

# **Australasian Health Facility Guidelines**

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## **Part B - Health Facility Briefing and Planning HPU 300 Emergency Unit**

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### **Australasian Health Facility Guidelines**

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## 01 INTRODUCTION

### 1.1 PREAMBLE

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This Health Planning Unit (HPU) has been developed by the Australasian Health Infrastructure Alliance (AHIA). This revision has been informed by an extensive consultation process during 2018 which included clinical experts.

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

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This HPU outlines the requirements for the planning and design of emergency departments (ED). The document should be read in conjunction with the Australasian Health Facility Guidelines (AusHFG) generic requirements described in:

- Part A: Introduction and Instructions for Use;
- Part B: Section 80 - General Requirements and Section 90 - Standard Components;
- Part C: Design for Access, Mobility, Safety and Security; and
- Part D: Infection Prevention and Control.

The following related AusHFG resources should also be referenced where appropriate:

- HPU440 Medical Imaging Unit (including information relating to ED satellite medical imaging services);
- HPU 133 Psychiatric Emergency Care Centres (PECC); and
- Project Resource – Isolation Rooms, Engineering and Design Requirements.

Emergency department redevelopments may collocate other short stay units such as Psychiatric Emergency Care Centres (PECC). While an ED Short Stay Unit is described in this document, PECCs are described in HPU 133 Psychiatric Emergency Care Centre.

### 1.3 POLICY FRAMEWORK

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Before undertaking a project, planners and project personnel should familiarise themselves with individual jurisdiction plans, policies, service specific guidelines and reports. Information relating to jurisdictional policies and guidelines are listed in the Appendices in the References and Further Reading section.

The Australasian College for Emergency Medicine (ACEM) publishes a range of guidelines and statements on standards for EDs, including the following that are referenced within this HPU:

- ACEM, 2012, S12 Statement on the Delineation of Emergency Departments (version 5.0);
- ACEM, 2012, S11 Statement on Hospital Emergency Department Services for Children (version 2.0);
- ACEM, 2014, G15 Emergency Department Design Guidelines (version 3.0); and
- ACEM, 2018, P32 Policy on Violence in Emergency Departments (version 3.0).

## 1.4 DESCRIPTION

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The role of an ED is to receive, assess, stabilise and manage patients who present with a wide variety of conditions of varying urgency and complexity. A comprehensive range of services are provided for adults and children, and while the caseload may be predictable, changing levels of demand must be anticipated.

### 1.4.1 Levels of Service / Role Delineation

Descriptions of role delineation and levels of service for EDs will vary between jurisdictions. The role delineation as defined by ACEM in the Statement on the Delineation of Emergency Departments (2012) is referenced within the HPU given it is applicable across Australia and New Zealand.

The following levels reflect increasing capacity and capability to provide specialist emergency care network support to non-specialist providers, education, research and health system support in disaster preparedness and pre-hospital care.

#### Level 1 Emergency Department

A Level 1 ED will provide emergency care within a designated area of a remote or rural hospital. It is the minimum level of service that can be defined as an ED. The emergency caseload for a Level 1 ED may be intermittent. Basic primary and secondary assessment should be available including advanced paediatric, adult and trauma life support and stabilisation of critically ill patients prior to arrival of the retrieval service. A Level 1 ED will have 24-hour access to specialty advice.

#### Level 2 Emergency Department

A Level 2 ED is a service component of a secondary hospital with capabilities for managing some complex cases and sub-specialty services. This level of service should be capable of providing primary critical care. The service will manage the complete range of emergency presentations and be capable of providing a level of service for the community that is commensurate with the provision of primary emergency care. It will be part of an emergency medicine network. The ED must have the capability of transferring critically ill patients, and have access to a retrieval service.

