Australasian Health Facility Guidelines

Part B - Health Facility Briefing and Planning

0700 – Logistics / Back of House Services

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Australasian Health Facility Guidelines

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01 INTRODUCTION

1.1 PREAMBLE

This Health Planning Unit (HPU) has been developed by the Australasian Health Infrastructure Alliance (AHIA) and has been informed by an extensive consultation process that was completed in 2022.

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

1.2 INTRODUCTION

The HPU provides information relating to contemporary operational models for hospital logistics / back of house (BOH) services and the associated planning and design requirements. The following services are included:

- Food Services
- Linen Services
- Cleaning Services
- Waste Management
- Facility Management
- Supply Services
- Loading Dock
- Security Services
- Porterage / Orderly / Wardsperson Services
- Patient Transport
- Fleet Management
- Mail Services

The guideline 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
- Part D: Infection Prevention and Control

The AusHFG HPU 430 Front of House should also be referred to, given a number of services described within this document may be located within the front of house areas of a hospital.

1.3 POLICY FRAMEWORK

Before undertaking a project, planners and project personnel should familiarise themselves with individual jurisdictional plans, regulations, policies, service specific guidelines and reports.

Relevant national codes and Australian / New Zealand Standards are referenced throughout this HPU. Jurisdictional policy information, where available, is contained in the Further Reading section.

1.4 DESCRIPTION

This HPU outlines common operational models for BOH services associated with hospitals providing overnight patient accommodation. Operational models, however, will vary between jurisdictions and facilities, and will require confirmation with relevant service providers, whilst ensuring alignment with local jurisdictional policies and cultural practices.

Where possible, the full end to end operational processes are described within this guideline, however the recommended schedules of accommodation in Section 14.1 only reflect BOH areas. Spatial implications throughout other areas of the hospital, e.g. cleaners' rooms, linen bays etc, are included within other relevant HPUs.

The majority of BOH functions are located within staff-only areas of a hospital. Supporting facilities including staff amenities for BOH services will require consideration. These areas should be shared with other services wherever possible, particularly for smaller rural hospitals including Multipurpose Services (MPS).

Opportunities for recycling, or to manage waste in a more effective manner, in line with local jurisdictional sustainability frameworks and policies, should be implemented. This could include zero waste policies, sustainable choices in product selection and procurement practices.

02 FOOD SERVICES

2.1 SERVICE DESCRIPTION

Food Services are responsible for the preparation and delivery of food to patients, staff and public in accordance with local jurisdictional guidelines.

The Food Service may be operated by a jurisdictional wide service provider or the local health service.

Food services are generally responsible for the following:

- Meal preparation, production, and delivery for patients
- Stocking of ward pantries and beverage bays as required
- Interface with nutritional support services and menu management
- Purchase, receipt, storage and provision of food and beverage products
- Ancillary services, including staff tea and coffee provision. Hospitality / function catering services in line with local jurisdictional policies.
- Access to meals for staff as per award conditions / in line with local jurisdictional policies
- Provision of safe drinking water in line with local jurisdictional policies
- Equipment cleaning and sanitising
- Ware washing

Retail catering services (comprising of onsite staff and public cafeterias with food-fair and coffee shops; functions and events catering; and vending machine catering) may be outsourced to the private sector or be part of food services delivery.

2.2 KEY POLICY AND GUIDELINES

Food Standards Australia New Zealand (FSANZ) is a statutory authority in the Australian Government Health portfolio. FSANZ develops food standards for Australia and New Zealand. The Code is enforced by state and territory departments, agencies and local councils in Australia, and the Ministry for Primary Industries in New Zealand.

Food safety laws differ across jurisdictions. Any changes to models should ensure they meet federal, state and local food safety requirements and nutritional guidelines.

Key policy and guidelines relating to all food services areas include:

- Australian / New Zealand Standard 4674-2004 Design, construction and fit-out of food premises

2.3 OPERATIONAL MODELS

The model and range of services will be dependent on the size and location of the healthcare facility and may take into consideration the acuity or profile of patients. Larger healthcare facilities are likely to have food prepared offsite and delivered for assembly and re-thermalisation in the kitchen. Some smaller hospitals and MPS in rural and remote areas may provide fresh cooked meals.

Common options for food services include:

- Re-thermalisation kitchen
- Cook fresh
- Cook chill (hot or cold plate)

Project teams should confirm the operational model for the hospital through consultation with service providers.

Factors to consider, when determining the best model for the facility, include the cost, size, location and opportunities to share resources across facilities. Each model is described below.

2.3.1 Re-thermalisation Kitchen

Food will generally be prepared offsite (via cook chill method or other methods) and supplied to healthcare facilities in the form of chilled and frozen patient meals and/or components of meals. Meals are assembled and re-thermalised within the kitchen.

Some services are now providing patients on inpatient units with access to bedside electronic menu ordering systems. This may involve food services staff taking orders from patients using a tablet device. Orders are then sent directly to the kitchen for preparation.

Kitchen staff also commonly use touchscreens to efficiently manage their workload, which features streamlined reporting for managers.

Under this model, some hospital kitchens are being redesigned to replace tray assembly lines with agile stations, where staff fill the orders they have personally taken. They deliver the meals and return to collect trays from the same patients, providing an agile and customer focus service.

As staff collect meal trays, they record what the patient has eaten on their tablet device. This can be sent directly to the patient's clinician, to support nutrition care planning.

A range of new operational models are being implemented across jurisdictions with the view to provide a more personalised approach to food service delivery.

Key areas of focus include:

- Increased food options
- Ability to customise tasty and nutritious meals
- Ability for patients to order meals
- Improved presentation
- Reduced waste
- Reduced time between ordering and receiving meals.

2.3.2 Cook fresh

The cook fresh methodology is based on preparation of meals onsite, held for a short period of time then served directly to the patient.

Mid meals will be provided for patients as required. Mid meals will be delivered from the central kitchen to the inpatient unit for distribution to the patients throughout the day and evening.

2.3.3 Cook chill (hot plate and cold plate)

Cook chill methodology is based on the full cooking of food, followed by rapid chilling and storage at controlled temperatures (for up to 28 days). This may occur on the hospital site or offsite and will be dependent on local arrangements (e.g., centralised and distributed to other sites), and the location and the size of the facility.

There are two methods in which food is reheated:

- Hot plating: bulk heating of food and plating in line with food temperature requirements
- Cold plating: meals are plated cold and re-thermalised in trolleys.

Food services staff will transport meals using re-thermalising / chiller trolleys and electric tug-carts / motorised trolleys via unit pantries, service corridors and hospital corridors.

Designated meal trolley bays will be provided in inpatient units for parking of trolleys and/or re-thermalising / chiller trolleys. Food services staff will generally be responsible for delivering meals to patients, unless there are special circumstances which require alternative arrangements (e.g., infectious patients, mental health units, paediatrics).

All patient trays will be collected and returned to the hospital kitchen by the food services staff.

Bays for trolley parking on inpatient unit will be dependent on operational models

Mid meals will be provided for patients as required. Mid meals will be delivered from the central kitchen to the inpatient unit for distribution to the patients throughout the day and evening.

Cook Fresh / Cook Chill operational models will require sufficient preparation area/s to perform all food service tasks appropriately and have a clear designation between different food preparation activities. Consideration should be given to a one-way workflow.

A separate area within the kitchen, including equipment and storage, may be required for the preparation of special meals (e.g., cultural and religious meals, special therapeutic diets (e.g., allergy, renal).

2.4 OPERATIONAL POLICIES

2.4.1 Hours of Operation

Catering services will operate 7 days per week in line with local arrangements.

2.4.2 Infection Prevention and Control

Personal protective equipment (PPE) and hand washing facilities shall be installed as attention to hygiene is essential in food services.

Handwash basins should be provided in accordance with Standards Australia AS 4674. Basins should be located at all staff entrance points to all food service areas, and no further than 7 metres from any place where food handlers are opening food.

Handwash basins with elbow lever taps for hands free washing should be used. Hand hygiene facilities and adjacency to staff facilities should be considered.

2.4.3 Work Health and Safety Considerations

The built environment should enable good Work Health and Safety (WHS) practices to ensure the safety of staff and others. This may include, but is not limited to, the following:

- Manual handling of heavy supplies that may require lifting equipment. This will also include equipment selection so ergonomic solutions are provided (e.g., bench-top dishwashers).
- Chemical agents used in cleaning / decontamination processes may require specific chemical handling requirements (refer to local regulations). Placement and adequacy of chemical storage and use of automated dispensing systems should be carefully considered.
- Electrical and fire hazards related to equipment in use
- Burn hazards to staff and patients. Risk of burns arising from placement of wall mounted boilers.
- Slip, trip and fall hazards associated with floor surfaces, workspace design and equipment placement / storage
- Infectious and contamination hazards.

2.4.4 Distribution of Goods

Automated or motorised equipment may be considered to assist with safe and efficient transfer of meal trolleys throughout the healthcare facility. If Automated Guided Vehicles (AGVs) are desired these need to be reviewed to ensure compatibility of the site (e.g., surface, inclines, pathways); compatibility with meal trolleys and accessibility to charging bays.

A return on investment exercise should be undertaken to determine the preferred model of distribution.

2.4.5 Management of Food not provided by the Hospital

Clinical areas do not have the capacity to store food that has not been provided by the hospital as there is no way to ensure the integrity and preservation of externally bought foods.

Nutritional advice should be sought regarding consumption of externally bought food.

2.4.6 Ordering of Food and Groceries

The procurement of food and groceries will be based on local jurisdictional policies. Some facilities may utilise electronic ordering systems, while others, such as smaller hospitals, may use manual systems.

2.4.7 Inpatient Units

Each inpatient unit will have a beverage bay with storage for mid meal items and for out-of-hours patient meals. The management of perishable items stored within inpatient units should comply with food safety standards.

Sites may provide an on-demand meal service for patients.

2.4.8 Preparation of Formula

Where required, a Milk Preparation / Storage Room should be provided and ideally be located adjacent to the food preparation area for ease of access. In determining the location, consideration should be given to the proximity of Neonatal Intensive Care Unit (NICU)and birth centres / maternity inpatient units if possible. Formula is typically prepared by hospital staff.

2.4.9 Paediatric Meals

Child-friendly food and meals will be provided for paediatric services.

Snacks such as yoghurt, fresh fruit, cheese and margarine and portion pack products such as, long-life juice, crackers, biscuits and jellies may be stored within paediatric inpatient units in designated fridges and storage areas and distributed by nursing staff. The management of perishable items stored within inpatient units should comply with food safety standards.

Meals may be provided for parents / carers if required in line with local jurisdictional policies or clinical requirements e.g., isolation of patient and carer.

2.4.10 Special Meals

Special meals such as cultural or religious dietary meals (e.g., halal) or special therapeutic diets (e.g., allergy, renal) are usually prepared onsite in a specialised diet kitchen. In some circumstances, for example kosher, these meals may be prepared offsite.

2.4.11 Supplements

Nutritional supplements are generally managed by dietitians and can be dispensed by kitchen or pharmacy and may be stored in locked cupboard within beverage bays. Operational processes will be dependent on local arrangements.

2.4.12 Receival of Goods

Perishable foods will be received by appropriately trained staff at the receiving area and on acceptance, will be delivered directly to the kitchen / food services stores.

Packed chilled and frozen foods (disposable pre-plated and bulk chilled food) will be delivered to the receiving dock and on acceptance, will be transported directly to the kitchen / food services for holding in the freezer / cool rooms.

Dry stores will be received by staff at the receiving area and on acceptance, will be delivered directly to the kitchen / food services dry stores area.

2.4.13 Waste Management and Sustainability Considerations

Food and appropriate waste will be disposed in the central kitchen, in line with hospital waste management policies.

Consideration should be given to a kitchen waste hold area to allow staff to sort waste into relevant streams prior to transfer to the waste hold area in the loading dock.

Appropriate temperature and pest controls should be taken into consideration.

Large facilities may consider technology that converts food waste into pulp, ready for composting (e.g., pulp master systems). This system will require an external tank within 30 metres of the pulp master unit with easy access and set down area for truck pumping.

2.5 FUNCTIONAL AREAS

This section provides a summary of the general functional areas provided within food services and may vary depending on the service model.

Entry / Receiving

- Receiving area for supplies with access to the Clean Loading Dock, and in line with food safety requirements, the separation of cooked / uncooked food deliveries
- Airlock Entry
- Handwashing area

Storage Areas

- Refrigerator/s, cool rooms and freezers of adequate size to store perishable foodstuffs
- Storage areas for dry goods, disposables, chemicals
- Fruit / vegetable / meat storage
- Storage for tableware, linen, crockery, utensils and consumables

Cleaning / Washing Areas

- Trolley return / stripping for returned food delivery trolleys
- Trolley / cart washing area
- Ware washing (size and equipment will be dependent on use of disposable or reusable utensils and equipment)
- Pot washing

Food preparation and Plating areas

- Separate preparation areas for food types including meat, dairy, vegetables, pastry, seafood, nuts
- Separate preparation areas for special meals (cultural, religious, therapeutic diets)
- Cooking facilities
- Blast chillers for cook chill processing
- Reheating facilities and/or re-thermalisation facilities if cook chill food is processed
- Plating areas including provision of tray lowerators, plate dispensers, trolleys holding meal tray components
- Cart holding area including provision for re-thermalisation of pre-plated chilled food for cook chill service, or hot / cold trolleys for cook fresh service
- Trolley parking

Shared Areas

Staff amenities for food services may be shared between other back of house services.

Access to an emergency shower facility will be required.

2.6 FUNCTIONAL RELATIONSHIPS

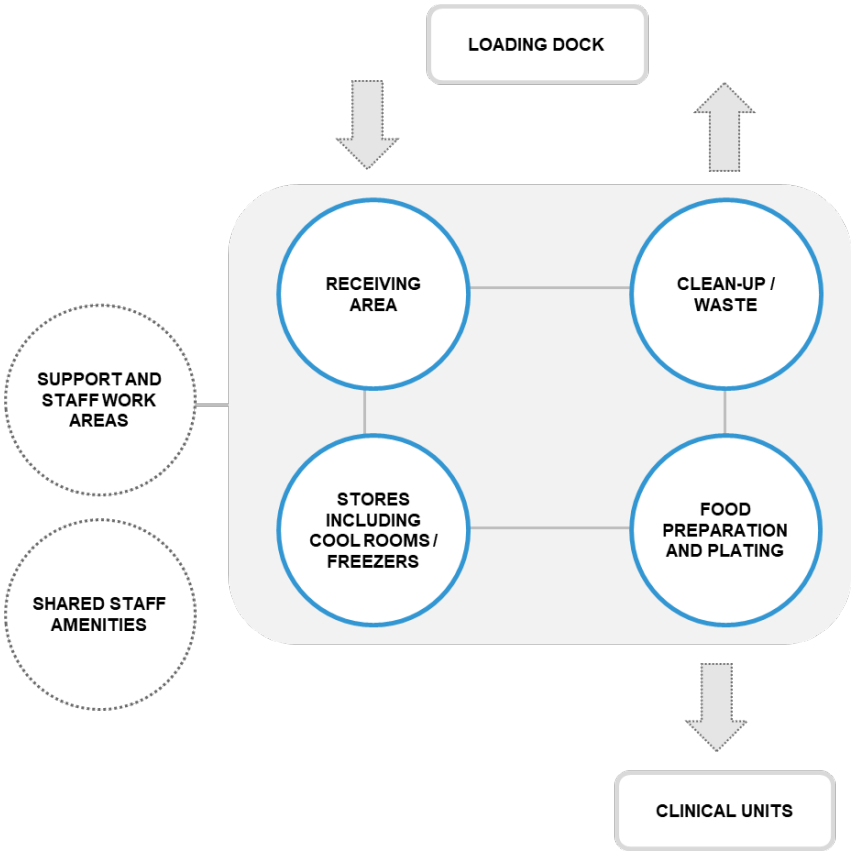
2.6.1 External

Key external relationships are with all clinical areas of the hospital including the loading dock. Requirements and considerations are as follows:

- Direct access from the receiving dock is essential for receipt of food supplies (food delivery vehicles may require a raised loading dock)
- Direct access to the dispatch dock will be required for waste removal
- Quick, easy, and undercover access will be required to all areas of the hospital where food is delivered. Level access will be required for those sites that don't have tugs/motorised trolleys
- Proximity to patients to reduce travel times to bedside, to support the implementation of order to appetite programs and increased responsiveness to patient and ward requirements e.g., late admissions and changes to diets, etc.

2.6.2 Internal

Key internal functional relationships are as follows:



Clear separation between clean and dirty processes should be maintained where possible, in addition to separate pathways that reflect cultural practices e.g., cultural practices where food and the deceased do not travel along the same paths.

Some jurisdictions may require a receiving area for smaller facilities.

Where vertical and horizontal paths need to be planned for operational flows to clinical units, direct access to dedicated service lifts should be considered.

2.7 DESIGN REQUIREMENTS

2.7.1 Access

Doorways to all areas must provide unhindered access for food trolleys and the installation of large equipment e.g., dishwasher, fridges. Access to freezer, dry store and cool rooms must accommodate pallet jacks.

Automated doors are preferred to minimise WHS risks including the cool room, freezer and dry store (and emergency internal door unlocks / safety alarms where required).

Refer to AusHFG Part C: Design for Access, Mobility, Safety and Security for additional information on wall protection, floor finishes and ceiling finishes.

