation by using signal colours to encourage a particular direction to follow. Contrasting colours can be used to make elements that residents rely on for orientation, or to aid mobility, stand out from their background, e.g. brightly coloured handrails against a contrasting colour wall;
- the use of a particular colour can be used to denote a function or 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;
- use contrasting colours to highlight changes in surface plane to assist a resident with vision impairment to differentiate between walls and the floor;
- avoid reflective floor finishes;
- avoid the use of extreme colours and patterns such as bold checks/stripes; and
- use computer or physical models to test the passage of the sun throughout the day and determine whether façade treatments cast shadows on the walls and floor that may be disturbing for residents with a visual impairment and / or dementia.

3.5.5 Environmental Sustainability

The planning, design and development of the MPS / small rural hospital must consider a ‘whole of life’ approach to sustainability to maximise sustainable outcomes throughout the life of the asset. Key sustainability principles include designing facilities as healing environments, minimising resource use, maximising the passive thermal performance of the building, and climate resilience.

The relevant jurisdictional sustainability policies and/or guidelines must be referred to and will include the following considerations:

- carbon reduction, including provision of on-site renewables;
- indoor environment quality;
- energy efficiency;
- water management;
- environmentally and socially sustainable materials;
- waste, resource recovery and circular economy;
- ecology and landscaping;
- transport;
- emissions to land, water and air; and
- climate resilience.

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

3.6 SPACE STANDARDS AND COMPONENTS

For the sections below refer to AusHFG Part C: Design for Access, Mobility, Safety and Security and the additional information provided.

3.6.1 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.

3.6.2 Access and Mobility

For relevant information regarding access and mobility refer to:

- Standards Australia, 2010, AS 1428 (Set) 2010 Design for access and mobility Set (SAI Global).

3.6.3 Signage and Wayfinding

Small rural hospitals and MPS facilities 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.

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.

Consider the use of a different signage strategy in residential aged care areas to support provision of a home-like environment. This includes selection and placement of the minimum necessary amount of appropriate and easy to interpret signage. This may include a combination of written signage and images.

Appropriate design solutions for wayfinding and orientation can support people living with dementia to navigate their environment more effectively. This results in patients and residents being able to exercise greater choice and control, improves independence and relies less on staff intervention and redirection which may trigger agitation and other responsive behaviours.

Other cues to assist pathfinding 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 and design features or fabric to designated zones or rooms.

For further information refer to:

- Sections 3.5.4 and 3.7;
- NSW Health Guideline GL2014_018 Wayfinding for Health Facilities and
- Alzheimer's WA Dementia Enabling Environments: https://www.enablingenvironments.com.au/orientation-and-wayfinding.html

3.6.4 Corridors

AusHFG Part C: Design for Access, Mobility, Safety and Security provides advice regarding recommended corridor widths in line with Building Code of Australia (BCA) requirements.

Corridor widths in residential and ambulatory care areas are typically narrower than inpatient areas given the relatively low volume of bed/trolley transfers and to create a less institutional and more domestic feel in residential areas.

3.6.5 Doors

Doorways must be sufficiently wide and high to permit the manoeuvring of beds, wheelchairs, walking frames, trolleys and equipment without risk of damage to the doorway or the item being moved, and without creating manual handling risks. Minimum clear opening dimensions will depend on the service area and in accordance with BCA requirements. Refer to AusHFG Part C: Design for Access, Mobility, Safety and Security and relevant AusHFG Standard Components for further information.

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

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 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.

Consideration may be given to the provision of a sliding door between the bedroom and ensuite in residential care areas as outlined in Section 2.4.6.

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, visitors and staff who are frail or have a disability must be considered with the provision of hold-open or delayed closing devices. Heavy doors that are difficult for older people and / or people with a disability to open should be avoided.

3.6.6 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 with consideration of security requirements, as well as insulation and UV control properties;
- 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 (older people are particularly sensitive to glare);
- outside lighting can be used to provide an outlook at night;
- maintaining the security and privacy of residents;
- safety glass should be installed in areas where there is a high risk of damage; and
- maintenance requirements including access for external cleaning such as removing build-up of spiderwebs and vermin in rural facilities.