#### Level 3 Emergency Department

A Level 3 ED will be part of a major regional, metropolitan or urban hospital with capabilities of managing most complex cases and have some sub-specialty services. A Level 3 ED should be able to manage a complete range of emergency presentations and be capable of providing a level of service for the community that is commensurate with the provision of primary emergency care. It should support other regional emergency centres as part of an emergency medicine network. The ED must have the capability of transferring critically ill patients and have access to a retrieval service.

#### Level 4 Emergency Department

A Level 4 ED will be part of a large, multifunctional tertiary or major referral hospital with capabilities for managing a wide range of complex conditions, and a significant level of sub-specialty services. The service must:

- be able to manage the complete range of emergency presentations and be capable of providing tertiary level support for other more regional centres as part of a clinical or jurisdictional healthcare network;
- have a dedicated retrieval service or access to one;
- have a capability for the key participation in a trauma service or trauma network. This includes a role within a formal disaster response plan;

- be accredited for emergency medicine training and actively participate in undergraduate and post graduate training and formal education programs for nursing, medical and allied health staff and students; and
- have an active research program.

Urgent Care Centre (UCC) models exist in a number of jurisdictions. Although this HPU does not specifically reference this model the information provided in this document may assist in informing the planning and design of these facilities.

## 02 PLANNING

### 2.1 OPERATIONAL MODELS

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#### 2.1.1 General

The following overarching clinical and operational models require confirmation prior to commencing the facility planning and design process given they will impact the configuration of the ED and overall space requirements.

#### 2.1.2 Patient Casemix

The projected ED activity and role within the local health service / network will underpin the future ED physical capacity requirements. The anticipated volume of presentations associated with the following patient groups will also inform planning and design requirements.

- major trauma;
- paediatrics;
- elderly patients;
- patients presenting with acute mental health conditions;
- patients presenting with drug and alcohol misuse;
- patients presenting with acute, severe behavioural disturbances;
- patients with mobility impairments;
- patients presenting from correctional facilities / under escort from police or guards;
- patients with infections or who are immunosuppressed; and
- other specific patient groups relating to the location of the ED, for example local cultural groups.

#### 2.1.3 Models of Care

Models of care implemented within emergency departments are aimed at optimising the timeliness, safety and quality of emergency care, as part of a whole-of-hospital approach to support the optimal patient journey.

The following information has been sourced from the Emergency Department Models of Care, 2012 (NSW Health) and many of the models are in use across all jurisdictions. There are a number of models of care that are common to all emergency departments, along with a range of more specialised models that may be established depending on the size, role delineation of the service and jurisdictional policies.

##### Common ED Models of Care

**Triage and registration** is streamlined to facilitate an efficient process that does not create a barrier to further assessment and clinical care. Only essential triage functions should occur at the point of triage including the determination of patient acuity and level of urgency, basic first aid if needed, and referral to the most appropriate area for treatment. This is followed by a quick registration by the triage nurse or clerical officer collocated with the triage nurse (pre-registration). The process generally takes between three and five minutes. Full registration of patients can then be completed by clerical staff at the bedside or within another ED location.

The **resuscitation** model of care outlines a set of guidelines for the most appropriate clinical, preparatory processes and team model that should be used in the resuscitation of patients in the ED (including trauma management). The resuscitation area of the ED will manage patients with immediately life threatening conditions. Key elements of the model of care include:

- a coordinated team approach to managing patients requiring resuscitation;



- standardised communication processes including between pre-hospital personnel and ED staff;
- timely access and turnaround times for diagnostic services (medical imaging, pathology and blood bank); and
- direct access to appropriate equipment and resources to ensure timely, safe and quality resuscitation care.

The **acute care** model uses a set of principles and processes that aim to promote efficiency in initiating, assessing, performing and transferring the care of patients who are acute, potentially unstable and complex. These patients require:

- cardiac monitoring;
- frequent observation and will include mental health patients;
- specialised interventions;
- a higher level of care; and
- a more comprehensive management plan.