2.7.2 Materials and Finishes

Finishes, walls and ceilings will be impervious and easy to clean. Slip resistant floors and floor drainage are required. Floors where staff are relatively stationary (i.e., tray line) should be level and vinyl flooring should be considered, as opposed to a textured flooring.

Refer to AusHFG Part C: Design for Access, Mobility, Safety and Security for additional information on wall protection, floor finishes and ceiling finishes.

2.7.3 Engineering Requirements

A temperature range of 20 degrees +/- 2 degrees Celsius will be maintained for the preparation and plating area. Continuous alarm monitoring of freezer, cool rooms, preparation and plating areas to the hospital Building Management System (BMS) is essential.

General Power Outlets (GPOs) are required throughout the kitchen for charging and electrical equipment. Emergency GPOs will be provided in accordance with current standards. Emergency power supply will be required to the freezer, cool rooms, the trolley reheating bays and computers for tray tickets etc and may be required for ovens when utilised to support the food services model.

Controlled staff-only access to the department will be required.

2.7.4 Loading Dock

Food Services are a frequent user of the loading dock.

Key considerations include:

- scheduling of operations to enable efficient operation of the loading dock
- access to pallet jacks for movement of goods and waste
- automated doors from the dock to the receiving area to reduce WHS risks
- if a raised dock is provided, a dock leveller is required. Edge protection should be provided for use when trucks are not docked
- space for food temperature checks

Refer to Section 08 Loading Dock for further information.

2.7.5 Technology Considerations

The following Information and Communications Technology (ICT) systems may be provided:

- data outlets and wireless access for computers / internet access to enable seamless operations and integration
- patient ordering system / menu management
- electronic monitoring of cool rooms and freezers linked to alarm systems.
- electronic monitoring of cart temperatures linked to alarm systems
- ability to take temperatures of receiving goods and dispatch linked to a compliance management software
- wireless networks for computer access in receiving areas, which may include service corridors and loading docks
- wireless access in all general areas of a hospital/s. This will support provision of mobile devices such as ‘tablets’ which are increasingly being used to assist with tasks such as logging meal intake and conducting audits.

2.8 SCHEDULE OF ACCOMMODATION

Refer to Section 14.1

03 LINEN SERVICES

3.1 SERVICE DESCRIPTION

Linen Services will be managed according to local jurisdictional polices and guidelines and relevant Australian and New Zealand Standards.

Linen is commonly provided to the facility by an external supplier, however some facilities may launder their own linen onsite.

Hospital linen services are usually responsible for:

- receiving clean linen on trolleys from supplier
- holding sufficient stocks of linen onsite
- collection of dirty linen for transport offsite
- distributing clean linen using trolleys
- distributing clean and collecting dirty theatre linen / general linen.

Inventories are managed by manual and/or electronic systems, depending on local jurisdictional policies.

3.2 KEY POLICY AND GUIDELINES

Refer to local jurisdictional policies and guidelines including Infection Prevention and Control and WHS regulations. A number of these are included under Section 14.3 Further Reading.

Key policy and guidelines relating to linen services include:

- Australian / New Zealand Standard Laundry practice AS/NZS 4146:2000; section 2.4 collection, loading, storage and sorting of linen

3.3 OPERATIONAL MODELS

The proposed linen service model will be dependent on the size and location of the healthcare facility. The two most common models are as follows, noting that there may be a hybrid model within some facilities:

- bulk distribution – clean linen is delivered on trolleys, sorted within a clean linen hold, transported to clinical units on trolleys, and either trolley exchanged or linen is decanted from trolleys
- roll on / roll off - clean linen is delivered on an imprest trolley exchange system to the loading dock, placed in clean linen hold and then transported to clinical units.

Deliveries are generally received 1 to 7 days per week and dirty linen collected 5 to 7 days per week depending on local arrangements, ensuring sufficient linen for service delivery. There may be opportunities to deliver outside of operational hours to minimise loading dock traffic and timeframes of unloading deliveries.

The separation of clean and dirty flows must be achieved in the back of house area including:

- separate clean and dirty linen hold areas
- separation of activity on the dock
- separation of flows in other areas of the hospital by covering clean and dirty transport trolleys.

Some linen may have special requirements for separate processing. These will be sorted separately. All linen will be handled according to infection prevention and control and WHS regulations. Linen may include items such as curtains and hoist slings, depending on local jurisdictional policies.

Within a clinical unit, such as an inpatient unit, clean linen will be stored in a designated bay. The linen will be protected from contamination by doors, a curtain or a dust cover that protects the trolley. Staff will place dirty linen in a skip that is stored in a dirty utility room. This is transferred to the disposal room where it is collected and taken to the dirty linen hold room near the loading dock. Dirty linen will be removed in line with operational policies.

Clean and used linen trolleys will utilise the same circulation pathways as other supplies and equipment.

The increased uptake in the use of reusable gowns, drapes and other items will have an impact on the supply chain. Consideration should be given to waste management and the sustainability of reusable and non-reusable items e.g., soft plastic recycling (packaging for uniforms etc).

3.4 OPERATIONAL POLICIES

3.4.1 Hours of Operation

The Linen Service will operate up to 7 days per week in line with local arrangements, ensuring sufficient linen for service delivery requirements.

3.4.2 Infection Prevention and Control Considerations

Key infection prevention and control considerations relating to linen services include:

- clear separation between clean and dirty processes should be maintained where possible
- contaminated or infectious dirty linen will be placed into alginate bags then heavy-duty bags to eliminate unnecessary handling of linen
- cytotoxic linen which should be bagged and handled in accordance with local jurisdictional policies and guidelines, and requirements of the launderer
- provision and location of linen bags in easily accessible areas.

3.4.3 Work Health and Safety considerations

The built environment should enable good WHS practices to ensure the safety of staff and others. This may include, but is not limited to, the following:

- the transportation of clean linen and minimising overweight dirty linen bags to reduce work related injuries
- safe management of sharps to reduce the risk of needle stick incidents
- safe management of clinical waste to reduce exposure to infectious diseases
- safe management of cytotoxic & infectious linen to limit exposure to hazardous substances and waste
- various hazards arising from insufficient space on loading docks and in holding areas.

3.4.4 Distribution of Goods

Automated or motorised equipment may be considered to assist with safe and efficient transfer of linen trolleys throughout the healthcare facility. If Automated Guided Vehicles (AGVs) are desired, these need to be reviewed to ensure compatibility of the site (e.g., surface, inclines, pathways), compatibility with linen trolleys and accessibility to charging bays.

A return on investment exercise should be undertaken to determine the preferred model of distribution.

3.5 FUNCTIONAL AREAS

The Linen Service will comprise of the following:

- Clean linen hold
- Dirty linen hold

The design requirements will depend on the size and scale of the healthcare facility and the operational models.

Washing of some clinical items, e.g., slings, may occur onsite where this is supported by local jurisdictional policies. This will require a dedicated commercial grade washing machine and compliance with laundry standards.

For some jurisdictions, onsite laundering 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. Refer to AS/NZS 4146: 2000: Laundry practice and local jurisdictional policies.

Storage space for laundered items may be required e.g., mop heads.

3.5.1 Clean Linen Hold

The clean linen hold will have sufficient capacity to store a minimum of a day's worth of trolleys.

Bulk linen trolleys range in sizes of approximately 650mm-750mm width, 1150mm-1605mm length and 1400mm-1410mm height.

Although there is no standard imprest trolley, similar dimensions to above are usual and measurements for the hospital imprest trolley should be obtained to ensure space is available in the clean linen hold for this requirement.

Some healthcare facilities located in remote areas may have goods and supplies cut off due to a natural disaster (e.g., flooding). If disaster management provision of linen is required, sufficient space for storage of wrapped pallets should be accommodated in the clean linen hold. Doors should be large enough for a pallet to enter the area, where applicable.

Access to a computer will be required for ordering and stocktake purposes. This may be fixed or a mobile tablet system.

The clean linen hold must not be a thoroughfare to access entry to another area.

3.5.2 Dirty Linen Hold

The dirty linen hold will be sized in line with frequency of collection and anticipated patient activity. In smaller sites this may need to be larger if dirty linen is not collected daily. Consideration should be given to size of trolleys.

Appropriate mechanical extraction is required to minimise odours.

Appropriate temperature and pest controls are required which take into consideration the local environment, to minimise odours and ensure appropriate working conditions for staff.

Access to a tap for cleaning purposes may be required.

3.5.3 Shared Areas

Staff amenities for cleaning services may be shared between other back of house services.

3.6 FUNCTIONAL RELATIONSHIPS

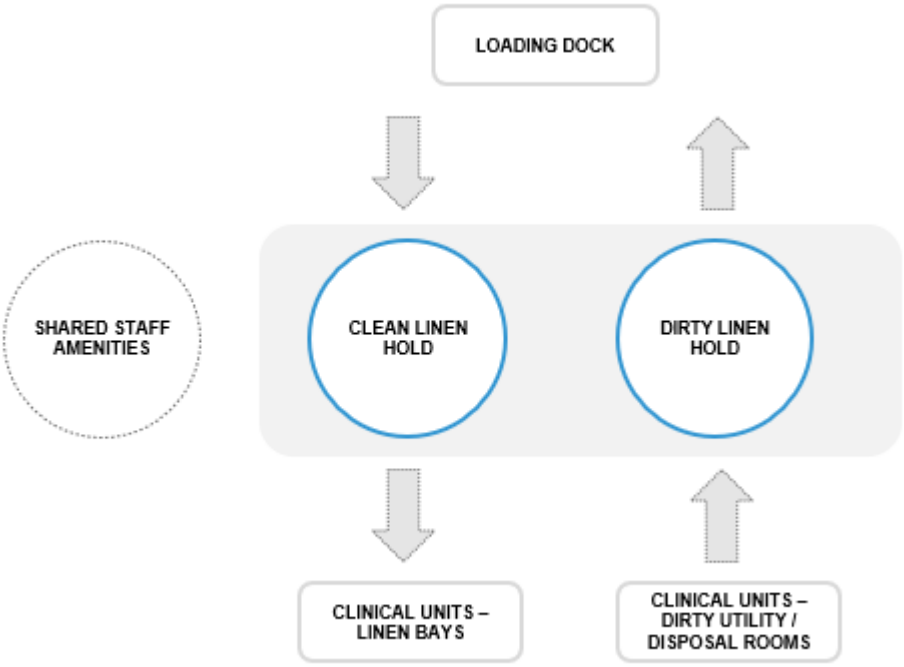
3.6.1 External

Key external relationships are with all clinical areas of the hospital including the loading dock. Requirements are as follows:

- direct access from the receiving dock for delivery and collection of linen trolleys
- direct access to the dispatch dock will be required for waste removal
- quick, easy, and undercover access will be required to all areas of the hospital where linen is delivered.

3.6.2 Internal

Key internal functional relationships are as follows:



3.7 DESIGN REQUIREMENTS

3.7.1 Access

Doorways to be sufficiently sized to enable two trolleys (or one pallet) to be removed at the same time without hold opens.

Facilities that utilise motorised tugs will require charging bays with a sufficient number of GPOs. These may be shared with other back of house services if practical.

3.7.2 Materials and Finishes

Finishes should be selected with consideration to the following:

- infection prevention and control and ease of cleaning
- ability to withstand heavy trolley traffic
- non-slip surfaces (tiles to be avoided where possible).

Door and wall protection should be provided where linen trolley movement occurs such as service corridors, service lifts, linen holding rooms and linen storage bays.

Refer to AusHFG Part C: Design for Access, Mobility, Safety and Security for additional information on wall protection, floor finishes and ceiling finishes.

3.7.3 Loading Dock

Linen Services are a frequent user of the loading dock.

Key considerations include:

- scheduling of operations to enable efficient operation of the loading dock
- access to pallet jacks for movement of goods and waste
- automated doors from the dock to the receiving area to reduce WHS risks
- if a raised dock is provided, a dock leveller is required. Edge protection should be provided for use when trucks are not docked.

Consideration may be given to the use of electric vehicles for delivery of linen services. If provided, planning will need to consider provision for charging stations at the loading dock.

Refer to Section 08 Loading Dock for further information.

3.7.4 Technology Considerations

The following ICT systems may be provided within the linen services including:

- data outlets for computers / internet access
- wireless networks for computer access in receiving areas, which may include service corridors and loading docks
- consideration of future Radio Frequency Identification (RFID) requirements e.g., for monitoring and ordering linen.

3.8 SCHEDULE OF ACCOMMODATION

Refer to Section 14.1

04 CLEANING SERVICES

4.1 SERVICE DESCRIPTION

Cleaning Services are responsible for maintaining a clean and sanitary environment across the hospital. Cleaning services will operate from a centralised location with decentralised storage facilities located across the hospital.

Cleaning services may be provided in-house or through an outsourced service, operating in accordance with local jurisdictional policies and guidelines.

Key functions include:

- general routine cleaning
- terminal (infectious) cleaning of patient care areas
- specialty area cleaning that may have a dedicated cleaning workforce including operating theatres, Intensive Care Units (ICU), and mental health inpatient units
- periodical carpet cleaning including shampooing (may be outsourced to an external contractor)
- auditing for accreditation / standards
- external façade and window cleaning, often undertaken by external contractors.

4.2 KEY POLICY AND GUIDELINES

Refer to local jurisdictional policies and guidelines. A number of these are included under Section 14.3 Further Reading.

4.3 OPERATIONAL MODELS

The Cleaning Service is generally coordinated by a manager.

The Cleaning service will generally be managed via a roster allocation to each area within the hospital and will be supported by a paging system or electronic allocation system. Management of staff and task allocation will be based on local jurisdictional policies. Provisions may include space for staff to wait pending task allocation.

Depending on the size of the facility, a night duty and evening shift will be covered by a cleaner or multi-task role hospital assistant.

Cleaning will be undertaken based on an agreed specification that considers the services being delivered (i.e., clinical or non-clinical), frequency of use, traffic density, and clinical considerations (where applicable). Frequency of cleaning should be in line with compliance of relevant standards / accreditation requirements.

The manager will normally order cleaning and domestic supplies for the facility. Bulk cleaning and domestic supplies will usually be delivered to the loading dock and transported to the main cleaner's store, equipment store, or chemical store. These supplies are then distributed to cleaners' rooms across the hospital. Smaller facilities will have a main cleaning store comprising general and equipment functions and chemical cupboard rather than two separate areas.

The utilisation of mops and cloths, in conjunction with appropriate technology (e.g., steam, ultraviolet), for cleaning in clinical areas, non-clinical areas and public areas should be done in line with infection control standards and/or relevant guidelines.

The management of waste will vary depending on the size and scale of the hospital where:

- larger facilities will have dirty utility rooms located in most clinical units. Waste will be transferred from the dirty utility to disposal rooms where it will be collected. This approach may only be feasible if there is a dedicated waste collection service in place.
- smaller facilities may have the dirty utility as a combined dirty / disposal room
- selected facilities, such as small hospitals, MPS or community health services, will not require a disposal room and will instead hold waste, ready for collection in a secure outdoor area or disposal at the loading dock area.

Cleaners' rooms will hold cleaning equipment, chemicals, and consumables, and may require charging points for battery operated equipment, drainage and a sluice. The room will be provided in clinical units and other areas across the hospital. The room will be locked and accessed by cleaning or nursing staff as required. Most cleaners' rooms will have automated chemical dispensing.

Staff amenities can be shared where possible with other back of house departments. Lockers for all staff will be required.

4.4 OPERATIONAL POLICIES

4.4.1 Hours of Operation

The Cleaning Service will operate onsite 7 days a week. After hours provision will be dependent on the local jurisdictional policies.

4.4.2 Infection Prevention and Control Considerations

Mop heads (traditional or microfiber) may be laundered off-site by an external laundry service or onsite in line with standards compliance (within the health service) and WHS regulations.

For some jurisdictions, onsite 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. Refer to AS/NZS 4146: 2000: Laundry practice and local jurisdictional policies.

4.4.3 Work Health and Safety Considerations

The built environment should enable good WHS practices to ensure the safety of staff and others. This may include, but is not limited to, the following:

- exposure to hazardous chemicals associated with use and storage
- ergonomics hazards associated with equipment, storage and workflows with the selection of equipment in line with industry best practice.
- manual handling and ergonomic hazards associated with storage and transport of equipment throughout the facility
- sufficient designated, secure storage space for equipment, with easy access for staff, as close to point of use as reasonably practicable
- trip and ergonomic hazards associated with charging cables, cords and positioning of GPOs
- battery operated / cordless equipment to improve the safety and efficiency of staff, and GPOs positioned at safe working height
- electrical hazards.

General considerations can be found in Part C: Design for Access, Mobility, Safety and Security.

Consideration should be given to use of Therapeutic Goods Administration (TGA) listed / registered environmentally friendly cleaning products.

4.4.4 Equipment Maintenance

Small equipment (e.g., scrubbers, floor polishers) will ordinarily be collected by external contractors and serviced offsite, or as per local arrangements. Large equipment will be serviced on the loading dock.

4.4.5 Testing and Tagging

All testing and tagging of electrical equipment will be conducted on a regular basis to ensure the safety of the people using the equipment and to reduce the risk of an electrical hazard. This should be completed in line with local jurisdictional policies and guidelines, including test and tag regulations.