3.6.7 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.

All window treatment choices must prioritise the capacity to maintain a clean and dry environment.

3.7 SAFETY AND SECURITY

The safety and security of staff is a major issue in rural and remote areas. Key considerations include:

- collocate services operating 24 hours;
- minimise publicly accessible access doors given the small staff numbers, so staff are aware of who is present within the facility.
- provision of airlocks at entry points;
- ability for staff to manually control doors;
- CCTV monitoring in line with local jurisdictional requirements;
- appropriate security of pharmaceuticals in line with local policy requirements; and
- provision of an appropriate ‘de-escalation’ / low-stimulus room as noted at Section 2.1.2.

The design should ensure there are no points of potential staff entrapment, including at reception and staff station areas. Patient treatment rooms will need to be arranged so that staff can exit rooms easily when they feel unsafe. This may be through the provision of a second door or the arrangement of furniture within the room to ensure that the clinician is facing the patient at all times and there is a clear path of egress that is not blocked by furniture or the patient. Duress alarms should also be provided. A risk assessment and local jurisdictional policies will inform the number and types of rooms requiring a second egress point.

Key safety considerations relating to the design of residential aged care zones include:

- support falls prevention strategies, such as providing appropriate night lighting; arrangement of the bedroom for line of sight to the toilet / ensuite; careful selection of floor coverings to minimise risk of slips and trips; provision of handrails to corridors, ensuites etc; and consideration of materials used for hard surfaces externally, e.g. rubber surfacing for paths;
- reduce environmental stressors that may agitate residents and trigger responsive behaviours such as verbal and physical aggression, e.g. by providing adequate space in shared areas; providing smaller sitting / quiet spaces so residents have a choice regarding levels of social interaction and careful consideration of acoustic design to minimise agitation caused by noise;
- incorporate design features and technology that supports unobtrusive monitoring of residents so they can move freely and safely within and outside the facility as they choose. This also supports compliance with enhanced regulatory requirements around minimising the use of restraint. Strategies that support the choice of free movement for all residents regardless of physical ability or cognitive impairment include sensor automated doors, safe and enticing outdoor areas that can be seen and accessed from communal lounge areas, minimal / passive wayfinding options into and out of the living environment and design that supports active staff presence and engagement in the living areas to provide a level of constant passive supervision.

Safety should also be enhanced through design, the methods of construction and use of materials, and also through choice of the fittings, fixtures and equipment.

3.8 FINISHES

For the sections below refer to AusHFG Part C: Design for Access, Mobility, Safety and Security and the additional information provided.

3.8.1 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 and / or shuffling gaits to move 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 / residents 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.

3.8.2 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.

3.9 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).

3.10 BUILDING SERVICE REQUIREMENTS

3.10.1 Communications Systems

Planning communication systems will need to consider:

- a nurse call system including nurse call, staff assist and emergency call functions;
- duress systems;
- alarm systems where necessary;
- movement detection systems;
- 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
- telehealth facilities used for staff education, management and clinical services.

3.10.2 Medical and Other Gases

Key requirements include:

- 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 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. The associated storage areas and access for delivery will need to be considered early in the planning process.

3.10.3 Air Handling

Where possible, design features should maximise the passive thermal performance of the building envelope to minimise mechanical air conditioning and heating requirements.

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

Ducted systems to both the general areas and residential areas with ducted outside air, and individual control should be considered.

Consideration needs to be given to local conditions including humidity and mould control.

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

Should clinical waste removal be infrequent, the waste will need to be cooled.

3.10.4 Power Supply

Rural areas are prone to failures in the electrical grid system. Emergency generators with sufficient capacity to service lighting and essential power requirements are required. In addition to the standard services requiring emergency power supply, emergency power points must supply electrically assisted beds and lounge chairs.