**Fast track** is a dedicated area in the ED to treat ambulant, non-complex (single system problem) patients who can be discharged within less than two hours. Triage streams patients into the fast track using a predetermined inclusion/exclusion fast track criterion. Fast Track zones aim to increase ED throughput by:

- expediting the care of ambulatory patients with less urgent symptoms and conditions;
- diverting the care of patients who meet particular clinical criteria through a separate stream in the ED;
- using a geographically dedicated area staffed by dedicated senior medical and nursing staff; and
- providing care that is standardised and targeted to specific conditions and injuries.

### Specialised ED Models of Care

The following models of care may be established within emergency departments depending on the size, role delineation and jurisdictional policies.

Early ED **Senior Assessment and Streaming** (ED SAS) is a flexible model of care that operates during peak periods of demand. This approach focuses on determining an early diagnosis, clinical management plan and disposition decision for patients. An important component of the model is the streaming zone, although the model functions most effectively with two key core components. These components are:

- triage and registration: Triage assessment that is limited to less than five minutes to establish the patient's level of urgency only. Interventions are limited to first aid only and may involve members of the multidisciplinary team; and
- streaming zone (physical space and appropriate staff): Early clinical decision-making and critical interventions by a senior ED physician and early streaming of patients to appropriate care areas within or outside of the ED in less than 10 minutes.

The **Early Treatment Zone** (ETZ) is a multi-functional and flexible clinical area that may be utilised as:

- a clinical area where the patient management plan from the streaming zone can be implemented and completed with the patient then discharged within two hours;
- a clinical area where the patient management plan can be commenced prior to the patient moving to another area in ED (e.g. into the acute area); and

- an internal waiting area for patients still requiring observation prior to discharge or who are waiting for results of tests such as pathology.

**Sub-acute care** is a designated area in the ED for patients who are:

- low acuity and do not require an acute bed or cardiac monitoring;
- high-complexity (with multiple co-morbidities), resource-intensive and require multiple investigations, consults and/or procedures, and are therefore not eligible for fast track; and/or
- non-ambulant and need to be cared for on a bed for treatment.

**Short Stay Units** may also be known as Emergency Medical Units. Emergency Department Short Stay Units (ED SSU) refer to designated units, co-located with the ED, which have been developed for the short-term care of patients who require observation, specialist assessment and diagnostics and whose length of hospital stay is deemed to be limited (for example less than 24 hours). These Units should be physically separate from acute assessment areas.

For further information refer to NSW Ministry of Health, Emergency Department Models of Care.

#### **2.1.4 Education, Training and Research**

The approach to education, training and research for the emergency department and the overall hospital will inform the extent of associated facilities required, both within and external to the ED, to support these functions.

This may include:

- some education/staff training space provided locally so staff do not need to leave the department;
- storage for mannequins and other training materials;
- telemedicine facilities;
- simulation capability;
- staff work areas for those engaged in education and research; and
- support for students.

#### **2.1.5 Workforce and Staff Areas**

Emergency departments are multidisciplinary work environments comprising emergency physicians and junior medical staff; nurses including nurse practitioners, nurse educators and clinical nurse consultants depending on the staff profile; clerical staff and wards persons/orderlies. Dedicated or in-reach mental health specialists, allied health, pharmacists, security, volunteers, research and education staff and students may also be present, along with a range of visiting specialities.

The ED capacity and models of care will have an impact on the nature, size and location of staff stations, as well as staff work areas and staff amenities. For smaller facilities it is important that departments maintain connection and visibility between different ED areas to optimise staff efficiencies and safety.

It is essential that optimal staff work practices are enabled through appropriate consideration of Information and Communications and Technology (ICT). Refer to sections 2.3.5 and 3.10.3 for further detail.

## 2.2 OPERATIONAL POLICIES

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### 2.2.1 General

Operational policies have a major impact upon the planning and design and capital and recurrent costs of health facilities. Project teams should review their design proposals with these in mind and be able to demonstrate that the capital and recurrent cost implications of proposed operational policies have been fully considered. Operational policies may have hospital-wide application or be unit-specific. A list of general operational policies that may apply can be found in Part B: Section 80 General Requirements.