4.4.6 Distribution of Cleaners' Rooms

Key principles in relation to the location and number of cleaners' rooms per service / department are as follows:

- one cleaners' room is typically provided in each inpatient unit and other clinical departments
- very small departments may be able to share a cleaner's room with an adjacent department in line with infection prevention and control requirements
- cleaners' rooms for large clinical departments will generally be provided at a rate of one per 1000m2
- operating theatres will provide one cleaners' room per 6 theatres. Ready access to all areas of the unit is required, with preference to locate rooms on the perimeter of the unit where practical. One room may be slightly larger to accommodate a floor scrubber
- cleaners' rooms for ambulatory and administration services may be shared with adjacent services, depending on the size and scale of the footprint.

4.5 FUNCTIONAL AREAS

Larger hospitals will consist of the following internal functional areas:

- access to workspace for supervisory staff
- consumable store for bulk cleaning materials and supplies
- secure chemical store / cupboard (depending on size)
- equipment store with parking and charging bays
- service room with drain and GPOs (drainage / servicing of floor scrubbers / large equipment service requires set up for wet services / equipment service and brush replacement specifications).

All stores require direct access from the main hospital service corridor.

Smaller sites will have a combined consumables and equipment store with provision for a small secure chemical cupboard. Access to workspace for supervisory staff will be required and will be shared with other back of house services.

In addition to the above, the following functional areas will be provided throughout clinical and other units within a hospital and should be briefed in accordance with AusHFG Standard Components:

- cleaners' rooms
- disposal rooms.

Distribution of disposal rooms is described in Section 4.8 Waste Management.

4.5.1 Store - Consumables

The consumables store will house bulk cleaning materials and consumable supplies including PPE and paper towels.

Heavy duty shelving will be provided for the storage of boxes. This may be located on mobile castors for ease of cleaning. Sufficient access for pallets may be required.

4.5.2 Store - Equipment

Some large equipment will be housed within the equipment store such as commercial scrubbers and platform ladders. A central location is preferable.

Adequate power will be provided to enable charging of equipment when not in use.

4.5.3 Store – Chemicals

A secure chemical store will be provided for the bulk storage of chemicals. This room should be provided near the loading dock, with access to an emergency shower.

A secure chemical store will be provided for the bulk storage of chemicals and associated safety equipment (e.g., spill kit) designed in line with WHS regulations.

This room should be provided near the loading dock, with access to an emergency shower.

4.5.4 Shared Areas

Staff amenities for cleaning services may be shared between other back of house services.

4.6 FUNCTIONAL RELATIONSHIPS

4.6.1 External

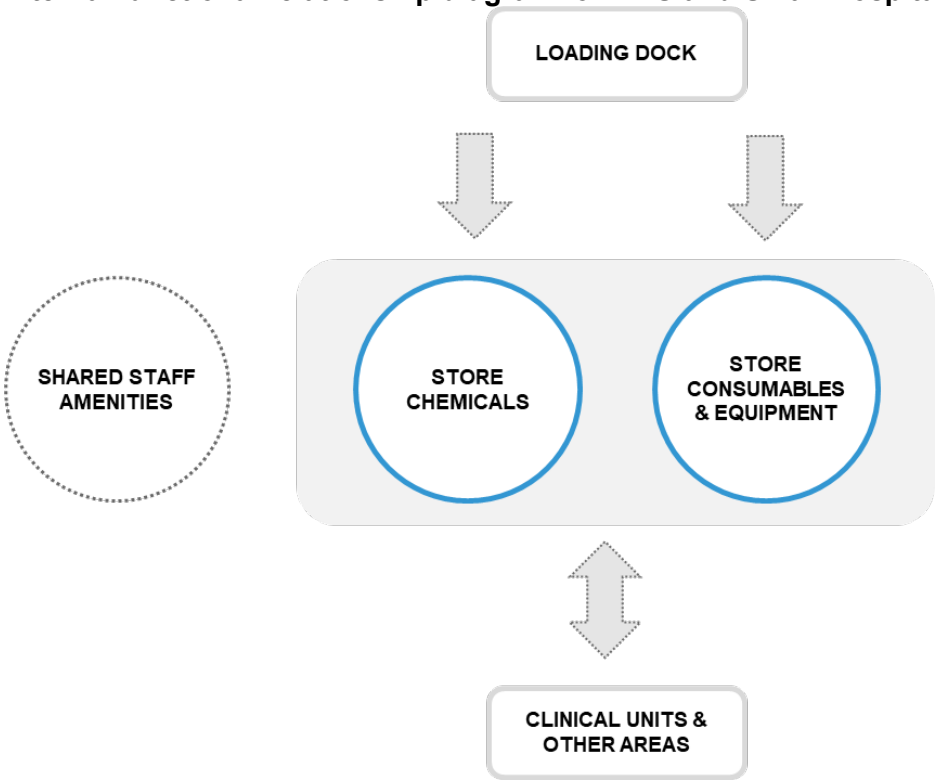
The Cleaning service will require direct access to the loading dock and ready access to lift cores and service corridors to enable regimented access to all services / departments across the hospital.

4.6.2 Internal

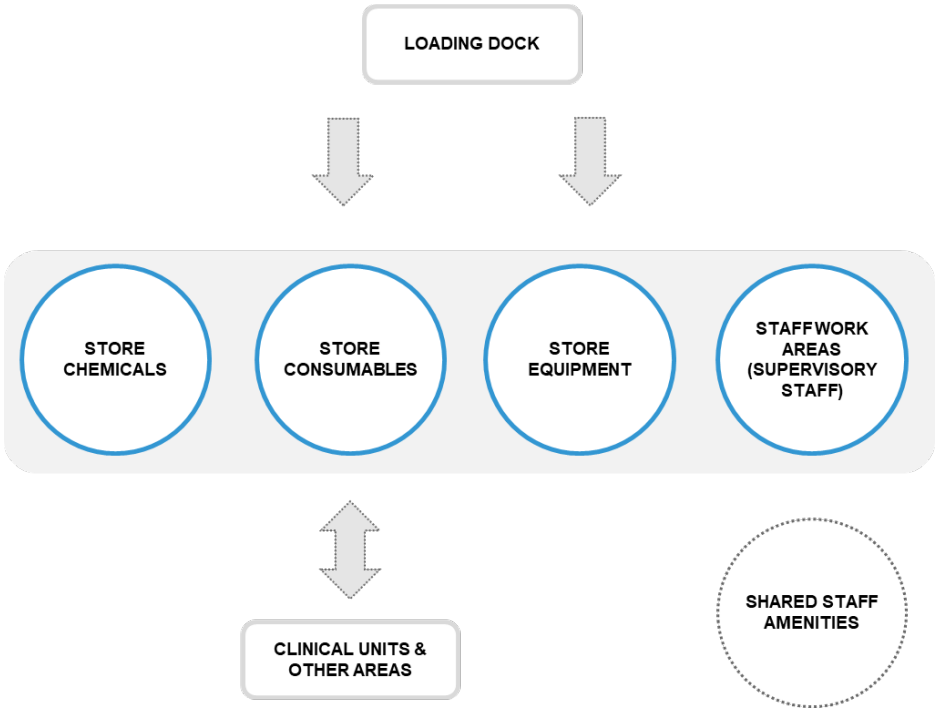
The distribution of storage areas will depend on the size of the hospital.

Key internal functional relationships are as follows:

Internal functional relationship diagram for MPS and Small Hospitals



Internal functional relationship diagram for 150+ bed Hospitals



4.7 DESIGN REQUIREMENTS

4.7.1 Materials and Finishes

Door and wall protection should be provided where trolley movement / large equipment occurs.

Refer to AusHFG Part C: Design for Access, Mobility, Safety and Security for additional information on wall protection, floor finishes and ceiling finishes.

4.7.2 Technology Considerations

Wireless access will be readily available in all general areas of a health service. This will support provision of mobile devices such as ‘tablets’ which are increasingly being used to assist with logging completion of cleaning jobs and access to safe work practices.

4.8 SCHEDULE OF ACCOMMODATION

Refer to Section 14.1

05 WASTE MANAGEMENT SERVICES

5.1 SERVICE DESCRIPTION

Waste Management Services will be managed according to local jurisdictional policies and guidelines, and Australian and New Zealand Standards.

Jurisdictions are responsible for ensuring that waste streams are managed in a safe, lawful, effective and efficient way.

Waste management is generally divided into two categories as outlined below:

Medical Waste

- Clinical Sharps
- Clinical Waste
- Cytotoxic Waste
- Pharmaceutical Waste
- Anatomical Waste
- Radioactive Waste

Non-Medical Waste

- General Waste
- Cardboard
- Kitchen Waste
- Paper
- Secure / confidential waste
- E-waste
- Bulky waste
- Pallets
- Toner and cartridges
- Landscape waste
- Sanitary waste

Waste Management Services are responsible for:

- provision of receptacles (bins) – these may be provided by the waste contractor
- collection, cleaning and maintenance of receptacles
- internal transport
- processing / segregation of waste
- treatment and/or disposal
- bin / site / trap cleaning
- customer education
- associated equipment such as compactors, bailers, lifters and additional receptacles for local consolidation as necessary.

The waste collection process will involve streaming of waste, collection by waste contractor and management offsite depending on the waste category.

5.2 KEY POLICY AND GUIDELINES

Refer to local jurisdictional policy and guidelines. A number of these relating to waste management services are included in Section 14.3 Further Reading.

5.3 OPERATIONAL MODELS

Internal waste management services (i.e., collection from point of source and transfer to the waste zone) may be provided by the local health service, centralised jurisdictional service or a private provider.

It is mandatory for all jurisdictions to provide waste management services under a waste management contract with an approved supplier. This contract outlines the suppliers' responsibilities and the tasks involved including removal and disposal of waste from the site.

Waste management / cleaning staff will be responsible for transferring waste from point of source to a designated waste zone on the healthcare site. Waste will be collected at regular and routine times each day, or when requested, to prevent build-up of waste in each service / department. Waste transfer may be manual, by motorised tugs or via automated systems.

Clinical services delivering patient care will have dedicated dirty utility rooms (e.g., inpatient unit, medical imaging department or intensive care units). Other related clinical services may instead have a clean-up room (e.g., community health, allied health).

Waste will be transferred by cleaning staff, or other designated staff, from the dirty utility / clean-up to a disposal room on each floor prior to being transferred to the waste holding area adjacent to the loading dock. This approach may only be feasible if there is a dedicated waste collection service in place. This is not typically the case in small hospitals or community health settings where waste will be transferred from the point of generation to a centre collection area.

Some services may combine the dirty utility / disposal room (e.g., mental health inpatient units where patients are typically self-caring) so equipment such as a pan sanitiser is not needed. Smaller standalone health services (e.g., MPS or community health service) will not require a disposal room and will instead hold waste, ready for collection in a secure outdoor waste holding area or room adjacent to the loading dock.

Waste segregation will be done at the point of generation e.g., inpatient unit, in colour-coded bins.

This segregation of waste will require an extensive receptacle system with holding spaces in the kitchen, kitchenettes, beverage bays, pantries, public areas and disposal rooms and the waste holding area adjacent to the loading dock for the separation of waste.

Bin washing will be undertaken:

- daily for food (at a minimum)
- in accordance with local operational policies and may be undertaken by external contractors with bins being washed offsite
- close to the storage area for bins.

Trade waste will be the responsibility of facilities management. External contractors will collect some specialised waste directly from areas within the hospital or managed in-house with contract for replacement and removal at the loading dock:

- confidential bins
- sanitary bins
- specialist theatre streams and Sterilising Services Units
- other areas.

5.4 OPERATIONAL POLICIES

5.4.1 Hours of Operation

Waste collection by the supplier will occur at agreed times, across 7 days as per the facility requirements. Hours of operation will need to consider noise generated from utilising equipment and impacts on adjoining properties.

Collection generally occurs 5 to 6 days a week in larger facilities and once per week in some smaller facilities.

5.4.2 Infection Prevention and Control Considerations

Waste will be segregated into the appropriate waste category at the point of use, in line with Infection Prevention and Control policies. This is to protect workers from injury and infection by preventing hazardous waste entering inappropriate waste categories. Adequate space must be provided to allow segregation of all applicable waste streams.

Appropriate PPE should be readily accessible for waste handlers. e.g., gloves, aprons, hand hygiene. Appropriate training should be undertaken for staff handling cytotoxic, lab waste etc.

5.4.3 Recycling in Healthcare Facilities

Recycling of waste can reduce or eliminate environmental hazards, protect natural resources, and provide economic benefits for health care facilities. Operating theatres, sterilising service departments and other areas that generate high volumes of waste should consider opportunities for recycling or to manage waste in a more effective manner. Items for consideration include:

- recycling of single use holloware bowls to reduce plastic waste, environment impact of plastic production and disposal and reduce workload of sterilisers (bowls are collected, hand rinsed by the sterilising staff; the bowls go into a skip for collection by supplier then recycled into furniture)
- reprocessing of reusable versus single-use anaesthetic equipment
- waste segregation and opportunities of stream identification; avoiding and reducing the generation of waste
- utilising reusable sharps containers
- partnerships between hospitals and production / distribution providers for recycling schemes (e.g., Baxter's WRAP recycling program WrapBack™ - Hospital Sterilisation Wrap Recycling Program)
- utilisation of surgical fluid extraction systems where fluid is discharged into sewer rather than clinical waste (refer to https://www.stryker.com/us/en/portfolios/medical-surgical-equipment/surgical-suction.html)
- the provision for food waste disposal such as pulp master and more conscious alternatives to the disposal of grease in kitchen areas
- storage area for donatable food (unopened / non expired food items)

- food packaging recycling
- auditing of waste to ensure correct disposal and identify opportunities for staff education programs.

5.4.4 Storage and Disposal of Radioactive Waste

Storage of radioactive waste must be secured and located in an area that considers ALARA (as low as reasonably achievable) principles for radiation exposure. Waste should be segregated into different physical states (solid, liquid, gas) of similar half-life.

Due to the short half-life of radioactive waste, it is stored within the Nuclear Medicine Department (rather than the waste management area of the health service) and is collected as required by specialists or in accordance with local arrangements.

Refer to the following documents for further information:

- AusHFG HPU 500 Nuclear Medicine / PET
- Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) Radiation Protection Series Publication, No 14.2 Safety Guide for Radiation Protection in Nuclear Medicine, Section 10.4 Environmental Issues, 2008

5.4.5 Work Health and Safety Considerations

The built environment should enable good WHS practices to ensure the safety of staff and others. This may include, but is not limited to, the following:

- the equipment selection process should involve the completion of a risk assessment and safe work practice to minimise manual handling risks and ensure ergonomics of equipment is easy to use and operate. Manual handling of waste should be avoided wherever possible
- the use of 660 L bins and above should be carefully considered due to the WHS risks however it is acknowledged in some areas, such as theatres, these may be required
- the use of a compactor for general and other waste will require review of workplace safety issues
- positioning of power points for waste management services should be located near point of use and should be provided at a safe working height to reduce staff having to bend down
- the use of tugs is encouraged with waste receptacles due to the weight of bins (e.g., 660 L waste bins)
- planned use of automated guidance vehicles will require careful consideration for systems relating to waste handling.

The integration between AGVs and current equipment (e.g., linen trolleys) and business practices should be considered.

Other general WHS regulations can be found in AusHFG Part C: Design for Access, Mobility, Safety and Security.

5.5 FUNCTIONAL AREAS

Smaller facilities

The waste management zone will consist of the following functional areas:

- clean bin hold / bin washing area with access to water, drainage and chemical dispenser. A high-pressure sprayer may be used in this area supported by adequate lighting.
- external, covered waste compound for general and cardboard and other recyclable and repurposed waste streams
- external waste hold room with designated areas for segregation of clinical, cytotoxic and sharps bin that is secured. This must be vented and consideration of air conditioning where there is low turnover or excessive temperatures.

Medium and Larger facilities

The waste management zone will consist of the following functional areas:

- bin washer or bin washing area will be adjacent to the loading dock compliant with policy, standards and EPA legislation. This should be located near the general waste collection area. Access to water and drainage in this area should be considered along with chemical dispensing. The use of a high-pressure sprayer may also be provided in this area.
- clean bin holding area will be located near the bin wash area.
- external, covered waste compound for general and cardboard waste collection area. (depending on the size of the facility, a compactor or bailer may be considered for cardboard and compactor, and bin lifter and cage for general waste).
- clinical waste hold comprising of clinical waste and sharps bins. This hold area is to be secured. This area must be vented and air conditioning considered where there is low turnover or excessive temperatures.
- recycling / other waste area or a recycling waste compactor.
- dry waste bin / hold area.

5.5.1 Shared Areas

Staff amenities may be shared between other back of house services.