The cost impact of providing 100% generator back up should be explored as for some MPS facilities this has proved to be a cost effective and reliable outcome.

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.

Also refer to Section 3.5.5 regarding renewable energy solutions, however requirements relating to specialist tradesman for maintenance and repair will require consideration.

04 COMPONENTS OF THE UNIT

4.1 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: www.healthfacilityguidelines.com.au/standard-components

4.2 NON-STANDARD COMPONENTS

Information relating to Non-Standard Components is detailed below.

4.2.1 Gymnasium / Activity Room

Description and Function

The gymnasium / activity room will be accessed by outpatients, inpatients and residents.

The space is often flexibly used for allied health services as well as other services such as antenatal classes, healthy lifestyle programs and other community-based activities and so needs to be designed to support a range of activities.

Location and Relationships

This room will be located on the perimeter of the primary / ambulatory care zone but accessible from the residential zone. As 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

Allied health equipment requirements will depend on the scope of services being delivered but may include parallel bars, a treadmill, exercise bike, equipment trolley with weights and stair unit. An open area will be required for individual or group therapy programs, as well as other activities.

Opportunities to optimise the flexible use of this space should be considered including the use of mobile equipment that can be stored separately or the use of an operable wall to secure fixed, heavy gym equipment when the open space is being used for other purposes.

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

4.2.2 Mobile X-Ray Room

Description and Function

This space is commonly provided in MPS facilities to take images and store the mobile x-ray unit. The room may also include a curtained area where patients can change.

For services providing a dedicated fixed x-ray unit or other imaging modalities, i.e. where it is justified based on the scope of clinical services, projected imaging demand and available workforce, refer to HPU 440 Medical Imaging Unit for detailed design information.

Location and Relationships

The room may be accessed by a patient requiring emergency care, planned ambulatory care and by inpatients and residents. The location should provide access by all of these groups.

Considerations

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.

4.2.3 1 Bedroom (Residential)

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 electric 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 and infection control 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.

4.2.4 Ensuite - Residential

Description and Function

The ensuite will be consistent with the Standard Component with the following additional considerations:

- 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.

4.2.5 Sitting Areas

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.

4.2.6 Lounge – Residential

Description and Function

A lounge area where residents may read, watch TV, participate in activities and entertain visitors. Comfortable seating, suitable for older people / people with disability, 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 residents should be able to see this space when they exit their rooms. This space will also provide access to an outdoor courtyard.

4.2.7 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.

An external outlook and views is desirable.

4.2.8 Dining – Residential

Description and Function

A dining area, used by residents and their family and friends for meals and recreational / diversional therapy activities. For smaller facilities, the room may be sized to accommodate all residents in addition to visitors and staff who may be assisting with feeding. Larger facilities should consider the provision of multiple smaller dining areas to provide a more domestic scale and to minimise noise and distractions.

Small tables seating up to six should be provided, rather than long benches. The furniture should be suitable for older people / people with a disability. Tables with a recessed edge to accommodate large air comfort chairs and wheelchairs should be considered.

Location and Relationships

Collocate the kitchenette.

4.2.9 Kitchenette – Residential

Description and Function

A domestic style kitchen within the residential care area, provided to promote interaction with family and friends, engagement in meaningful activities and access to cooking smells.

Location and Relationships

Collocated with the dining area/s.

Considerations

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).

A balanced approach between safety and accessibility needs to be considered based on the outcomes of a risk assessment. Access for patients / residents with disabilities needs to be provided and the kitchen should be securable after hours.

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.

4.2.10 Kitchen

Description and Function

A kitchen used to produce or plate up resident / patient meals for those in overnight accommodation. The size and scale will be dependent on the model used (cook-chill or fresh cook), however it is recommended that the facility is designed to support a range of models given this may change over time.

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 be managed to ensure food safety is maximised.

Requirements will need to consider the local context, for example the area allocation may require adjustment to meet specific service requirements relating to the geographic location, food model and availability of products.

4.2.11 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 clean linen bays; and
- store dirty linen before it collected by the linen contractor.