### 2.2.2 Hours of Operation

Emergency departments operate 24 hours a day, seven days a week. In some cases, the ED will provide a controlled access point to the hospital after normal business hours.

### 2.2.3 Management of Vulnerable and Special Patient Groups

#### Children

Unless a specialised paediatric hospital exists in the immediate vicinity, children will usually comprise a significant proportion of attendances in most general EDs, and they will frequently accompany a parent or carer presenting to the ED.

Special requirements to cater for paediatric attendances may include:

- provision of a dedicated waiting space including play area, that is separated acoustically and visibly from the general waiting area (but still observable by staff);
- protection of the children's clinical area from disturbing sounds or sights from other patients in the ED, including the SSU;
- consideration of activity flows so that frequent transit routes, e.g. to medical imaging or inpatient units do not traverse other clinical areas; and
- the provision of sufficient visitor space and facilities for parents or carers and siblings.

For further information refer to Section 2.4.5 and the Aust. College of Emergency Medicine, 2012, S11 Statement on Hospital Emergency Department Services for Children (Version 2).

#### Patients Presenting with Acute Mental Health Conditions

Patients presenting to the ED with acute mental health conditions often have complex requirements and services should have adequate facilities to receive, assess, stabilise and provide initial treatments.

Clinical pathways for mental health patients will be underpinned by local jurisdictional policies and will inform planning and design requirements relating to optimal activity flows and the range of assessment and treatment areas to be provided.

#### Patients Presenting with Acute Severe Behavioural Disturbances

Behavioural disturbance may be caused by a range of conditions, including general medical conditions (e.g. acute delirium, head trauma, dementia), intoxication or withdrawal and mental health conditions.

When assessing and managing patients with acute severe behavioural disturbance within the ED the safety of the patient, staff and others is the priority. Patient care pathways and associated facility requirements will depend on local jurisdictional policies and will include consideration of:

- clinical areas to support assessment and management of the patient in a safe environment to reduce the risk of deterioration;
- use of de-escalation techniques that focus on engagement of the person with acute severe behavioural disturbance; and

- protocols for sedation of the patient whose behaviour puts them or others at immediate risk of serious harm and which is unable to be contained by other means.

### **Sexual Assault**

Patients may present to the ED following sexual assault. ED staff will be required to implement protocols in line with their local jurisdictional / networked model for forensic services.

If the ED is a designated examination site, a dedicated consult room with an attached ensuite will be provided to ensure that the chain of evidence and DNA decontamination procedures can be managed. In addition to its fit-out as a consult room this room requires storage capacity for forensic related materials. Strict protocols will be in place to prevent contamination of forensic specimens.

Depending on the defined role of the ED, this service may be provided as part of a comprehensive clinical forensic medical service.

For other facilities where a dedicated room is not available, local protocols will be implemented which may include access to general ED consult rooms, lockable storage for sexual assault services and the use of pre-prepared standardised examination packs.

### **Chemical, Biological and Radiological (CBR) Emergencies**

For chemical, biological and radiation incidents, triage, decontamination and initial treatment may occur outside of the ED. A decontamination room will be required within all EDs and must be accessible from the ambulance bay without the need for the patient to enter the ED.

Some services will require mass decontamination capability in addition to a room (e.g. through fixed shower heads or erectable systems) depending on the service requirements and risk assessment. Appropriate containment of waste water from all decontamination areas is required.

Refer to:

- Australian Government Department of Health, 2015, 'Australian Clinical Guidelines for Acute Exposures to Chemical Agents of Health Concern: A Guide for the Emergency Department Staff'; and
- Little M and Murray L, 2004, Consensus Statement: Risk of Nosocomial Organophosphate Poisoning in Emergency Departments, *Emergency Medicine Australasia*, 16, pp. 456-458.