5.6 FUNCTIONAL RELATIONSHIPS

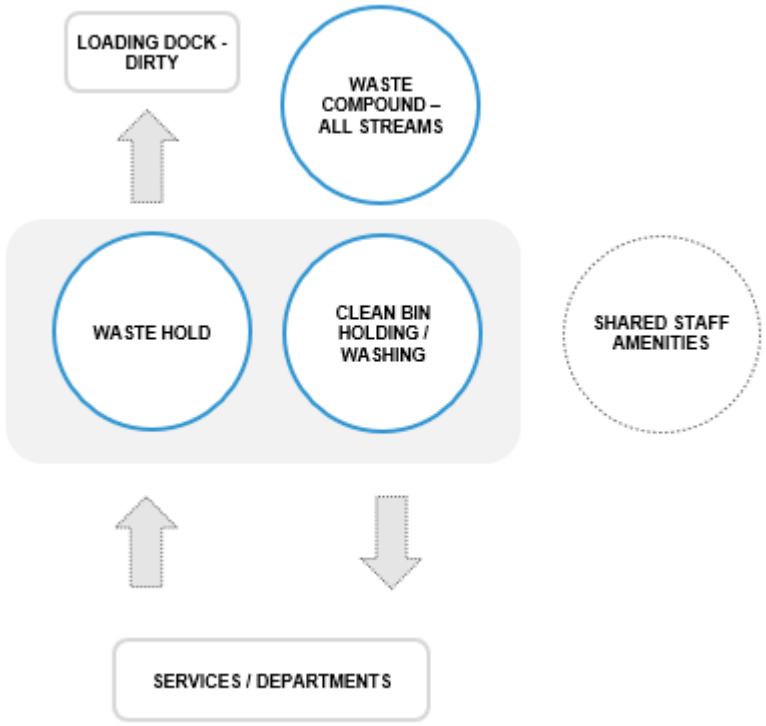
5.6.1 External

Waste management services will require direct access to the loading dock and ready access to lift cores and service corridors to enable routine access to all services / departments across the hospital.

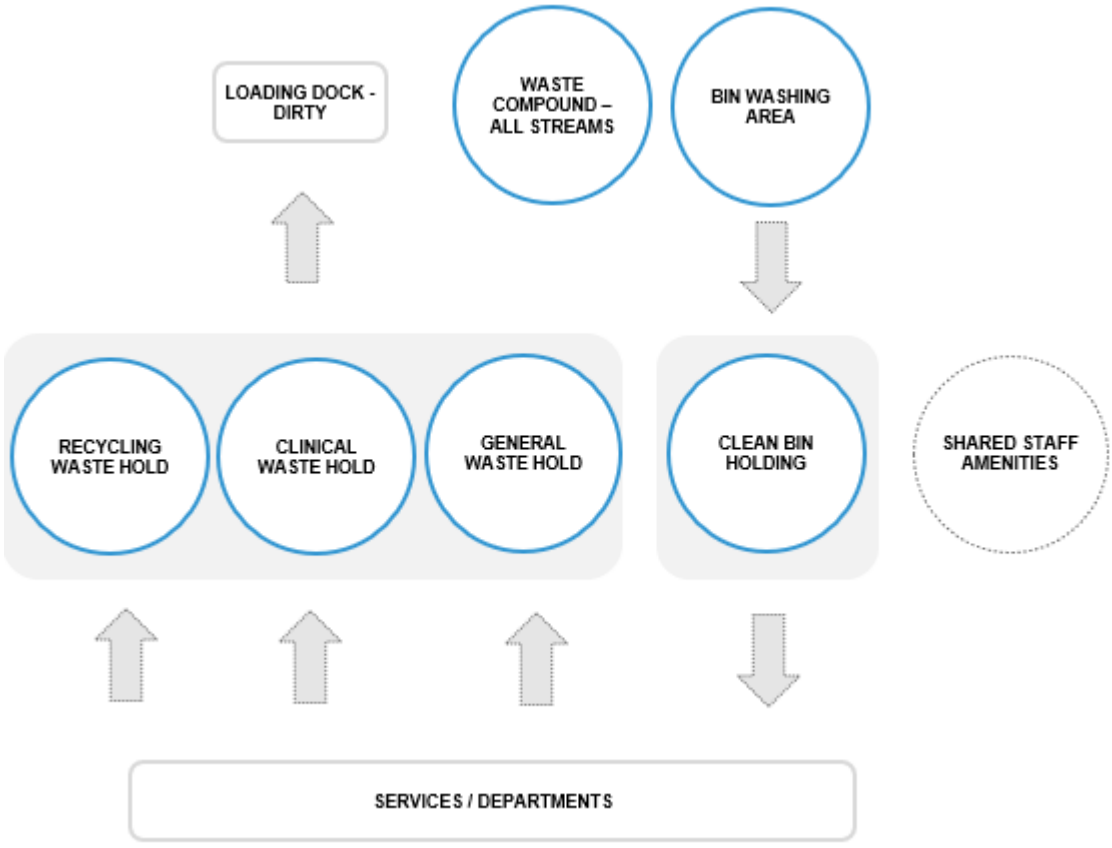
5.6.2 Internal

Key internal functional relationships are as follows:

Internal functional relationship diagram for MPS and small hospitals



Internal functional relationship diagram for 300+ bed hospitals



5.7 DESIGN REQUIREMENTS

5.7.1 Access

Door openings and corridors will be sufficient width to enable transfer of large bulky equipment and trolleys. If waste receptacles are larger than 240 L, a review of doors and openings should be considered along the path of travel between point of source and the designated waste area.

Level or ramped access to external loading areas will be required.

5.7.2 Materials and Finishes

Walls and floors in areas used for bin storage should be impervious and sealed to allow daily hosing and cleaning of spills. Doorways need to be sufficiently wide to allow bins that are used in the facility. A graded floor with drainage to allow hosing of areas should be provided.

5.7.3 Equipment Charging Bays

Capacity to store /or charge motorised tugs or AGVs will be required. This may be shared with other back of house services if practical. If AGVs are identified as the preferred method of transport, a business case will be required to demonstrate return on investment.

5.8 SCHEDULE OF ACCOMMODATION

Refer to Section 14.1

06 FACILITY MANAGEMENT SERVICES

6.1 SERVICE DESCRIPTION

Facility Management (FM) services are responsible for coordination and management of the ongoing maintenance and repair of all building, plant, equipment, and machinery and for monitoring the supply of critical utilities such as water, electricity, gas and medical gas on a healthcare site. FM services a broadly categorised into two groups: soft and hard services.

FM will also manage external maintenance contracts in accordance with local jurisdictional policies.

FM scope of service includes, but is not limited to, the following:

- planned and preventative maintenance of building fabric, plant, and equipment (both statutory and business required)
- management of the building management system
- day to day repairs often identified by a range of staff
- maintaining asset registers
- grounds and external areas (including roadways and external lighting)
- management of external façade
- compliance certification of equipment (including items like test and tag, RCD and HEPA filters)
- contractor management disruption management of critical utilities such as water, electricity, domestic gas and medical gas.

FM services may be operated by health service staff or fully outsourced to a private provider (depending on local arrangements).

6.2 KEY POLICY AND GUIDELINES

Key policy and guidelines relating to FM services include:

- ISO55000 – ISO550003 Asset Management
- AS/NZS IEC60601.1 – Part 1: General requirements for basic safety and essential performance
- AS/NZS 2500: Safe use of medical electrical equipment in health care
- AS/NZS 2896: Medical gas systems
- AS/NZS 3003: Electrical Installations – patient areas
- Local jurisdictional engineering services guidelines
- Infection prevention and control guidelines
- Sterile environment management
- Code of practice managing the risks of plant in the workplace
- WHS Regulations

6.3 OPERATIONAL MODELS

Upon commencement of a project, the planning team should review current practices and determine what the core business will be and how this may change over time. Increasingly, selected trades and services are being contracted to external contractors which in turn reduces the requirement for workshops and storage.

Broadly, the delivery of FM falls into 6 operational models:

- full in-house FM: services are delivered by in-house delivery team
- single services outsourced: using several specialist providers which concentrate on one discipline, for example, medical gas, cardiac and body protected electrical services, warm water; all management and administration are retained in house
- integrated services: several services are delivered by one organisation under a single management agreement. Some management and administration are retained in house
- total FM: where the entire matrix of service delivery is outsourced under a single contract to a single provider. All management and administration are outsourced with only high-level compliance and contract management retained in house
- managing agent: where a consultant sits between the client and supply chain providing business intelligence and some administration
- a hybrid approach: a combined model, whereby some services are kept in-house and others are outsourced, using any of the models above.

The chosen model will affect the required spatial and services requirements. The area or site may also plan to move between models over time.

The facility maintenance groups from all the above models will facilitate contractors' access and ensure inductions along with site sign in. Sing in occurs prior to undertaking any work in accordance with the relevant legislation and local jurisdictional policies. This common function also impacts on the spatial and services requirements.

6.4 OPERATIONAL POLICIES

6.4.1 Hours of Operation

The FM service will typically operate during business hours in line with local arrangements. After hours may be managed by a roster to ensure 24-hour cover onsite or on call

Afterhours access will be dependent on the size of the facility. In smaller facilities, this will typically be coordinated by the afterhours nurse manager.

6.4.2 Infection Prevention and Control Considerations

Plantrooms will generally be located on the periphery of departments to enable access without having to traverse bulky equipment through the clinical area.

Access hatches may be required within treatment spaces and these hatches should be accessible without disturbing patient care. Where possible, maintainable equipment should not be located above the ceiling to limit the requirement for access hatches. For access hatches in walls, wherever possible, a hatch should open into circulation spaces in preference to clinical spaces e.g., Thermostatic Mixing Valve (TMV) boxes and TMV monitoring hubs.

6.4.3 Management of Beds

A designated area will be provided for beds awaiting routine maintenance and/or repair. Access to facilities for cleaning of beds will be required before they are returned to the clinical area. A dirty to clean flow should be established for bed cleaning facilities. Bed repair area needs to have special bays with dedicated power supply and charging stations.

6.4.4 Work Health and Safety Considerations

The built environment should enable good WHS practices to ensure the safety of staff and others. This may include, but is not limited to, the following:

- provision for motorised or automated transportation of bulky equipment
- delivery of construction materials should be considered closely to minimise manual handling
- safe storage and management hazardous substances and dangerous goods
- safe access to plant with safe removal and repair posable.

The safety in design process guidelines should be adhered to vigorously within health facilities.

6.5 FUNCTIONAL AREAS

FM services located in large hospital and healthcare sites may consist of the following functional areas:

- reception / contractor sign in station / registration and workspace
- workshop areas
- storage areas
- monitoring room
- workspace for administrative and clerical activities
- workspace for trade staff to access asset and facilities management software/applications (e.g. AFMO). Key trade staff will include Electrician, Plumber, Fitter, Medical gas, Carpenter, Mechanical/HVAC and Handyperson.

Smaller hospital facilities will only require a combined workshop / store with access to workspace for visiting staff. A reception / registration area will not be required as external contractors will sign in through the main reception for the facility.

Many other healthcare facilities (e.g., community health centres) will not provide dedicated facilities and maintenance staff will in-reach as required and bring the necessary tools and equipment with them.

6.5.1 Reception / registration and workspace

Larger facilities will have a front reception and registration area for external contractors and visitors to report to, sign in and undergo induction training. This area will have access to a meeting area for private discussions away from the workstation area.

Sufficient workspace should be provided for administration personnel and for contractors required to log in to compliance systems.

6.5.2 Workshop

Regardless of the proposed FM model, access to some workshops should be provided onsite.

MPS and small healthcare facilities will have a general maintenance workshop with storage facilities for equipment, tools and documents to facilitate onsite maintenance activities.

Larger facilities will ideally have the workshop attached to the main facility. The workshop may have separate workshop areas required for carpentry, mechanical, plumbing, and electrical services. As a minimum, the workshop should be delineated into clean and dirty areas along with sufficient space for workbenches, drill press, angle grinder, stainless steel trough, tool storage and storage cabinets. A separate area for hot works is required.

Dedicated storage areas / cupboards for dangerous and hazardous substances are required.

Sufficient floor space will be needed to hold equipment during repairs.

Work areas require good mechanical ventilation systems with ambient cooling, with dust and fume extraction systems.

Three phase power will be provided to all workshops; specific power requirements for individual equipment shall be confirmed prior to construction.

Workshops require adequate lighting levels suitable for the work being completed.

Provision for painting workspace will be dependent on facility size but may be outsourced by the facility dependant on the FM model.

Contaminated equipment will be cleaned using different cleaning agents so consideration of an area with various stainless-steel tubs may be required.

Test rigs for some specialised devices may need to be provided if appropriate and electricians work bench to have test rigs for equipment testing.

Landscaping is often outsourced to an external contractor and services are provided as required. Provision needs to be made in workshop design where landscaping services are undertaken by in-house staff.

Shared workstations should be considered to support workflow of staff to complete data entry or accessing asset and facilities management software/applications (e.g. AFMO).

6.5.3 Storage

Each trade will require space to store essential tools. This should be located adjacent to the maintenance workshop.

Designated areas for chemical or flammable materials are required. Note these areas may be shared with back of house services.

Mobile equipment bays for equipment awaiting repair should be provided adjacent to the workshop.

At larger facilities, consideration should be given to small maintenance store areas located at various locations around the facility for the storage of spare parts, step ladders etc. These may be located within plant rooms in some cases.

Bed storage / bed repair bay should be provided, co-located between Facility Maintenance and the bed store.

6.5.4 Monitoring Room

A separate control room may be required for management and coordination of the building management system (BMS) and other systems such as emergency lighting, temperature, Uninterrupted Power Supply (UPS) etc.

The number of monitoring systems will determine the size or quantum of screens (e.g., one large screen or 2-3 screens). This room should ideally be located adjacent to the main plantroom with visual access into the plant room.

A networked approach should be considered for monitoring of the BMS and other systems.

6.5.5 Plant Rooms

Planning of plantrooms will consider the following:

- access and pathway to plant room for replacement of equipment and material handling that does not traverse clinical space, where possible
- dedicated pathways and appropriate access which is wide enough for pallet jacks, lifting equipment and trolleys
- secure access / access control systems
- be no less than person height including low hanging services
- include capability to handle bulky equipment
- provide ease of access to all equipment
- be designed to manage the heat loads and moisture from equipment
- easily maintainable finishes
- consider safety in design principles
- not be a confined space or contain unnecessary confined spaces
- plant rooms with louvers to have filters to minimise the dust ingress
- location of the mechanical plant room to consider the risks from generator exhaust, loading dock, toilet exhaust and grease traps

6.5.6 Documentation Room

While most of the documentation may be electronic, planning may consider storage of hardcopy documents including A1 size plans and certification documentation.

6.5.7 External Areas

Parking space for contractors and delivery vehicle is required within easy access of the department. The quantum of parking spots will be determined based on the FM model chosen and the size of the facility.

6.5.8 Shared Areas

Staff amenities may be shared between other back of house services.

6.6 FUNCTIONAL RELATIONSHIPS

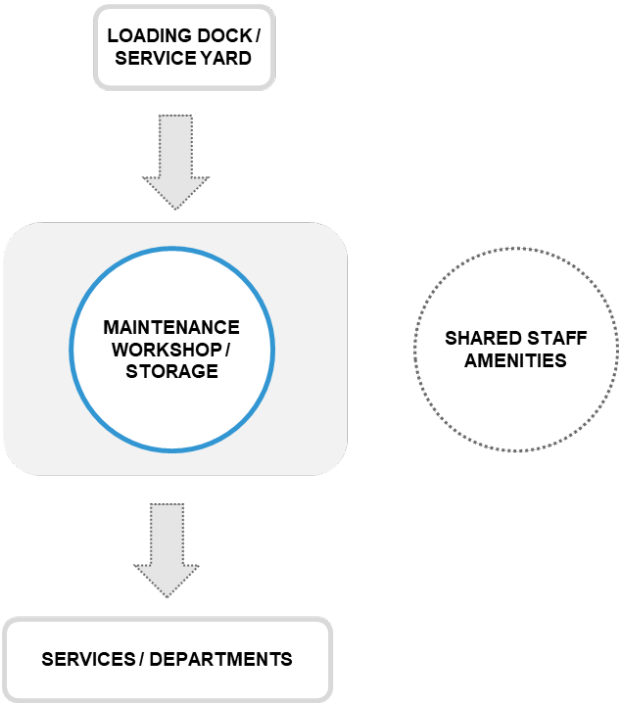
6.6.1 External

- The FM service should be located to enable easy access for contractors, deliveries and the handling of large equipment. Access to a loading dock is desirable.
- The service will require easy access to all areas of the healthcare facility in particular plant areas and critical care areas. Access to the hospital corridor system is required.

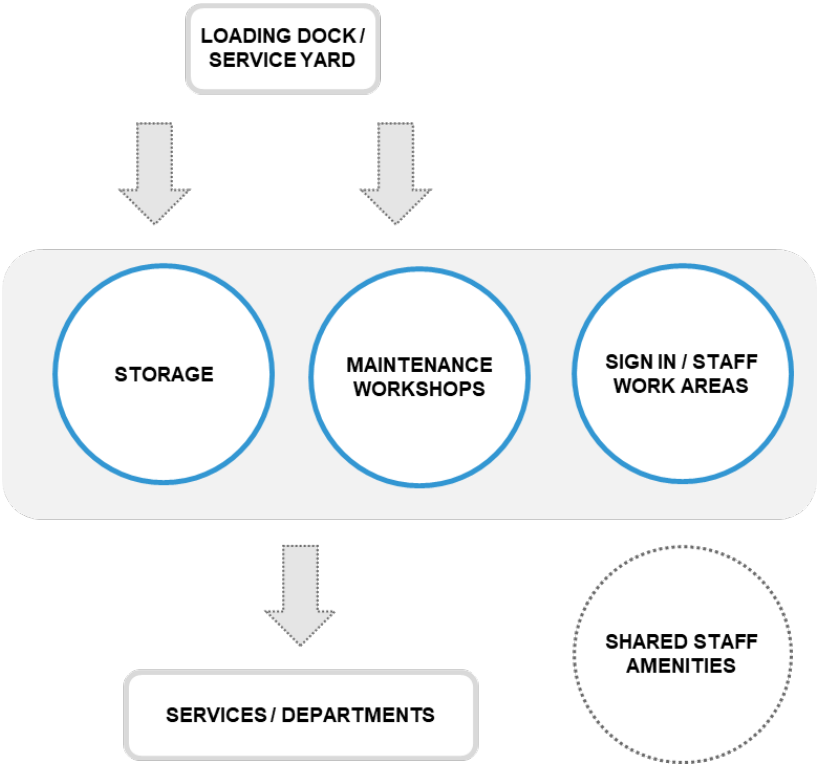
6.6.2 Internal

Key internal functional relationships are as follows:

Internal functional relationship diagram for small hospitals



Internal functional relationship diagram for medium and large hospitals



6.7 DESIGN REQUIREMENTS

6.7.1 Access

Door openings and pathways between plantrooms, clinical areas and the workshop should be of sufficient width to accommodate trolleys tools and equipment transported for maintenance. The size and weight of equipment likely to be moved needs to be taken into consideration. Movement of large plant items should be considered via the safety in design process, with consideration given to crane lift areas.