Location and Relationships

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

4.2.12 Laundry – Residential

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, to prevent injury. Access will be provided to a small write-up area where a significant in-house laundry service is provided.

4.2.13 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

Locate in the service compound.

4.2.14 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

Locate in the service compound.

4.2.15 Waste Holding – General, Recycling 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.

05 APPENDICES

5.1 SCHEDULE OF ACCOMMODATION

An indicative Schedule of Accommodation for an MPS is provided below. This assumes provision of four inpatient beds and 16 residential care beds. Capacity requirements and associated support areas will need to be adjusted in line with the Clinical Services Plan.

This Schedule of Accommodation may also be used as a starting point for other small rural hospitals with reference to other relevant AusHFG HPUs depending on the scope of services to be delivered.

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 / Waiting

AusHFG Room Code	Room / Space	SC / SC-D	Qty	m2	Remarks
AIRLE-10	Airlock - Entry	Yes	1	10	
WAIT-10	Waiting	Yes	1	18	Central waiting zone for the facility. The recommended area is indicative only and the space allocation will depend on the range and scale of services. Subwait areas may be required for larger services. In selected jurisdictions, a separate waiting area may be provided if a GP service is collocated with the MPS. Waiting areas should not be directly visible from the main entry access for privacy reasons.
PLAP-10	Play Area - Paediatric	Yes	1	10	
RECL-10	Reception / Clerical	Yes	1	9	Assumes 1 staff member
BVM-3	Bay – Vending Machines	Yes	1	3 (o)	Optional. Assumes 2 machines. Place in a location where noise generated by the machines is minimised.
WCAC	Toilet – Accessible	Yes	1	6	Includes baby change
WCPU-3	Toilet – Public	Yes	1	3	Number will depend on the size of the facility
OFF-S9	Office – Single Person	Yes	1	9	Health Service Manager (or equivalent), to be located in close proximity to this zone in a discrete location.
STPS-8	Store - Photocopier / Stationery		1	4	Includes multifunction device.
STFS-20	Store – Files	Yes	1	20	Requirements will depend on transition to EMR.
	Discounted Circulation			25%	

Primary / Ambulatory Zone

AusHFG Room Code	Room / Space	SC / SC-D	Qty	m2	Remarks
CONS	Consult Room	Yes		14	Larger area than standard consult room provided to meet the needs of paediatrics, maternity and other specialised services. Number will depend on service plan. If a child and family health clinic is provided design considerations will include weighing scales, measuring equipment and vaccine fridge. May be located for flexible use by emergency zone.
INTF	Interview Room	Yes		12	May be located for flexible use by emergency zone. Dual egress required depending on risk assessment and local jurisdictional policies.
TRMT	Treatment Room	Yes		14 (o)	Optional. May be required for allied health treatment or wound care. May be located for flexible use by emergency zone. The provision of service specific treatment rooms eg for dental services, dialysis, opthalmology and audiology will depend on the service scope.
	Telehealth Room		1	9 (o)	Optional. For services providing local patients with access to specialist appointments via telehealth. Typical fit out requirements include a table with 2-3 chairs facing a wall mounted TV with camera, speakers and microphone.
MEET-L-30	Meeting Room	Yes	1	30	Telehealth, video conferencing, staff education. Include kitchenette.
	Gymnasium / Activity Room		1	50	To be flexibly used for allied health, and other education and community group activities. Gym equipment will depend on service profile. Consider inclusion of operable wall to secure fixed gym equipment area when open space is being used for other purposes. Operational policy relating to patient belongings requires confirmation and may require access to a property bay.
WCAC	Toilet – Accessible	Yes	1	6	Locate near consult / treatment rooms. A 7m2 Ensuite-Accessible may be required for services providing ADL assistane / day services requiring access to a shower.
	Office - Workstation			4.4	Number and area allocation will depend on staff profile and local jurisdictional policies.
BPROP	Property Bay - Staff	Yes	1	1	For use by visiting staff.
STGN-9	Store - General	Yes	1	10	
	Discounted Circulation			32%	