### **Bariatric Patients**

Emergency department design requires provision for bariatric patients and the need to ensure a safe work environment for staff. This will include consideration of ambulance bays, treatment areas, consultation rooms, circulation space and furniture, fittings and equipment capable of meeting the needs of the bariatric patient.

Projects will need to refer to local jurisdictional policies regarding capability requirements for bariatric patient management.

### **People with Disability**

The ED must be accessible to all people with disability. This includes access to patient care areas and appropriate adjustments to the workplace for staff with disabilities. Statutory Braille Tactile signage identifying WC facilities, exit locations and the provision of hearing augmentation systems will need to be provided. Information boards will need to be installed in accordance with the view range requirements of AS1428.2:1992. The formatting of the messaging information provided will need to be determined and reviewed with regard to the prevalent community groups accessing the facility.

Refer to Section 3.6.2 for further information.

## Local Cultural Groups

The local cultural context requires consideration when planning the ED to ensure the provision of a welcoming environment for all people. Information should be provided in languages other than English that relate to the local community's needs. Wayfinding solutions should also be in culturally specific languages and should include the use of universal pictorial symbols.

The Australian Commission on Safety and Quality in Healthcare's guidance (2017) on Improving Care for Aboriginal and Torres Strait Islander People details the need to work with the local Aboriginal and Torres Strait Islander community to create a welcoming, culturally sensitive and safe environment for these consumers. The use of local Aboriginal art in ED waiting rooms can provide links to culture and community and a culturally appropriate space within the hospital should be identified for access by Aboriginal families and carers.

Access to safe, culturally appropriate outdoor areas should also be considered, in particular for families with children and grieving families.

Refer also to: He Korowai Oranga, New Zealand's Maori Health Strategy (2014).

Further information relating to culturally sensitive planning and design solutions is provided in the AusHFG Resource, 'Culturally Sensitive Planning and Design'.

### 2.2.4 Medical Imaging

In larger EDs, a satellite medical imaging service may be required to promote rapid access and patient throughput, especially where it is difficult to collocate the ED with the main medical imaging department. These modalities are in addition to mobile x-ray provided in resuscitation and typically include x-ray, ultrasound and CT.

Key considerations include:

- high volume of activity flows between the various ED areas and medical imaging;
- the need to separate adult and paediatric flows where appropriate;
- provision of a sub-wait area;
- provision of mobile equipment bays for mobile imaging equipment; and
- access to high resolution diagnostic (PACS) viewing monitors within the ED.

Refer to HPU 440 Medical Imaging Unit for further information.

### 2.2.5 Pathology

Some point of care testing (PoCT) will occur in EDs. These devices should be managed and maintained by the local pathology service. In most large EDs, pneumatic tube systems will be used to transport samples to the Pathology Unit. The pathology bay and pneumatic tube stations will be located in an area supervised by staff.

### 2.2.6 Medication Management

Depending on the size of the ED a central medication store may be provided, or for larger sized EDs a number of decentralised stores may be required for ease of access from the various ED zones. Automated dispensing systems may be considered.

Rapid access to a medication store, including fridge and drug safe, from the resuscitation zone is essential. This may be located centrally in the resuscitation zone and shared between resuscitation bays.

### 2.2.7 Ambulance Services

Ambulance services deliver and retrieve patients from EDs. Officers transfer patients into the ED via the ambulance entrance and then wait with patients in the ambulance triage for assessment. These areas will be physically and visually separated from public areas. Ambulance officers will be provided with a write-up bay to access patient healthcare records and make phone calls.

### 2.2.8 Major Incident Management / Pre-Hospital Response

Depending on the hospital's role within the local jurisdiction's disaster response plan the ED will require appropriate support areas to respond to emergencies such as natural disasters and severe weather, man-made emergencies (e.g. major transport accident), infectious diseases, food safety threats or chemical and radiation emergencies.