6.7.2 Materials and Finishes

Materials and finishes shall be impervious, easily swept, cleaned and resistant to impact damage. For the engineering workshops, a concrete or epoxy floor is preferred.

Door and wall protection should be provided where equipment movement occurs. Refer to AusHFG Part C: Design for Access, Mobility, Safety and Security for additional information on wall protection, floor finishes and ceiling finishes

6.7.3 Technology Considerations

Wireless access will be readily available in all areas of a health service (including plantrooms and workshops). This will support provision of mobile devices such as ‘tablets’ which are increasingly being used to manage patient workflow.

6.7.4 Engineering Spare Parts and Materials

Sufficient storage should be considered for spare parts / materials included in the redevelopment building contract and opportunities to recycle materials (e.g., scrap metal, light fittings). The allocation will be at the discretion of the project team.

6.8 SCHEDULE OF ACCOMMODATION

Refer to Section 14.1

07 SUPPLY SERVICES

7.1 SERVICE DESCRIPTION

Supply Services will be responsible for management of incoming goods and services, management of onsite logistics and the delivery of goods within the hospital/s.

This guideline should be read in conjunction with Section 08 Loading Dock.

Supply services will manage deliveries of goods and equipment including management of the following:

- delivery of goods to departments (may be in conjunction with loading dock or orderlies)
- portable medical gases (may be managed by other services)
- equipment, both new purchase and on loan (may be in conjunction with biomedical and equipment loan pool).

Items of loan equipment and reusable medical devices may be delivered via the dock and/or delivered directly to the department.

Depending on local arrangements, Pathology and Pharmacy stores may be managed independently, however supplies may be delivered via the loading dock.

7.2 KEY POLICY AND GUIDELINES

Refer to local jurisdictional policy and guidelines.

7.3 OPERATIONAL MODELS

A variety of methods may be used to procure goods and services.

The model and range of services to be provided will determine the component parts and configuration of supply services.

Hospital redevelopment processes provide an opportunity to determine the optimal end to end solution for supply services.

The following should be considered when reviewing the end-to-end processes:

- distance from central store / proximity to loading dock
- capacity of the existing loading dock
- disaster management requirements
- size of the facility.

Two common supply service delivery models to hospitals are described below.

Direct to Imprest

'Direct to Imprest' refers to a direct-to-clinical area supply process where consumable inventory is stored at the Supply Chain distribution centre or the supplier and delivered to the hospital.

The process involves goods being packed into trolleys specific to the clinical area and delivered to the hospital. The Direct to Imprest may be delivered in different formats such as pallets which are then split into the imprest requirements at the loading dock and immediately delivered to the areas, but not stored on the loading dock or adjacent areas. This process will be dependent on the location of the facility as trolleys are mainly utilised in metropolitan areas and only for sites which have deliveries on dedicated trucks.

The benefit of Direct to Imprest model is that it reduces or eliminates the need for a bulk store within the healthcare facility as the majority of goods will come from the Supply Chain Distribution Centre ready to be delivered to the clinical area.

Central Bulk Store

The central bulk store model applies to goods being delivered to the hospital in large quantities and stored in a central bulk store. The process involves the delivery of goods on pallets. Goods will be checked, unloaded, and placed in a bulk store by hospital supply staff. Consumables will then be picked and packed from the central store and delivered to clinical units and other areas as required.

7.4 OPERATIONAL POLICIES

7.4.1 Hours of Operation

Supply services hours of operation should be in line with local jurisdictional policies, although extended hours such as early morning deliveries may be utilised.

7.4.2 Distribution of Goods

Automated or motorised equipment may be considered to assist with the safe and efficient transfer of supply trolleys throughout the healthcare facility. If automated guided vehicles are desired, these need to be reviewed to ensure compatibility with trolleys and doors along pathways.

A return on investment exercise should be undertaken to determine the preferred model of distribution. Opportunities to recycle packaging should be maximised.

7.4.3 Sterile Consumables

Most sterile consumables will be delivered directly to point of use, however if this is not possible a small sterile consumable store will be provided as a temporary holding room.

Review of end-to-end process for supply of in hours and out of hours deliveries to theatre and Sterilising Services Units (SSU) should be considered when deciding on the requirements for a sterile store at the back dock.

7.4.4 Intravenous (IV) Fluids

Depending on local arrangements, some goods such as fluids may be ordered and delivered direct to the point of use by the supplier / vendor. This is becoming an increasingly common model for IV fluids.

Renal dialysis fluid will mainly be delivered to the dock (depending on the size of the facility) and transferred directly to the bulk store in the renal department and may be transported on pallets.

7.4.5 Stationery

Ordered stationery will either be delivered to loading dock or directly to the point of use supplier / vendor (desktop deliveries).

7.4.6 Work Health and Safety considerations

The built environment should enable good WHS practices to ensure the safety of staff and others. This may include, but is not limited, to the following:

- necessary equipment will be provided to support safe working practices
- the requirement for a forklift should be considered
- secure access to the areas should be considered as this area represents a high risk to patients and visitors. CCTV should be considered
- sign in requirements should exist for contractors and drivers
- large deliveries to have more than one personnel assisting
- site induction is critical to dock staff
- high visibility clothing should be worn by all dock staff
- high visibility vests should be worn by all dock visitors
- larger healthcare facilities may consider a recessed parking bay to enable drivers to wait without blocking the entry / exit to the service yard
- a traffic management plan for each dock within the hospital, developed in consultation with key stakeholders

General considerations can be found in Part C: Design for Access, Mobility, Safety and Security

7.5 FUNCTIONAL AREAS

Key functional areas for both traditional and direct to imprest models are described below.

- Loading Dock – Clean / Dirty
- Receivals / dispatch
- Bulk store
- Bay – Mobile Equipment
- Store – Medical Gases
- Store – Flammable (small healthcare facilities may share this area with other back of house services)

Handwash facilities and adjacency to staff amenities should be considered.

7.5.1 Receivals / Dispatch

A dedicated goods receipt area shall be provided for the receipt, checking, sorting and temporary holding of incoming / outgoing stock.

The receivals dispatch area should be located directly adjacent to the loading dock to enable maximum visibility of vehicles entering / exiting the service yard.

The receivals / dispatch area will include a workstation and computer.

7.5.2 Bulk Store

Stock will be stored in heavy duty shelving elevated off the floor.

Smaller facilities will include provision for receivals/dispatch and equipment in the bulk store.

7.5.3 Store – Medical Gas

The medical gases store will accommodate portable gas cylinders used in clinical areas, with adequate storage for both full and empty cylinders. The store will be secured and may be located external to the facility. The store will be designed in accordance with relevant standards and should ensure that the manual handling of gas cylinders is minimised. The store area should be of sufficient size for the cylinders to be stored upright and restrained.

A separate entry and exit should be provided if possible.

7.5.4 Bay – Mobile Equipment

A readily accessible space will be provided for storing and recharging of pallet jacks, forklifts, motorised and other equipment used for transporting goods. Access control should be considered.

7.5.5 Shared Areas

Staff amenities for may be shared between other back of house services.

7.6 FUNCTIONAL RELATIONSHIPS

7.6.1 External

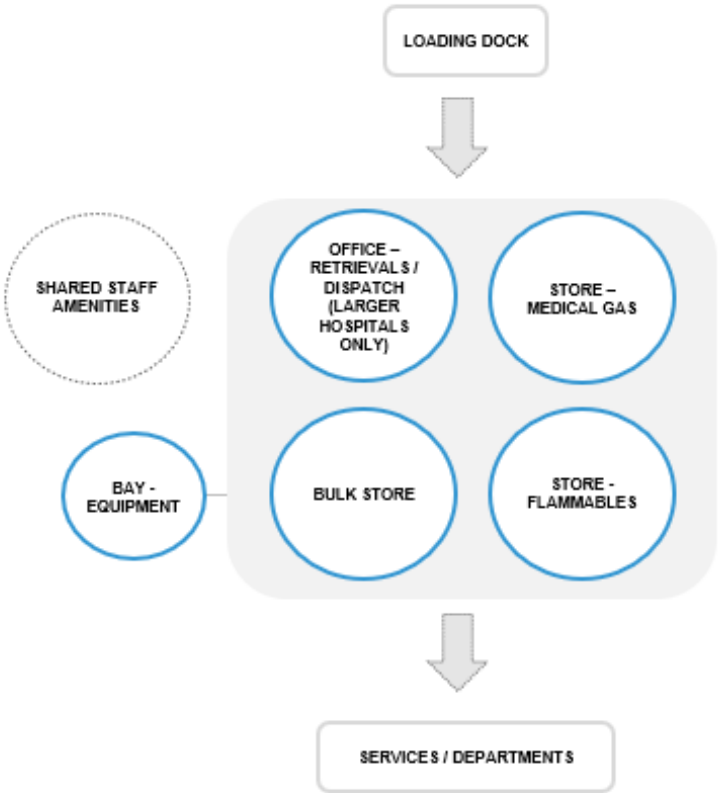
Key external functional relationships will be with external services who have direct access to the loading dock and all services/departments within the hospital/s.

7.6.2 Internal

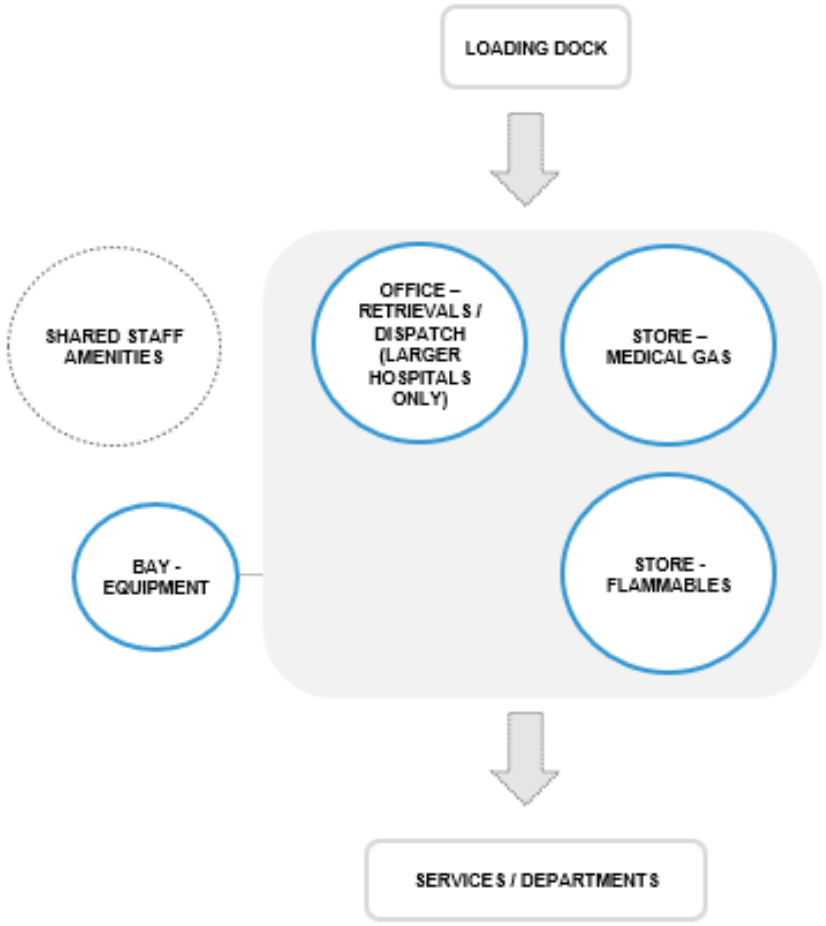
Key internal functional relationships are as follows:

Clear separation between clean and dirty processes should be maintained where possible.

Central bulk store



Direct to imprest



7.7 DESIGN REQUIREMENTS

7.7.1 Access

The stores, including the medical gases store, should be access controlled to ensure only authorised personnel gain entry. Access to these areas should be large enough for pallet delivery and forklift operations. Access control, for afterhours in particular, should be considered to the main bulk store.

7.7.2 Lift Considerations

In larger healthcare facilities, lifts will be located within back of house areas to enable transfer of patients between departments and movement of back of house services. Where possible, separate lifts for patients needs to be considered.

Back of house lifts should be sized to support transfer of larger items including pallets of stock. Where possible direct access to dedicated lifts needs to be considered.

The number of lifts will be dependent on activity and capital cost considerations.

General considerations can be found in Part C: Design for Access, Mobility, Safety and Security.

7.7.3 Technology Considerations

An inventory system will be implemented across the hospital for effective stock management. Access to workstations and computers will be required.

The following ICT systems may be provided:

- data outlets for computers/ internet access
- wireless networks for computer access in receiving areas, which may include service corridors and loading docks.

7.8 SCHEDULE OF ACCOMMODATION

Refer to Section 14.1

08 LOADING DOCK

8.1 SERVICE DESCRIPTION

The loading dock is the primary operational services entry and exit access point to the hospital.

Loading dock staff will manage deliveries of goods and equipment and may include scheduling and receipt of the following:

- receipt and delivery of goods
- waste management external pickup scheduling
- clean and dirty linen delivery and pickup scheduling
- food delivery scheduling
- pharmacy goods – receipt and scheduling – this is usually performed in conjunction with pharmacy staff
- pathology goods and reagents receipt and scheduling – this is usually performed in conjunction with pathology staff
- portable medical gases scheduling (may be managed by other services)
- equipment receipt both new purchase and on loan receipt
- loan equipment and reusable medical devices will usually be delivered via the dock and transferred directly to the department.
- courier deliveries – these may be accepted at the dock or may be directed to departments and / or the main entry

Where possible separation of the following should occur from the main loading dock, noting that this is unlikely to be possible in smaller facilities:

- Maintenance and Engineering
- Patient loan equipment pick up and drop off

Recycling infrastructure, including toner recycling, should be located within the loading dock, or in close proximity.

8.2 KEY POLICY AND GUIDELINES

Refer to local jurisdictional policy and guidelines.

8.3 OPERATIONAL MODELS

The most critical factor in loading dock success is the scheduling of deliveries and pickups. This may be difficult in situations where suppliers are required to perform their own scheduling for multiple drop off and pick up points.

A dock manager will be required in larger facilities to ensure smooth flow of traffic and scheduling.

8.4 OPERATIONAL POLICIES

8.4.1 Hours of Operation

The loading dock hours of operation should be in line with local jurisdictional policies. Extended hours such as early morning deliveries may be utilised depending on the location of the dock.

8.4.2 Optimal Flow Principles

Optimal flow principles include:

- all goods will be received on the loading dock
- vehicle access to the loading dock must be capable of being secured
- secure access for goods awaiting distribution from the dock will be required
- goods will ideally be delivered throughout the hospital via separate clean pathways
- secure dedicated back of house lifts should be provided for goods and patients where possible (see Section 7.7.2)
- access to goods delivery pathways will only be given to hospital staff and authorised visitors
- food service delivery must have dedicated clean access into the kitchen stores including cold store
- linen service delivery will be delivered via the clean dock and collected via the dirty dock (or if separate docks are not feasible, separation of the delivery and collection processes)
- goods and waste management service flows will avoid unnecessary travel through clinical areas (e.g., the pathway to transfer waste bins should not use another clinical area as a thoroughfare)
- some stores such as fluids and medications (vendor managed inventory) are ordered and delivered to the point of use by the supplier / vendor.

8.4.3 Distribution of Goods

Automated or motorised equipment may be considered to assist with safe and efficient transfer of trolleys throughout the healthcare facility. If automated guided vehicles are desired these need to be reviewed to ensure compatibility with trolleys.

Return on investment exercise should be undertaken to determine the preferred model of distribution.

8.4.4 Work Health and Safety considerations

The built environment should enable good WHS practices to ensure the safety of staff and others. This may include, but is not limited to, the following:

- necessary equipment will be provided to support safe working practices
- the requirement for a forklift should be considered
- secure access to the areas should be considered as this area represents a high risk to patients and visitors.
- CCTV should be considered
- sign in requirements should exist for contractors and drivers
- large deliveries to have more than one personnel assisting
- site induction is critical to dock staff
- high visibility clothing should be worn by all dock staff

- high visibility vests should be worn by all dock visitors
- larger healthcare facilities may consider a recessed parking bay to enable drivers to wait without blocking the entry / exit to the service yard
- a traffic management plan for each dock within the hospital, developed in consultation with key stakeholders during the design process, taking into consideration size of vehicles, volume of deliveries; clean and dirty flows; separation of pedestrian and vehicular traffic; and separation of light and heavy vehicles

General considerations can be found in Part C: Design for Access, Mobility, Safety and Security.