Emergency Treatment Zone

AusHFG Room Code	Room / Space	SC / SC-D	Qty	m2	Remarks
	Shower- Decontamination		1	8	
AIRLE-12	Airlock - Ambulance Entry	Yes	1	12	An additional secure ambulant entry for pandemic screening with collocated covered outdoor waiting area may be provided depending on jurisdictional approaches. This would be located to enable direct access for pathology samples / assessment with appropriate separation of patient flows.
	Resuscitation / Treatment / Holding			16	May be used for minor procedures. Number to be informed by clinical services planning.
WAIT-SUB	Waiting - Sub	Yes	1	5	Separate to main waiting to support patient flow and privacy. Assume this is closed after hours with use of main waiting area only given small staffing numbers.
TRIAGE-1	Triage Assessment Room, Emergency	Yes	1	13	To include dual egress.
INTF INTF-MH	Interview Room	Yes		14	To include dual egress. Also to be used as a low simulus room as required. Access to telehealth. Anti-ligature requirements will be informed by a risk assessment. May be located for flexible use by primary / ambulatory zone. Refer to INTF-MH for mental health interview room depending on service requirements.
TRMT	Treatment Room	Yes		14 (o)	Optional. Number to be confirmed. May be used for GP consultations, other multipurpose consultations.
OFF-WI-5	Office - Write Up			3	
	Mobile X-Ray Room		1	22	Where a fixed general x-ray is justified refer to HPU 440 Medical Imaging.
BPATH	Bay - Pathology	Yes	1	3	To support POCT. May be located in the Resuscitation / Treatment / Holding areas along with a small refrigerator for specimen holding.
BMEQ-4	Bay - Mobile Equipment	Yes	1	4	
BRES	Bay - Resuscitation Trolley	Yes	1	1.5	Adjacent to Resuscitation/ Treatment/ Holding
ENS-ST-C	Ensuite - Standard		1	5	Toilet / shower
	Discounted Circulation			32%	

Inpatient Zone

AusHFG Room Code	Room / Space	SC / SC-D	Qty	m2	Remarks
1BR-SP-A1	1 Bed Room - Special	Yes	1	18	Larger size to accommodate a carer eg for palliative care. Includes ceiling mounted patient lifter. Number of special sized rooms to be provided will depend on clinical services planning.
ENS-SP	Ensuite - Special	Yes	1	6	
1BR-ST-A1	1 Bed Room	Yes	3	16	
ENS-ST-A1	Ensuite - Standard	Yes	3	5	
BHWS-B	Bay - Hand Washing, Type B	Yes	1	1	Located in corridors. Each bedroom will also include a handwashing bay.
BMEQ-4	Bay - Mobile Equipment	Yes	1	4	
	Palliative Care Lounge		1	18	Includes a beverage bay.
	Discounted Circulation			32%	

Residential Aged Care Zone

AusHFG Room Code	Room / Space	SC / SC-D	Qty	m2	Remarks
	1 Bed Room (Residential)		16	18	Consider inclusion of interconnecting a number of rooms for couples. Sized to enable flexible use for bariatric residents, palliative care, ageing in place and to accomodation personal items and furniture.
	Ensuite (Residential)		15	5	
	Ensuite, - Accessible (Residential)		1	7	
	Lounge - Residential		1	48	3m2 per resident. May be divided into a number of smaller lounges for a more domestic scale.
	Dining - Residential		1	32	2m2 per resident. May be divided into a number of smaller lounges for a more domestic scale.
	Kitchenette - Residential		1	12	
	Resident Lounge / Multipurpose Room		1	16	For family meals, gatherings and functions. May be booked by families
	Sitting Area		3	6	
WCPT	Toilet - Patient	Yes	1	4	Located adjacent to shared areas.
STGN-9	Store - General	Yes	1	12	
BLIN	Bay - Linen	Yes	1	2	
BMEQ-4	Bay - Mobile Equipment	Yes	2	4	
BHWS-B	Bay - Hand Washing, Type B	Yes	1	1	
	Discounted Circulation			32%	