Flexible planning is required to accommodate the large workloads, critically ill and/or infectious patients, relatives, friends and hospital staff, as well as equipment involved in managing a major incident and/or pre-hospital response including retrieval services.

## 2.3 PLANNING MODELS

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### 2.3.1 Planning Principles

In order to promote functionality and flexibility, the following principles should be considered when planning an ED:

- patients and their relatives/carers will often be in pain or anxious and so the ED should support delivery of a reassuring and comfortable environment that seeks to optimise the patient experience;
- activity flows through the ED need to be carefully considered including the need for rapid access to clinical care and diagnostics for the critically ill, separation between patient groups where required and appropriate provision of flows to and from the ED in the event of a major incident;
- where patients are grouped by acuity, consideration should be given to the staffing implications of the layout. It is possible, for example, to arrange different levels / types of treatment spaces around a single staff station, each retaining their own discrete area;
- where patients are grouped by functional areas in alignment with the models of care it is important to ensure that efficient internal activity flows are achieved; the need for patients and visitors to traverse other areas is minimised; and the location of staff areas supports efficient use of resources;
- a clear circulation strategy is essential to facilitate intuitive wayfinding for visitors and patients and connectivity for staff;
- for smaller facilities it is important that departments maintain connection and visibility between different ED areas to optimise staff efficiencies and safety;
- planning should enable the ED to contract during less busy periods to promote operational efficiencies and patient and staff safety. With careful planning this should be managed without the need to change the work patterns of the Unit as a whole, or impinge on the proposed model of care;
- standardisation of space is recommended to promote flexible rooms and spaces that can be adapted in the future; and
- planning should consider projected expansion requirements to ensure future development has minimal impact on the operation of the ED.

### 2.3.2 General Location

Decisions regarding the Unit location have a major influence on the cost and operational efficiency of the ED. The ED should be located for easy access, usually on the ground floor, close to public transport, and adequately signposted.

The location should, as much as possible, maximise the choices of layout with careful consideration of access points, future expansion opportunities and key functional relationship requirements, as noted in Section 2.5.

Clear and separate traffic flows should be provided for ambulance traffic and public traffic. These should not interfere with other traffic patterns on the site. In some instances, the ED will be the only access to the rest of the hospital after hours and will require implementation of appropriate security strategies.

### 2.3.3 Activity Flows

The ED is a busy area, accommodating a wide variety of activities and people, where time delays may be life threatening. It is important that the design allows for rapid access between functional areas with a minimum of cross traffic. Visitor and patient access to all areas should not traverse clinical areas. Patients who need to be transferred to other Units, such as medical imaging or inpatient units should not traverse other clinical areas. It is important that patients' visual, auditory and olfactory privacy is maintained while at the same time recognising that staff need to observe patients.

### 2.3.4 Waiting Areas

Patients should be 'streamed' to the most suitable model of care as early as possible, promoting a logical and forward movement through the episode of care. In some cases, this forward movement may be facilitated through the provision of internal waiting spaces/'sub-waiting' areas that are supervised by staff and can also provide a role in monitoring and/or initial treatment and assessment. Patients may also return to a sub-wait area to finalise their treatment or for observation if appropriate.

### 2.3.5 Information Communications and Technology

Information, communications and technology are key enablers for the emergency department to optimise patient care and flow. Key considerations relate to clinical infrastructure and devices; communications systems; security and facilities management; and requirements relating to patients and visitors.

Further detail is provided in Section 3.0 Design.

## 2.4 FUNCTIONAL AREAS

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### 2.4.1 Functional Zones

The ED will typically consist of the following functional zones with the scope dependent on the size, role delineation and jurisdictional policies:

- entry/waiting;
- triage and registration;
- ambulance areas;
- assessment and treatment including resuscitation, acute, fast track, and other specialist zones and rooms;
- short stay unit;
- support areas; and
- staff areas.

### 2.4.2 Entry / Waiting / Public Amenities

The main ED entry is the location where ambulant patients present for services and is separate from the ambulance entry.