8.5 FUNCTIONAL AREAS

Key functional areas for both traditional and direct to imprest models are described below.

- Loading Dock – Clean / Dirty
- Receivals / dispatch
- Bulk store
- Bay – Equipment
- Store – Medical Gases
- Store – Flammable (small healthcare facilities may share this area with other back of house services)

Hand hygiene facilities and adjacency to staff facilities should be considered at the entry and exit to the back dock.

An emergency shower facility will be required.

8.5.1 Loading Dock

As part of a logistics assessment, a cost benefit analysis should be performed on larger projects to ascertain if a flat dock or a raised dock will give the best operational outputs and return on investment. This should be performed on any hospital over 300 beds. Smaller facilities are likely to have a level dock. Options for loading docks are either raised loading docks e.g., with use of dock levellers and pedestrian access, or flat loading docks e.g., with use of tailgate lifters.

Where forklifts may be used on the loading dock, the design of the dock and safety features must meet the relevant standards (AS2359 or equivalent).

All loading / unloading areas should be weather protected.

Edge protection should be provided to the edge of the raised dock when no truck is in place.

There will be separate flows for dirty and clean goods, and a designated area for receiving food.

The loading dock and service yard should have sufficient turning circle capacity to enable large trucks such as a semitrailer (e.g., with linen trolleys, food deliveries, goods). Consideration may be given to one way traffic flow.

Service yard parking area should have sufficient spatial allocation to support deliveries to dock and to also cater for vehicles delivering directly into the hospital such as stationery desk top deliveries, IV fluids and specialised equipment which includes installation etc.

The loading dock should include provision for side loading vehicles and will require a driver safety zone adjacent to the vehicle. This will be reviewed on a case-by-case basis and will be largely dependent on the size of the facility.

Some health facilities are investigating the option of electric vehicles for delivery of linen services. If provided, planning will need to consider provision for charging stations at the loading dock to enable charging of vehicles, ensuring there is no impact on the flow of the loading dock traffic.

8.5.2 Shared Areas

Staff amenities for may be shared between other back of house services.

8.6 FUNCTIONAL RELATIONSHIPS

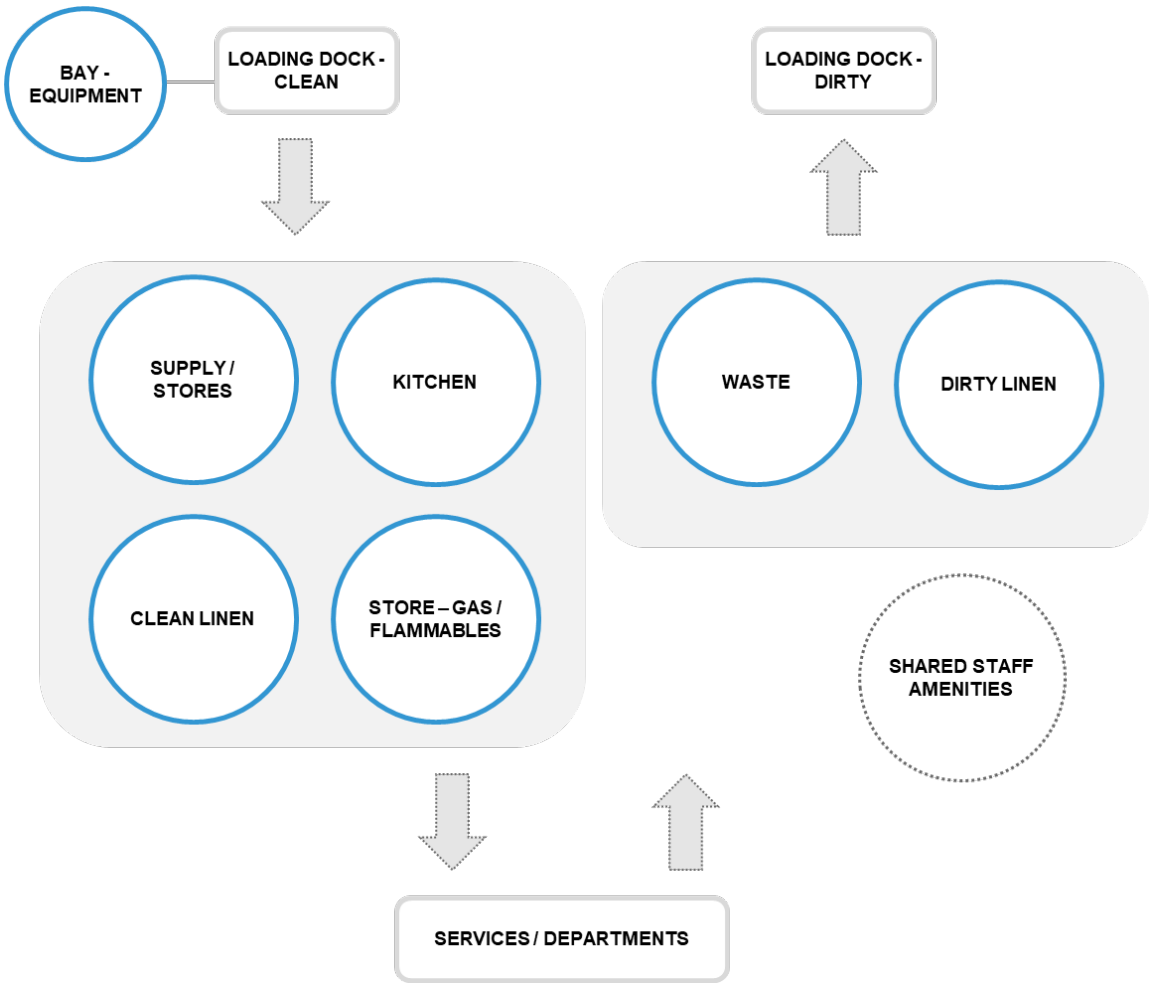
8.6.1 External

Key external functional relationships will be with external services who have direct access to the loading dock and all services/departments within the hospital/s.

8.6.2 Internal

Clear separation between clean and dirty processes should be maintained where possible, with adequate space for recycling / waste management processes.

Key internal functional relationships are as follows:



8.7 DESIGN REQUIREMENTS

8.7.1 Access

The loading dock will be access controlled (e.g., boom gate or similar) to prevent unauthorised vehicles from entering the service yard.

An entry and exit gate should be provided where possible to manage flows.

Security requirements will include oversight of operations in the loading dock and CCTV. Technology Considerations

Wireless network coverage should include all buildings on the hospital site to enable full functionality of equipment.

8.8 SCHEDULE OF ACCOMMODATION

Refer to Section 14.1

09 SECURITY SERVICES

9.1 SERVICE DESCRIPTION

Security services have a key role in ensuring the safety and security of patients, staff, and assets of a healthcare facility.

Security services may be provided by the health service or by an external contractor (e.g., external patrols).

The role of security staff may include:

- assisting customers and visitors with enquiries and providing information and assistance
- responding to security alarms and fire alarms
- undertaking facility lockdown or securing a physical area to protect staff, patients, or visitors, in response to a real or immediate threat
- escorting staff, patients and visitors to vehicles or their destination within the hospital
- maintaining order in areas such as emergency departments, methadone clinics, helipads and facility-specific services
- assisting with emergency evacuations
- participating as a team member in response to code emergencies; Code Orange – evacuation, Code Red – fire alarm response, Code Yellow – internal emergencies, Code Brown – external emergencies, Code Blue – medical emergencies, Code Black – personal threat with / without weapon and Code Purple – Bomb Threat
- de-escalating developing situations where aggression may become an issue
- internal and external patrolling, to ensure security is maintained and to provide a visible preventative presence
- maintaining parking control and issuing penalty notices
- reporting security related incidents
- providing input into security issues and audits
- receiving, receipting, and recording lost items of value and weapons, and reporting to Police services in line with jurisdictional policies and procedures
- monitoring, reviewing, and maintaining surveillance equipment, such as cameras, Digital Video Recorder (DVR) / Network Video Recorder (NVR) systems, monitors, switchers and associated items
- maintaining key control processes by receiving authority forms for ordering, receiving, distributing and maintaining keying data records including financial data.
- operating access control systems, including locking / unlocking buildings or rooms
- operating or managing staff identification processes where necessary
- providing and managing staff access control cards.

Additionally, the role of security staff can include, as an option of last resort, conducting physical restraints under a clinician's direction.

New hospital developments must include planned control of access to all building areas (ideally centralised networked electronic systems).

9.2 KEY POLICY AND GUIDELINES

Security considerations and priorities in the facility will be guided by the standards set out in local jurisdictional security policies and local documented security risk management plans.

Key policy and guidelines relating to the provision of security services include, but are not limited to, the following:

- AS/NZS ISO 31000 Risk Management – Principles and Guidelines
- AS4485.1 Security for Healthcare Facilities
- AS4485.2 Security for Healthcare Facilities Procedures Guide
- AS2201 Intruder Alarm Systems (Set)
- AS4806 Closed Circuit Television (CCTV) (Set)
- Australian Standards Handbook HB 167-2006 Security Risk Management (pending revision)
- Australian Standards Handbook HB 327-2010 Communicating and Consulting about Risk

Jurisdictional policies and guidelines are included in Section 14.3 Further Reading.

9.3 OPERATIONAL MODELS

Safety and security in healthcare facilities is affected by a range of factors including:

- the type of services being delivered at the facility and the identified risk of aggression or violent incidents occurring
- who is likely to use the service, including during local events where there is an increased number of population expected e.g. large festivals or events
- the total number of staff on duty at any one time and their experience and skill levels
- the size and layout of the facility, including those centres that are separate from a hospital
- the geographical location of the area and the population demographics
- the crime risk of the locality
- proximity of the local police services and the response times
- the current security controls in place and their effectiveness in reducing the likelihood of violence occurring.

To address these factors, a risk assessment to determine the need for security services, the number of security staff required, the times where a security presence is necessary and the associated systems that support the overall approach, will need to be completed by the healthcare facility. An independent site-specific security risk assessment could be considered, to determine the need, type and extent of security controls required, particularly where there is the presence of critical infrastructure.

The operational model for security services can occur through one or a combination of the following ways, depending on the identified risk:

- an onsite 24/7 security presence
- an onsite security presence during usual business hours only
- an onsite security presence during usual business hours with some additional staffing at identified high risk times (e.g., Friday and Saturday nights)
- off-site duress response and patrolling arrangements only.

In all cases, security staff operate in a defensive, non-offensive way and work as part of a team, in collaboration with other staff, to assist with managing patients, to provide assistance to visitors, and to assist with protecting staff and securing the assets of the facility.

The different arrangements for the provision of security services will determine the physical infrastructure requirements of the facility. In all cases, security staff will be required to have a visible presence in the facility, particularly in high-risk areas such as the Emergency Department or Mental Health Units, rather than an office-based role.

Security operations and presence should be considered for health care facilities outside of the hospital environment.

9.4 OPERATIONAL POLICIES

9.4.1 Hours of Operation

Security services will be operational and available in line with the requirements set out in the documented risk assessment. This will include identification of those times where a foundational onsite security presence is required, when additional staffing is required and when offsite on-call services are available in place of an onsite presence.

9.4.2 Infection Prevention and Control considerations

The security role undertaken means that individual staff will frequently touch surfaces (e.g., locking / unlocking etc) interact with patients and others and on occasion physically restrain individuals. Access to facilities to maintain hand hygiene and disposal of PPE is required.

9.4.3 Staff Identification (ID) Cards

Where security staff are responsible for the management of Staff ID cards, there must be sufficient space to allow identification photos to be taken and printed. This should include sufficient distance between the camera and the staff member along with a clear backdrop and must reflect WHS standards and ergonomics.

9.4.4 Access Control Cards

The distribution of Access Control Cards and keys will be undertaken by Security services. The practice of printing IDs on Access Control cards should not be encouraged due to potential security breaches if the card is lost.

9.4.5 Training Facilities

Security staff are required to undertake refresher courses and practice drills to ensure that knowledge and skills on practices relating to their role remain current.

Access to shared and bookable facilities will be required, noting that access to equipment to undertake relevant activities needs to be located proximate to shared training facilities.

9.5 FUNCTIONAL AREAS

Security services may require the following functional areas:

- a reception space (for public enquiries, lost property, wayfinding, wait area, staff IDs etc)
- a security room (to act as a base and it may also contain security CCTV monitoring, see Section 9.5.3 below)
- CCTV monitoring room (if not contained in security room)
- store – general.

In addition, provision may be made for a localised security satellite base in high-risk areas, including mental health services.

9.5.1 Reception

A reception may be required where security staff interface with the public and where staff present for provision of staff ID cards and staff access control cards. This functional area may require an area for taking of photographs of staff (for ID cards).

9.5.2 Security room

A security room will be provided to allow security staff to complete tasks relevant to their role when not patrolling including to consult with external authorities or clinicians.

This room should be appropriately sized for general workspace and an operating console, sufficiently sized to house the necessary equipment. If no reception is provided, an area to take photographs should be adjacent.

Wall space or ceiling space may be required for the mounting of larger LCD displays from any point within the room, depending upon the requirements of the facility (see below for CCTV continuous monitoring). Images on any monitors must not be visible by members of the public / patients / other staff, so location of monitors and appropriate glazing on any windows are essential considerations.

Other space requirements in the security room may include building management systems and fire alarm control equipment, security reporting systems, security management systems require PCs to maintain facility access control / remote locking and security alarm monitoring.

The following requirements should also be considered as part of the security room:

- duress response alarm communications requirements
- intruder alarms
- handsets, two-way radios and other communication equipment with sufficient GPOs for charging
- heating and cooling
- securable / limited access
- key lockers for collection of keys and installation in line with manufacturer standards.
- storage space for spare equipment (e.g., hazard signs) if a separate store is not available,
- audible and visible indicators for monitored alarms
- sufficient space for charging bays and racks with appropriately sized power available.
- heat load within the security and CCTV rooms and independent HVAC provisioned with local controls.

9.5.3 CCTV monitoring room

In most cases, a separate room for CCTV monitoring will only be provided where continuous monitoring is occurring or where monitoring is occurring for multiple facilities. Workspace should be provided in this area for reporting. CCTV monitoring rooms must also be set up with the ability to install communication devices. CCTV room should be sized with advice from an ergonomist to determine the optimal distance from the monitors, depending on number and size of view area/s.

Set up of the CCTV monitoring must reflect WHS standards and ergonomics such as distance from screens, number of screens, lighting (dimmable), privacy and other issues around CCTV viewing. CCTV monitoring rooms must be designed so people outside the room cannot view the monitors in the room. A space fit exercise should be undertaken to ensure that all required equipment can be accommodated while adhering to workspace and circulation space requirements.

Depending on local jurisdictional policies, space may be required to facilitate confidential discussions and / or briefings, ideally located adjacent to the CCTV monitoring room.

9.5.4 Store - General

Additional storage space should be planned for security equipment, such as radios, torches, ID supplies, administration supplies, documentation and operational documents. To ensure the security of assets and patient belongings, storage areas should be under CCTV surveillance

If security staff carry weapons, lockable storage for this equipment must be available

9.5.5 Shared Areas

Staff amenities may be shared with other services, noting that consideration should be given for access to change rooms, showers and beverage facilities.

9.6 FUNCTIONAL RELATIONSHIPS

9.6.1 Relative Location

While the security role involves internal and external patrolling to facilitate high visibility, there will also need to be a security base / office. The location of this will depend on a number of factors, including the afterhours access points and arrangements. The security base / office is most typically located near an emergency department or the main entry depending on the size of the facility.

The facility needs to consider the layout and the activities that will be performed in the security base / office compared to the requirement for security to be mobile.