Clinical Support

AusHFG Room Code	Room / Space	SC / SC-D	Qty	m2	Remarks
SSTN-14	Staff Station	Yes	1	14	
OFF-S9	Office - Single Person	Yes	1	9	Number and area allocation will depend on staff profile and local jurisdictional policies.
	Office - Workstation			4.4	Number and area allocation will depend on staff profile and local jurisdictional policies.
CLN-MED	Clean Store / Medication Room	Yes	1	14	
DTUR-12	Dirty Utility	Yes	1	12	A second dirty utility may be required depending on the number of areas served and travel distances.
BLIN	Bay - Linen	Yes	1	2	
	Discounted Circulation			32%	

The allocation of staff work areas also needs to consider community health services, support staff, facility maintenance staff and visiting services.

Non-Clinical Support Areas

AusHFG Room Code	Room / Space	SC / SC-D	Qty	m2	Remarks
CLRM-10	Cleaner's Room	Yes	1	10	
	Kitchen		1	54	Area assumed to manage up to 50 patients / residents and will accommodate a range of food services models. Area allocation may require adjustment to meet specific service requirements relating to the geographic location, food model and availability of products.
STBK-20	Store - Bulk	Yes	1	30	
STEQ-20	Store - Equipment	Yes	1	20	Access to clinical areas and parking for transfer to the community to be considered.
	Laundry - Residential		1	16	For laundering of residents' clothing. Where washing of selected clinical devices is supported by jurisdictional policies a dedicated commercial grade washing machine is required and must be separate to the laundry for residential care. Refer to local jurisdictional policies and AS/NZS 4146. Some services may provide ADL assistance including laundering of clothes which will require access to a separate washing machine.
	Store - Dirty Linen		1	8	
	Store - Clean Linen		1	4	
	Store - Flammables		1	6	
	Store - Medical Gases		1	5	
	Waste holding - General and Recycling		1	10	
	Waste holding - Clinical		1	10	
	Body Hold		1	14	Cool room or refrigerated cabinets. Requirements will depend on local operational policies.
	Workshop - Facility Maintenance		1	15	Size requirements will depend on the operational approach to facilities maintenance. Includes area for minor repairs, tool storage, administration, contractor management, and storage / viewing of plans.
	Discounted Circulation			25%	

Shed storage for large equipment relating to facility maintenance will also require consideration.

Staff Areas

AusHFG Room Code	Room / Space	SC / SC-D	Qty	m2	Remarks
SRM-18	Staff Room	Yes	1	20	Sized in conjunction with staff establishment, operational practice regarding meal times and number of staff on duty each shift. Includes beverage bay.
BPROP	Property Bay - Staff	Yes	1	2	
SHST	Shower - Staff	Yes	1	3	May be provided as part of the site staff facilities
WCST	Toilet - Staff	Yes	2	3	Number will depend on staffing profile for the facility. May be distributed across the facility to minimise travel distances.
	Discounted Circulation			25%	

Staff Accommodation – Optional

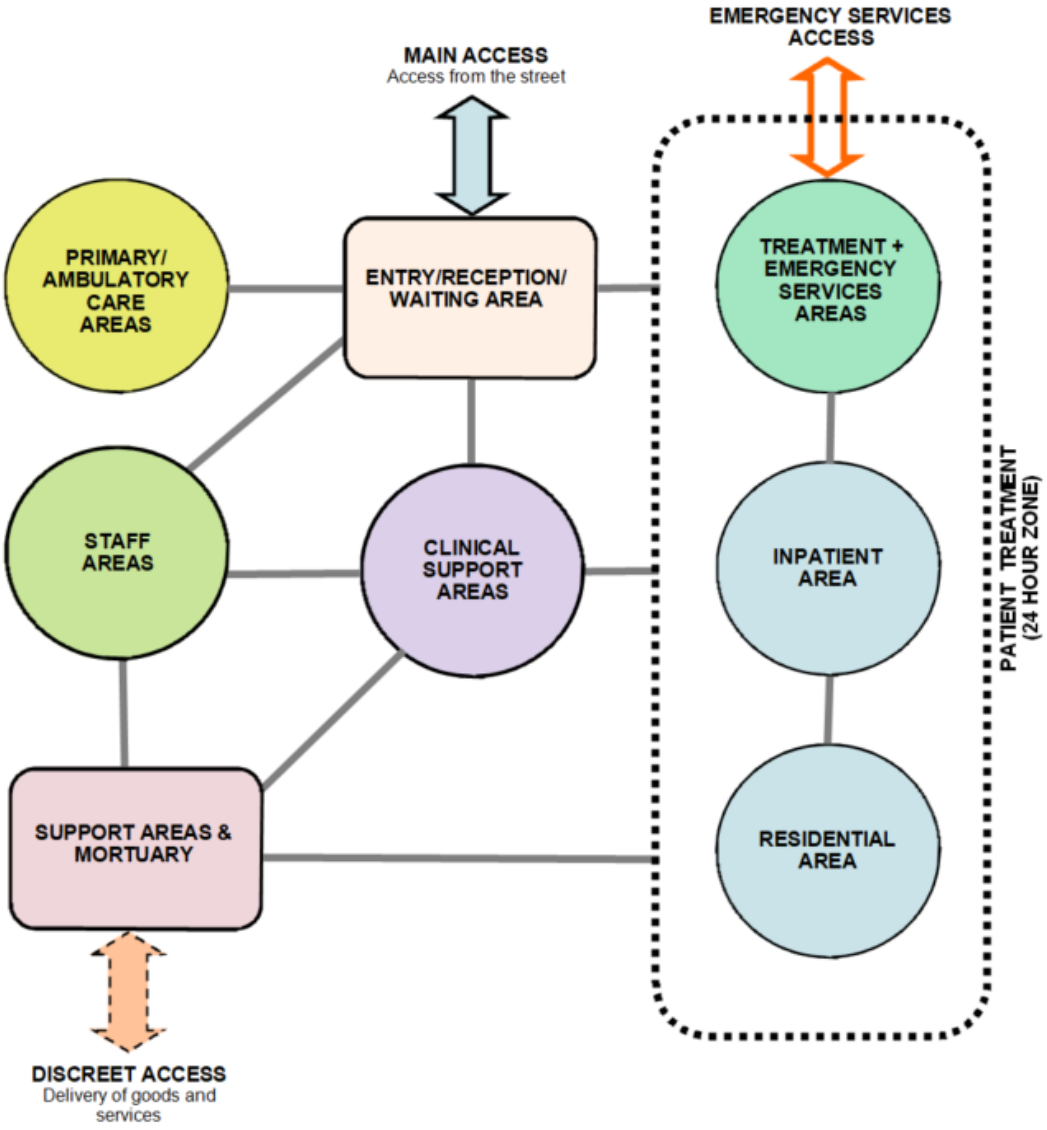
The provision of staff accommodation will depend on local requirements. It may be provided in remote areas where there are no alternative accommodation options.

The areas below represent the provision of one-bedroom units. The number of units provided will depend on projected utilisation.

AusHFG Room Code	Room / Space	SC / SC-D	Qty	m2	Remarks
OVBR	Bedroom	Yes		14	17m2 recommended for accessible bedroom.
OVES	Ensuite	Yes		5	7m2 recommended for accessible ensuite.
	Lounge / Dining			28	34m2 recommended for accessible lounge/dining area.
	Laundry			6	To be shared between units. Size dependent on number of staff sharing access.
	Discounted Circulation			10%	