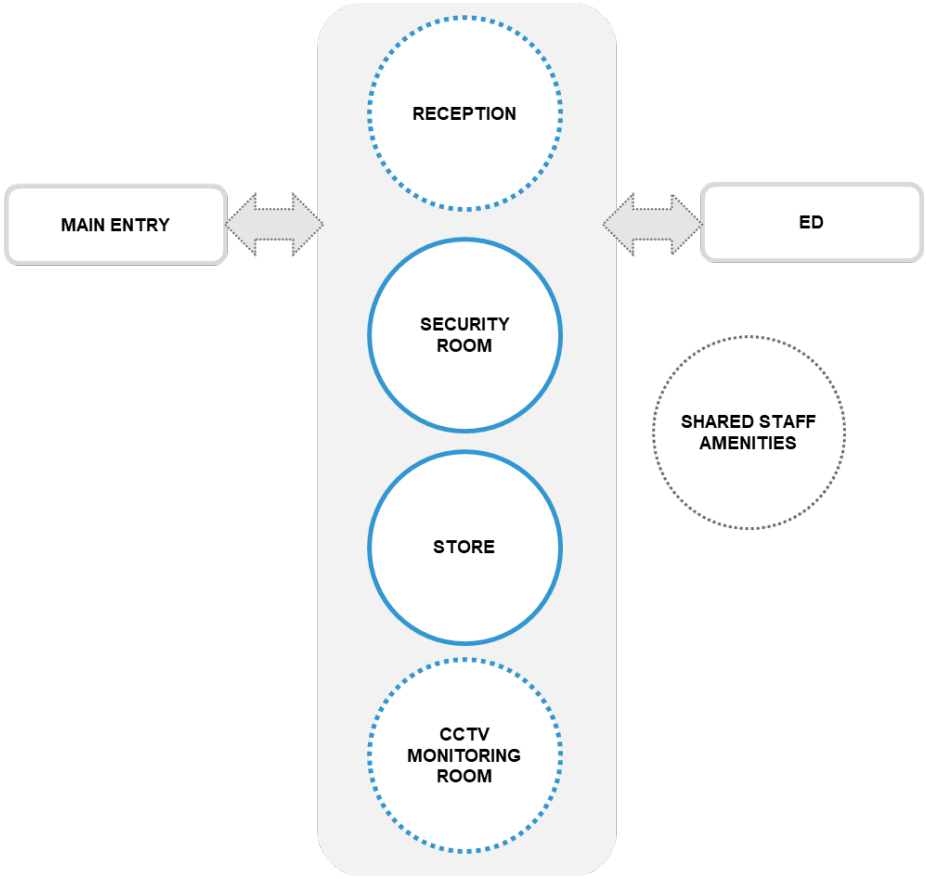
The security base / office location should be activity driven. For example, if the security base / office will be a point for public enquiries, way-finding and lost property, it will need to be accessible from public zones in the facility. If there is no public facing activity required, the location may be in the back of house but located so as not to create isolation risks for the staff working in the security base / office.

Where mobile patrols of facilities, or a security escort to parked cars is required, a parking space for security vehicles should be available near the security office.

9.6.2 Internal

Once the operational model has been determined, internal functional spaces can be identified (as the space requirement will be dependent on the operational systems, flows, processes and usage) e.g., a security service that provides staff ID may need a reception area.

Key internal functional relationships are as follows:



9.7 DESIGN REQUIREMENTS

9.7.1 Electrical Requirements

The security and CCTV room(s) should be provided with emergency back-up power in the event of a power failure (e.g., generators).

The power supply should be consistent with the facility requirements and should be sufficient to provide full functionality of each control point.

9.7.2 Technology Considerations

Systems and devices will be selected to assist facilities in managing the identified risks. The selected systems and devices must be 'fit for purpose' and address the risk identified in the facility security risk assessment.

These may include:

- CCTV cameras and monitors
- handsets to enable communication between clinical and security staff
- mobile and fixed duress systems
- access control systems.
- two-way radios – charging station area for multiple devices
- electronic key systems/safes
- multiple phone and data points
- access control systems and reporting PCs.

Wireless coverage should include all buildings on the hospital site to enable full functionality of equipment.

9.8 SCHEDULE OF ACCOMMODATION

Refer to Section 14.1

010 PORTERAGE / ORDERLY / WARDSPERSON SERVICES

10.1 SERVICE DESCRIPTION

Wardspersons provide internal patient transport and a variety of services including code black support and the transfer of clinical equipment and medical gases throughout a hospital. This may include transport of pathology and pharmacy items when the pneumatic tube is either unsuitable or unavailable.

Terminology relating to this service will vary between jurisdictions.

10.2 KEY POLICY AND GUIDELINES

Key policy and guidelines relating to porterage services include manual handling, work health and safety and local operational policies.

10.3 OPERATIONAL MODELS

Wardspersons will provide support and assistance to clinical and other frontline staff in a variety of activities such as general assistance to patients, patient care, patient handling, patient transport and clinical equipment transfer.

Wardspersons will sign on and initially be tasked from the wardsperson coordinator's work base.

All requests from clinical areas will be logged either via an electronic or paper-based system or direction from clinical staff. The operational system utilised by wardspersons staff will be determined during the planning phase of a project but may include the option for a centralised job logging electronic system. The wardsperson coordinator will review each job and prioritise based on urgency, then allocate to the next available wardsperson. Communication devices will be provided to relay jobs to wardspersons on shift (dependent on service requirements and scope of service provision agreement).

Depending on the size of the facility, clinical areas requiring frequent use of porterage services such as Emergency Department, Medical Imaging and Operating Theatres may have a dedicated wardsperson allocated on a 24-hour basis.

10.4 OPERATIONAL POLICIES

10.4.1 Hours of Operation

Services will typically operate 24 hours onsite 7 days a week in line with local arrangements. After hours provision will be dependent on the size of the facility.

In medium or smaller sites, this may be a dual role with security or mortuary services.

10.4.2 Infection Prevention and Control considerations

Given the role of wardspersons in patient transport and transfer of equipment throughout the hospital, access to hand hygiene facilities and PPE is required.

10.4.3 Work Health and Safety considerations

The built environment should enable good WHS practices to ensure the safety of staff and others. This may include, but is not limited, to the following:

- mechanical or motorised bed movers will be provided where reasonably practicable
- lifting devices will be provided for patient lifting to reduce risk of injury
- equipment stores of adequate size and located in a central area.

10.5 FUNCTIONAL AREAS

10.5.1 Work areas

The wardsperson coordinator, where provided, will have a workspace in the back of house area. In smaller facilities, there may be different arrangements and the workspace may be collocated with other services. Consideration may be given to space for wardsperson awaiting task allocation

10.5.2 Equipment bays

Capacity to recharge bed movement devices will be required. These should be located near the inpatient units and the Emergency Departments to enable ease of access near point of use. Consideration should be given to space for storage of wheelchairs.

Other tugs such as waste and linen may be located in the back of house area.

10.5.3 Shared Areas

Staff amenities for wardspersons may be shared between other back of house services.

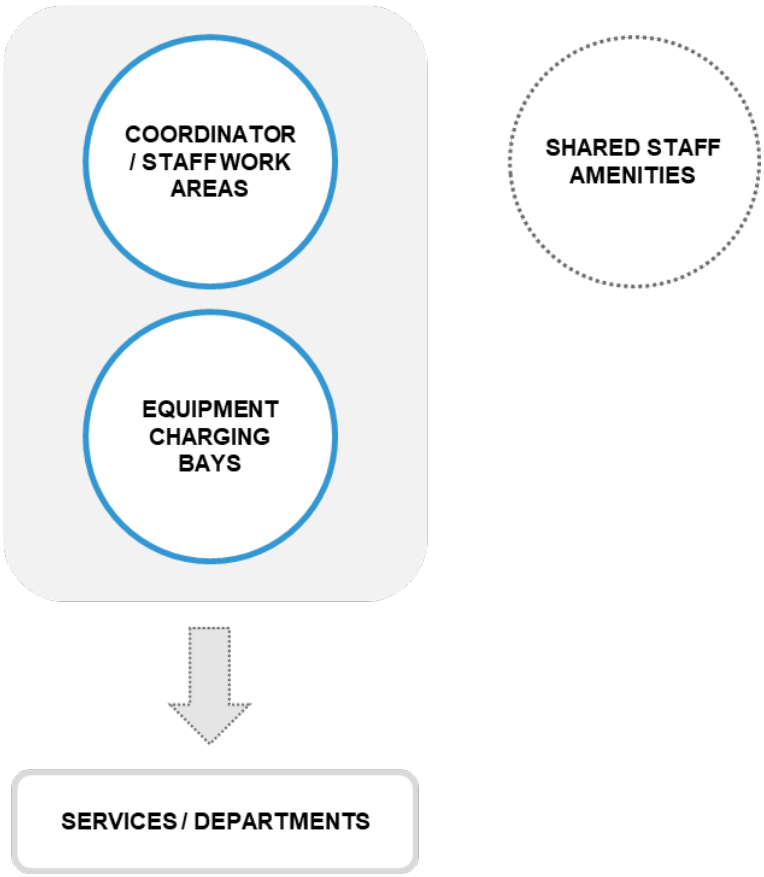
10.6 FUNCTIONAL RELATIONSHIPS

10.6.1 External

Wardspersons will be a mobile workforce required to assist throughout the facility. Easy access is required to all services / departments on the campus including covered walkways where possible.

10.6.2 Internal

Key internal functional relationships are as follows:



10.7 DESIGN REQUIREMENTS

10.7.1 Technology Considerations

Wireless access will be readily available in all areas of a health service including plantrooms and workshops. This will support provision of mobile devices such as ‘tablets’ which are increasingly being used to manage workflow and task allocation, and to support a mobile workforce.

Wardspersons will move large clinical items such as beds and lifters between storage spaces and clinical units. Provision of electronic tracking devices such as Radio Frequency Identification (RFID) / Real Time Location Systems (RTLS) may be utilised on clinical equipment.

10.8 SCHEDULE OF ACCOMMODATION

Refer to Section 14.1

011 PATIENT TRANSPORT SERVICES

11.1 SERVICE DESCRIPTION

Health facilities accommodate a range of road transport services that drop off and pick up patients and this will need to be reflected in the planning and design. These services include:

- Ambulance Services
- Patient Transport Services
- Corrective Services
- Police
- other health services as designated by each jurisdiction (e.g., maternity carers, mental health crisis team).

Dedicated parking bays will be required to accommodate these vehicles. These parking bays should be clearly signposted to ensure exclusive use by transport services (i.e., Ambulance, Patient Transport Service, Corrective Services, Police).

To calculate the number of bays required, a process of consultation will be undertaken with each service provider during the functional briefing process about their future requirements. This may include a review of current activity. This information will be used to project future requirements.

While Police and Corrective Services will require some access, most of the activity will be generated by Ambulance Services and Patient Transport Services.

Local jurisdictional policies will provide guidance in relation to design requirements.

11.2 FUNCTIONAL RELATIONSHIPS

The ambulance bays will be located at the ambulance entry to the emergency department so direct access can be facilitated. Patient transport services would ideally not use these drop off bays or travel through the emergency department.

Patient Transport Services should be provided, where possible, with direct access to main hospital entry points, separate from the ambulance bays. This should include an entry near the patient discharge / transit lounge (where provided).

Pathways of travel from Patient Transport Services bays to the facility should be covered, level and wide enough to accommodate equipment and staff.

Consideration should be given to proximity to main lifts, clinical areas, discharge / transit lounge, etc. Depending on the size of the facility, multiple drop off locations may be required.

Electric Vehicle (EV) charging infrastructure may be required.

11.3 DESIGN REQUIREMENTS

Door openings and corridors will be of sufficient width to enable transfer of patients, transportation equipment and staff.

For information relating to the planning and design requirements of ambulance vehicle parking bays refer to Section 3.2 of the AusHFG HPU 300 Emergency Unit:

Planning and design requirements for parking bays for Patient Transport Services should take into consideration the following:

- adequate dimensions to accommodate Patient Transport Service vehicles. The dimensions of the bays are like that of the ambulance service, with access / clearance in the rear of the vehicle for loading and unloading of stretchers and sufficient space for manoeuvring
- smooth, level surface from the bay to the facility entry point(s)
- access to the stretchers and the path that the stretchers are manoeuvred should be on a flat/level clear pathway clear of obstruction
- adequate vertical clearance on entry.

012 FLEET SERVICES

12.1 SERVICE DESCRIPTION

Fleet Services provides a vehicle pool service across hospitals and broader health services. Fleet management may include, but is not limited to, the following:

- acquisition & disposal, provision and management of an electronic pool car booking system
- vehicle usage compliance (including running sheet / telematics review and reconciliation)
- data capture for Fringe Benefits Tax (FBT) reporting, insurance, fines management, invoice reconciliation, vehicle utilisation, financial and compliance review and reporting
- vehicle maintenance management and review
- fuel card management
- ETAG management
- mobility parking pass management
- driver management (licencing, approvals, compliance)
- cleaning
- parking
- pool car keys / folder management.

The fleet service may also be involved in provision of carparking or contracting of the carparking, for private vehicles for staff, although in some jurisdictions this may be out of scope.

Overall management may extend to delegating responsibility to business unit managers or vehicle custodians dependent on the fleet vehicle, nature of usage and pool location.

Car parking for fleet vehicles will be secure with limited access to authorised persons.

Accessible parking considerations can be found in AusHFG Part C: Design for Access, Mobility, Safety and Security.

12.2 KEY POLICY AND GUIDELINES

Refer to local jurisdictional policy and guidelines.

12.3 OPERATIONAL MODELS

Fleet services for healthcare facilities may be provided by the healthcare facility or outsourced to an external provider.

Fleet services, where provided, are generally located centrally or near the fleet vehicle car park. Keys will be held in a central location to enable ease of access for collection or return of keys.

In smaller hospitals, MPS or community health centres, the day-to-day management of fleet services may be undertaken by reception staff.

12.3.1 Electric Vehicles

The provision, installation, management and maintenance of Electric Vehicle (EV) charging infrastructure may be required. Electric charge stations for public or private vehicles should be considered separately and located in an alternative area to fleet vehicle charge stations.

Electric fleet vehicles that require charge may be left unattended for several hours during the charge process. Provision must ensure once a charge is completed, the charge station becomes available for next vehicle. The infrastructure should include technology that extends to remote monitoring, auditable and easy process associated with access and cost recovery.

EV charge infrastructure should consider fast charge in the first instance for feasibility and cost benefit.

12.4 OPERATIONAL POLICIES

12.4.1 Hours of Operation

The service will typically operate during business hours, Monday to Friday. Consideration of a key locker, or alternative, for afterhours collection and drop off for keys may be required.

12.4.2 Booking

The fleet service will provide bookings via an electronic booking system.

12.4.3 Vehicle Management

Fleet services are responsible for maintaining vehicles in line with the manufacturer's requirements and in a manner that ensures optimal safety. Servicing and maintenance of vehicles will generally be performed offsite by an approved service provider.

Logbooks will be maintained by staff utilising fleet vehicles.

Cleaning of vehicles will either be performed offsite or onsite depending on local arrangements. This may include additional consideration such as wiping down of surfaces between vehicle bookings with the responsibility of such cleaning generally allocated to the returning driver. Responsibility of provision and management of wipes is aligned with the vehicle management.

Vehicle safety inspections is aligned with the vehicle management and carried out in accordance with local policies and procedures.

Fuel cards will be provided for purchase of fuel while the vehicle is in use.

Fleet services may provide logbook checking or this may be performed centrally.

12.5 FUNCTIONAL AREAS

12.5.1 Fleet office

Where a fleet management service is provided by the health service, dedicated workspace will be required. This may be shared with mail or other services depending on the size of the fleet office.

Where there is no office provided, a process for collection and drop off keys will need to be defined taking into consideration limited access to key storage areas.

MPS and smaller hospitals will usually store keys and logbooks at the main reception.

12.5.2 Shared Areas

Staff amenities for fleet services may be shared between other back of house services.

12.6 FUNCTIONAL RELATIONSHIPS

12.6.1 External

The fleet service, where a dedicated service is provided, should be in an area that is centrally located to all departments such as front of house or near the fleet vehicle carpark.

Smaller hospitals and MPS would normally provide fleet management from the reception and fleet in a co-located parking area.

The location of fleet vehicle parking should be risk assessed based on patterns of use, and after hours use.

12.7 DESIGN REQUIREMENTS

12.7.1 Technology Considerations

Consideration to be given for an electronic key cabinet for after-hours pick up and drop off. A location for storage will also need to be considered in services without dedicated fleet staff (e.g., lockable key cupboard within a community health service).

Future consideration for access control cards, or similar, to replace vehicle key access should be supported if determined feasible. This will negate keys management processes as vehicles progress towards tele metrics to record vehicle usage and driver login, replacing paper-based systems.

Electric Vehicle infrastructure will need to be considered, as outlined above.

12.8 SCHEDULE OF ACCOMMODATION

Refer to Section 14.1

013 MAIL SERVICES

13.1 SERVICE DESCRIPTION

The Mail Service coordinates the distribution of hard copy mail and parcels received in and out of the facility.

13.2 KEY POLICY AND GUIDELINES

Refer to local jurisdictional policy and guidelines.

13.3 OPERATIONAL MODELS

Mail and parcels will be generally delivered via the loading dock and transported to the mailroom. Mail services will sort incoming parcels and mail into pigeonholes ready for collection by departmental or mail staff, and will sort external mail into collection trays (i.e., for couriers, etc)

Smaller services, such as a community health services or MPS, will receive mail through the front reception or collect from a Post Office box.

13.4 OPERATIONAL POLICIES

13.4.1 Hours of Operation

The service will typically operate during business hours, Monday to Friday.

13.4.2 Work Health and Safety considerations

The built environment should enable good WHS practices to ensure the safety of staff and others. These may include but is not limited to:

- the provision for motorised or automated transportation of bulky packages should be provided where possible
- height adjustable workspaces and planning specific to ergonomic considerations for workflow practices.

13.5 FUNCTIONAL AREAS

13.5.1 Mail room

A dedicated mail room will be provided to store letters and parcels going in and out of the hospital. MPS and small hospitals will include provision for mail at the main reception.

The room will include the following:

- sorting bench with space adjacent to enable unpacking of trolleys (or provision for storing mail bags e.g. wall hooks)
- pigeonholes for each department
- bench space for parcels awaiting pick up
- write-up area
- storage of empty trolleys.

13.5.2 Shared Areas

Staff amenities may be shared between other back of house services.