5.2 FUNCTIONAL RELATIONSHIPS / DIAGRAMS

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



5.3 REFERENCES

- AHIA, 2016, AusHFG Part B: Section 90, Standard Components, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW
- AHIA, 2016, AusHFG Part B: Section 80 General Requirements, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW
- AHIA, 2018, AusHFG Part C: Design for Access, Mobility, Safety and Security, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW
- AHIA, 2016, AusHFG Part D: Infection Prevention and Control, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW
- AHIA, 2016, AusHFG Part B: 140 Allied Health / Therapy Unit, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW
- AHIA, 2020, AusHFG Part B: HPU 155 Ambulatory Care and Community Health, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney NSW
- AHIA, 2016, AusHFG Part B: HPU 280 Oral Health Unit, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney NSW
- AHIA, 2019, AusHFG Part B: HPU 300 Emergency Unit, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney NSW
- AHIA, 2018, AusHFG Part B: HPU 440 Medical Imaging Unit, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney NSW
- AHIA, 2020, AusHFG Part B: HPU 490 Hospital Mortuary / Autopsy Unit, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW
- AHIA, 2017, AusHFG Part B: HPU 510 Maternity Unit, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW
- AHIA, 2018, AusHFG Part B: HPU 520 Operating Unit, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW
- AHIA, 2016, AusHFG Part B: HPU 550 Pathology Unit, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW
- AHIA, 2016, AusHFG Part B: HPU 560 Pharmacy Unit, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW
- AHIA, 2016, AusHFG Part B: HPU 620 Renal Dialysis Unit, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW
- Alzheimer's Australia SA Inc., 2010, Gardens that Care: Planning Outdoor Environments for People with Dementia
- Alzheimer's WA Dementia Enabling Environments: https://www.enablingenvironments.com.au/orientation-and-wayfinding.html
- Australian Commission on Safety and Quality in Health Care, 2017, National Safety and Quality Health Service Standards (NSQHS) - Guide for Multi-Purpose Services and Small Hospitals 2017
- Australian Government Department of Health, Multi-Purpose Services (MPS) Program: https://www.health.gov.au/initiatives-and-programs/multi-purpose-services-mps-program
- Queensland Health. Design Guidelines for Queensland Residential Aged Care Facilities: https://www.health.qld.gov.au/__data/assets/pdf_file/0025/151099/qh-gdl-374-8.pdf

- The Eden Alternative in Care Communities: https://www.edenalt.org/the-eden-alternative-in-care-communities/
- Fleming R & Bennett KA, 2017, Environmental Assessment Tool, Dementia Training Australia
- National Health and Medical Research Council (NHMRC) 2013 Prevention and Control of Infection in Residential and Community Aged Care
- National Health and Medical Research Council (NHMRC) 2019, Australian Guidelines for the Prevention and Control of Infection in Healthcare
- NSW Government Agency for Clinical Innovation (ACI), Living Well in a Multipurpose Service: https://www.aci.health.nsw.gov.au/resources/rural-health/multipurpose-service-model-of-care-project/living-well-in-multipurpose-service
- NSW Health Guideline GL2014_018 Wayfinding for Health Facilities
- Standards Australia, 2010, AS 1428 (Set) 2010 Design for access and mobility Set (SAI Global), Standards Australia, Sydney, NSW
- Victorian Department of Health & Human Services. Dementia Friendly Environments: https://www2.health.vic.gov.au/ageing-and-aged-care/dementia-friendly-environments
- Victorian Department of Health & Human Services. 'Garden design and outdoor spaces' checklist:https://www2.health.vic.gov.au/ageing-and-aged-care/dementia-friendly-environments/strategies-checklists-tools/outdoors-checklist

5.4 FURTHER READING

Further reading relevant to this HPU include:

- NSW Health, NSW Palliative Care Strategic Framework, 2010 – 2013.
- NSW Health, PD2010_049 Multipurpose Services – Policy and Operational Guidelines, 12 July 2010.
- NSW Health PD2010_033 Children and Adolescents – Safety and Security in NSW Acute Health Facilities.
- NSW Health GL2020_014 Hospital Helicopter Landing Sites in NSW.
- NSW Government Clinical Excellence Commission, 2021, COVID-19 Infection Prevention and Control Manual.