13.6 FUNCTIONAL RELATIONSHIPS

13.6.1 External

The mail service should be in an area that is central to all departments and provides ease of access for postal services (Australia Post and New Zealand Post) and couriers picking up and dropping off (adjacent to loading dock may be required or access to a delivery area).

The mail service should be close to courier drop off / pick up bays and will depend on the size and location of the hospital. Courier bays may be close to the back dock in an area separate to large truck drop off areas.

13.7 DESIGN REQUIREMENTS

13.7.1 Technology Considerations

Capacity for e-parcel tracking may be required including the ability to track the status of delivery.

13.8 SCHEDULE OF ACCOMMODATION

Refer to Section 14.1

014 APPENDICES

14.1 SCHEDULE OF ACCOMMODATION

A schedule of accommodation is shown below and lists generic spaces for this HPU.

Food Services

AusHFG Room	Room / Space	SC / SC-D	MPS		< 50 Beds		150 Beds		300 Beds		600 Beds		Remarks
			Qty	m2	Qty	m2	Qty	m2	Qty	m2	Qty	m2	
ENTRY / RECEIVING AREA													
	Receiving Area						1	10	1	10	1	15	Include handwashing area
STORES													
	Freezer Room		1	2	1	4	1	10	1	10	1	15	Flexibility in the allocation of m2 between freezer room and cool rooms; collocate for flexibility of use of space
	Cool Room - Cooked Prepared Goods		1	2	1	4	1	10	1	10	1	15	
	Cool Room - Dairy, Sweets, Juices		1	2	1	4	1	5	1	5	1	10	
	Cool Room - Fruit and Vegetables						1	5	1	5	1	10	
	Cool Room - Meat						1	5	1	5	1	10	
	Store - Dry Goods		1	5	1	5	1	15	1	15	1	20	
	Store - Cook Chill						1	5	1	5	1	10	
	Store - Wares		1	2	1	4	1	10	1	10	1	15	
FOOD PREPARATION & PLATING													
	Cooking Area		1	30	1	50	1	60	1	60	1	120	MPS/<50 beds Cooking Area will include Plating and Preparation areas
	Plating Area						1	40	1	40	1	60	
	Preparation Area - Hot and Cold						2	20	2	20	2	30	
	Diet Kitchen						1	30	1	30	1	40	
	Store - Cooks Day Store						1	5	1	5	1	5	
	Bay - Trolley Parking		1	4	1	8	1	20	1	20	1	40	
BHWS-B	Bay - Handwashing, Type B	Yes	1	1	1	1	3	1	3	1	5	1	Number required will depend on travel distances.
CLEANING / WASTE													
	Trolley / Cart Washroom						1	10	1	10	1	15	
	Dishwashing Area		1	10	1	15	1	30	1	30	1	50	
	Pot Washing Area						1	10	1	10	1	15	
DISP-10	Disposal room	Yes					1	8	1	8	1	12	
	Bin Store		1	2	1	2	1	4	1	4	1	4	
SUPPORT													
	Store - Disposables, Paper Goods		1	2	1	4	1	10	1	10	1	15	
	Store - Chemicals						1	6	1	6	1	6	MPS/< 50 beds - small cupboard for chemicals will be located in Store - Disposables, Paper Goods
CLRM-5	Cleaner's Room	Yes					1	5	1	5	1	5	Small hospitals to share with other areas
STAFF WORK AREAS													
RECP-10	Reception	Yes					1	9	1	9	1	9	
OFF-1P-9	Office - 1 Person	Yes	shared		shared		1	9 (o)	1	9 (o)	1	9 (o)	Optional. Will be dependent on size of facility and may be shared with cleaning services. This will be used for coordination of task allocation.
OFF-WS	Office - Workstation	Yes					2	4.5	3	4.5	6	4.5	Includes menu monitors and stores; Number and area allocation will depend on staff profile and local jurisdictional policies.
	Discounted Circulation		15%		15%		15%		15%		15%		

Linen Services

LINEN SERVICE - ROLL ON / OFF													
AusHFG Room	Room / Space	SC / SC-D	MPS		< 50 Beds		150 Beds		300 Beds		600 Beds		Remarks
			Qty	m2	Qty	m2	Qty	m2	Qty	m2	Qty	m2	
	Clean Linen Hold		1	8	1	12	1	40	1	60	1	100	150 – 600 beds will include additional 5m2 for workstation and emergency stock
	Dirty Linen Hold		1	5	1	10	1	20	1	40	1	70	Smaller sites with minimal use may have linen stored in centralised disposal room
	Discounted Circulation		20%		20%		20%		20%		20%		
LINEN SERVICE - BULK STORAGE													
AusHFG Room	Room / Space	SC / SC-D	MPS		< 50 Beds		150 Beds		300 Beds		600 Beds		Remarks
			Qty	m2	Qty	m2	Qty	m2	Qty	m2	Qty	m2	
	Clean Linen Hold		1	8	1	12	1	70	1	100	1	150	150 – 600 beds will include additional 10m2 for workstation and emergency stock
	Dirty Linen Hold		1	5	1	12	1	25	1	50	1	80	Smaller sites with minimal use may have linen stored in centralised disposal room
	Discounted Circulation		20%		20%		20%		20%		20%		

Cleaning Services

AusHFG Room	Room / Space	SC / SC-D	MPS		< 50 Beds		150 Beds		300 Beds		600 Beds		Remarks
			Qty	m2	Qty	m2	Qty	m2	Qty	m2	Qty	m2	
	Store - Consumables		1	10	1	12	1	9	1	12	1	15	MPS cleaners store will be a combined consumable and equipment store
	Store - Chemicals				1	2	1	5	1	9	1	12	MPS - small cupboard in cleaner's store. < 50 beds - similar cabinet in room
STEQ-20	Store - Equipment	Yes					1	15	1	25	1	40	
	Service Room				1	9	1	9	1	9	1	9	Service room with drains and GPOs
OFF-1P-9	Office - 1 Person	Yes							1	9	1	9	A facility with > 300 beds is likely to have a dedicated cleaning manager.
OFF-2P	Office - 2 Person	Yes					1	12					Shared with other back of house services. Number and area allocation will depend on staff profile and local jurisdictional policies.
OFF-WS	Office - Workstation	Yes							3	4.5	4	4.5	Shared with other back of house services. Number and area allocation will depend on staff profile and local jurisdictional policies.
	Discounted Circulation		20%		20%		20%		20%		20%		

Waste Management Services

AusHFG Room	Room / Space	SC / SC-D	MPS		< 50 Beds		150 Beds		300 Beds		600 Beds		Remarks
			Qty	m2	Qty	m2	Qty	m2	Qty	m2	Qty	m2	
	Waste Hold		1	10	1	15	1	20					Combined general/recycling/clinical
	Clean Bin Hold		1	5	1	10	1	15	1	20	1	35	Smaller facilities will include bin washing
	Bin Washing								1	10	1	10	
	Recycling / Other Waste Holding								1	30	1	60	
	Clinical Waste Holding								1	50	1	100	Includes anatomical waste and sharps
BMEQ	Bay - Mobile equipment	Yes	Shared		Shared		1	10	1	15	1	25	
	Waste Compound		1	10	1	20	1	60	1	60	1	60	For compactor or equivalent adjacent or part of dock
	Discounted Circulation		20%		20%		20%		20%		20%		

Facility Management Services

AusHFG Room	Room / Space	SC / SC-D	MPS		< 50 Beds		150 Beds		300 Beds		600 Beds		Remarks
			Qty	m2	Qty	m2	Qty	m2	Qty	m2	Qty	m2	
RECP-10	Reception	Yes					1	9	1	9	1	12	150 beds and above includes a photocopier
OFF-WS	Office - Workstation	Yes					2	4.5	3	4.5	4	4.5	Number and area allocation will depend on staff profile and local jurisdictional policies.
	Bay - Photocopier								1	3	1	3	
STFS-10	Store - Files	Yes					1	8 (o)	1	8 (o)	1	8 (o)	Optional; dependent on quantum of hardcopy documentation; Plan cabinet in all sites for as installed A1 size plans
MEET-9	Meeting Room	Yes					shared		1	12	1	15	
	Workshop		1	25	1	40	1	120	1	200	1	400	Workshop size is dependent on the amount of outsourcing and centralisation of maintenance in smaller facilities. The area will be segregated into areas for each discipline. Includes internal storage for high value items; Access to workstations for AFMO / data entry
	Monitoring Room								1	12 (o)	1	12 (o)	BMS, UPS and other systems. Optional; may be centralised in LHD.
BMEQ	Bay - Mobile equipment	Yes					1	10	1	10	1	20	General mobile equipment
BMEQ	Bay - Mobile equipment	Yes			1	5	1	5	1	5	1	10	For beds awaiting repair, collocated between engineering and central equipment store.
STEQ-14	Store - Equipment				1	15	1	25	1	50	1	80	
	Store - Spare Parts		-	-	-	-	1	4	1	4	1	4	Allocation to be agreed in planning. Smaller remote sites may require additional storage.
	Gardeners Shed / Welding Bay		1	15	1	15	3	15	3	15	3	15	Small sites will require access to an external hard stand area able to be suitably screened for welding and will have shared space; To consider if this could be outsourced. May include garden maintenance equipment e.g. ride on mowers
	Discounted Circulation		15%		15%		15%		15%		15%		

Supply Services & Loading Dock

TRADITIONAL SUPPLY MODEL - BACK OF HOUSE													
AusHFG Room	Room / Space	SC / SC-D	MPS		< 50 Beds		150 Beds		300 Beds		600 Beds		Remarks
			Qty	m2	Qty	m2	Qty	m2	Qty	m2	Qty	m2	
	Loading Dock - Clean		1	10	1	15	1	50	1	100	1	150	Space allocated for food temperature checks if required
	Loading Dock - Dirty		1	10	1	15	1	30	1	60	1	80	
	Office - Receivals / Dispatch						1	12	1	12	1	12	
BES	Bay - Emergency Shower	Yes	1	1	1	1	1	1	1	1	1	1	Access for BoH services
BMEQ	Bay - Mobile equipment	Yes					1	10	1	12	1	12	Forklift and pallet lifter
STBK-40	Store - Bulk	Yes	1	30	1	30	1	60	1	120	1	200	
	Store - Medical Gases		1	2	1	5	1	10	1	10	1	20	
	Store - Flammables		shared		shared		1	10	1	10	1	10	May be shared with an adjacent service (flammables storage only)
	Discounted Circulation		15%		15%		15%		15%		15%		
DIRECT TO IMPREST SUPPLY MODEL - BACK OF HOUSE													
AusHFG Room	Room / Space	SC / SC-D	MPS		< 50 Beds		150 Beds		300 Beds		600 Beds		Remarks
			Qty	m2	Qty	m2	Qty	m2	Qty	m2	Qty	m2	
	Loading Dock - Clean		1	10	1	15	1	50	1	100	1	150	Space allocated for food temperature checks if required
	Loading Dock - Dirty		1	10	1	15	1	30	1	60	1	80	
	Office - Receivals / Dispatch		shared		shared		1	9	1	12	1	12	
BES	Bay - Emergency Shower	Yes	1	1	1	1	1	1	1	1	1	1	Access for BoH services
BMEQ	Bay - Mobile equipment	Yes					1	10	1	12	1	12	Forklift and pallet lifter
STBK-20	Store - Bulk	Yes	1	10	1	10	1	15	1	30	1	50	
	Store - Medical Gases		1	5	1	5	1	10	1	10	1	20	
	Store - Flammables		shared		shared		1	10	1	10	1	10	May be shared with an adjacent service (flammables storage only)
	Discounted Circulation		15%		15%		15%		15%		15%		

Security Services

AusHFG Room	Room / Space	SC / SC-D	MPS		< 50 Beds		150 Beds		300 Beds		600 Beds		Remarks
			Qty	m2	Qty	m2	Qty	m2	Qty	m2	Qty	m2	
RECP-10	Reception	Yes					1	4	1	10	1	10	Dependent on requirements for access control cards during business hours; all facilites usually have a reception. E.g. a small mental health facility.
SECR-10	Security Room	Yes	1	9	1	15	1	20	1	20	1	20	Space for Multi Function Devices (MFD), shredders and recycling bins; May include space for Beverage Bay and storage for wet weather gear
	CCTV Monitoring Room				1	15	1	15	1	20	1	30	May not be required in MPS; The more CCTV being installed the greater the space required for the 'back of house' equipment and storage of records. computer racks, etc.
STGN	Store - General	Yes							1	9	1	12	Storage for 150 bed hospital will be incorporated into the security room; may include lost property
	Discounted Circulation		20%		20%		20%		20%		20%		

Porterage / Orderly / Wardsperson Services

AusHFG Room	Room / Space	SC / SC-D	MPS		< 50 Beds		150 Beds		300 Beds		600 Beds		Remarks
			Qty	m2	Qty	m2	Qty	m2	Qty	m2	Qty	m2	
OFF-1P-9	Office - 1 Person	Yes							1	9	1	9	
OFF-2P	Office - 2 Person	Yes							1	12			Shared with other back of house services - Number and area allocation will depend on staff profile and local jurisdictional policies.
OFF-WS	Office - Workstation	Yes									4	4.5	Shared with other back of house services -Number and area allocation will depend on staff profile and local jurisdictional policies.
BMEQ	Bay - Mobile equipment	Yes	Shared on ward		1	2	1	4	1	6	1	8	Open bay for storage and recharging frequently used mobile equipment; One central location / back of office and proximate to the frequently used areas such as inpatient units, ED, and other clinical departments.
	Discounted Circulation		20%		20%		20%		20%		20%		

Fleet Services

AusHFG Room	Room / Space	SC / SC-D	MPS		< 50 Beds		150 Beds		300 Beds		600 Beds		Remarks
			Qty	m2	Qty	m2	Qty	m2	Qty	m2	Qty	m2	
OFF-2P	Office - 2 Person	Yes							1	12			Number and area allocation will depend on staff profile and local jurisdictional policies.
OFF-WS	Office - Workstation	Yes									4	4.5	Shared with other back of house services -Number and area allocation will depend on staff profile and local jurisdictional policies.
	Discounted Circulation		20%		20%		20%		20%		20%		

Mail Services

AusHFG Room	Room / Space	SC / SC-D	MPS		< 50 Beds		150 Beds		300 Beds		600 Beds		Remarks
			Qty	m2	Qty	m2	Qty	m2	Qty	m2	Qty	m2	
	Mail Room								1	20	1	30	MPS and small hospital will have facilities included in front of house reception.
	Discounted Circulation		20%		20%		20%		20%		20%		

14.2 REFERENCES

- Food Standards Australia New Zealand (FSANZ) Food Standards Code
- Australian/New Zealand Standard Laundry practice AS/NZS 4146:2000; section 2.4 collection, loading, storage and sorting of linen.
- ISO55000 – ISO550003 Asset Management
- Engineering Services Guidelines
- AS/NZS IEC60601.1 – Part 1: General requirements for basic safety and essential performance
- AS/NZS 2500: Safe use of medical electrical equipment in health care
- AS/NZS 2896: Medical gas systems
- AS/NZS 3003: Electrical Installations – patient areas
- AS/NZS ISO 31000 Risk Management – Principles and Guidelines
- AS/NZS Handbook 167 Security Risk Management
- AS 44851.1 Security for Healthcare Facilities
- AS 4485.2 Security for Healthcare Facilities Procedures Guide
- AS 4674 Design, construction and fit out of food premises
- AS 4332-2004 The storage and handling of gases in cylinders
- AS 2201 Intruder Alarm Systems (Set)
- AS 4806 Closed Circuit Television (CCTV) (Set)
- HB 167 Security Risk Management
- BH 327 Communicating and Consulting about Risk
- NZS Management of Healthcare Waste 4304:2002
- Work Health and Safety Regulations 2011

14.3 FURTHER READING

- NSW Health Clinical Excellence Commission - Infection Prevention and Control for Food Services
- NSW Health Infection Prevention and Control Policy PD 2017_013
- NSW Health Infection Prevention and Control Handbook, 2020
- NSW Health Work Health and Safety: Better Practice Procedures.
- NSW Health PD2020_020 Cleaning of the Healthcare Environment policy
- NSW Health PD2017_026 Clinical and Related Waste Management for Health Services
- Clinical Excellence Commission Environmental Cleaning Standard Operating Procedures
- NSW Health Clinical Excellence Commission – Environmental Cleaning: https://www.cec.health.nsw.gov.au/keep-patients-safe/infection-prevention-and-control/cleaning-and-reprocessing

- NSW Health Clinical Excellence Commission Infection Prevent and Control Handbook, January 2020 Waste Disposal
- NSW Health PD2020_049: Clinical and Related Waste Management for Health Services (This document includes labelling and bin and lid colour of each type of waste stream, so these have not been repeated in this guideline).
- NSW Health PD 2018_013: Manual Handling Incidents – NSW Public Health Services Policy / Best Practice Guidelines Prevention
- NSW Health, Protecting People and Property - NSW Health Policy and Standards for Security Risk Management in NSW Health Agencies, 2013
- Workplace Surveillance Act 2005 NSW
- NSW Health PD2013_050 Workplace Health and Safety: Better Practice Procedures
- NSW Health PD2006_068 Transport for Health.
- NSW Health PD2018_002 Service Specifications for Transport Providers, Patient Transport Services
- NSW Health Generic Waste Management Plan for Health Care Facilities (currently under review)
- NSW Health, Improvements to security in hospitals – Final Report 2020