The size of waiting areas will be dependent on the approach to the provision of internal/sub-wait areas within the ED clinical zones to promote forward movement of patients. In hospitals with on-site security services, a security base may ideally be located in this area with line of sight over the access to the entry, public waiting area and reception. CCTV will support visual surveillance of these areas.

Waiting areas will be arranged to allow some separation between groups (e.g. adults and children) and will accommodate all patient groups including bariatric, elderly and those with accessibility requirements. A range of visitor amenities will be available including toilets, drinking water, vending machines, parenting room and mobile phone charging stations. 'Changing Places' toilet amenities should also be provided in this area if not provide elsewhere in the facility.

Further information regarding safety considerations for these areas is included in Section 3 Design.

### 2.4.3 Triage and Registration

The triage and registration zone will facilitate the rapid assessment and movement of patients from the entry/waiting area through to the assessment and treatment zone. The triage will have oversight of patients arriving via the main entry and ambulance.

The triage area must be easily identifiable and accessible. Clear, culturally appropriate, signs and wayfinding should be utilised to indicate where patients report, with the triage and reception areas designed so that the first point of contact for patients is the Triage Nurse.

Access to a triage room may be required where a greater level of privacy is needed to complete the triage assessment and provide basic first aid.

The reception and triage desk must allow for surveillance of all persons entering the ED, and designed with due consideration for the safety of staff. Design solutions to address safety requirements must also support optimal communication between staff and patients.

The reception area may accommodate:

- reception of patients and visitors;
- registration of patients;
- printing of ID labels;
- handling general enquiries; and
- money handling.

### 2.4.4 Ambulance Areas

A dedicated ambulance parking area and entrance to the ED will be provided. Ideally, this entry will provide a one way flow for ambulance vehicles. The drop-off point will be covered, as will access to the decontamination shower. Refer to section 3.2 for design considerations relating to the ambulance vehicle parking area.

A range of other services may access the ambulance entry, for example inter-hospital transfer services, newborn emergency transport services, police and corrective services.

The ambulance triage / holding area provides accommodation for ambulance officers and patients presenting via ambulance prior to triage and transfer of the patient to the appropriate area within the ED. Ease of access from the ambulance triage bays to a private assessment space, e.g. triage room, may be required to complete the clinical assessment with a greater level of privacy. Close proximity is also required to patient toilets and a dirty utility room.



Ambulance officers will require access to a range of support areas from the ambulance triage bays including a write up area for access to patient health records, phone and printer. Ease of access is also required to a beverage bay or ED staff room and toilets; as well as limited storage for wheelchairs, cleaning equipment and other ambulance equipment to be returned.

#### 2.4.5 Assessment and Treatment

The assessment and treatment zone will be made up of a range of areas including:

- **resuscitation bays** will have direct access from triage and the ambulance entry, and to medical imaging (in particular CT). Each bay will need to accommodate a range of staff required for resuscitation. The location of these rooms will promote visual and acoustic privacy. Dedicated storage will be required for equipment with ready access to interview/quiet rooms for relatives;
- **acute care** will provide standardised acute treatment patient bays. Where possible, bays will be overseen by a staff station. The area will be supported by a range of clinical support spaces such as utility rooms and storage (enclosed and in open bays). Isolation rooms will generally be required in this area and be located so that travel through the area is minimised;
- **senior assessment and streaming**, where provided, is ideally located in close proximity to triage and registration. Access to an examination trolley and treatment chairs will be required. The early treatment zone will also require an examination trolley and treatment chairs. A shared staff station will provide a coordination point;
- **fast track** is a separate area and should be located close to the main waiting room, plaster and other procedure rooms. Specialised consultation rooms may be provided in Level 3 and 4 services to supply the necessary equipment and space to manage ENT, ophthalmology and oral health conditions;
- **sub-acute** care, where provided, may be collocated with fast track; and
- **paediatric zone**, where established as a dedicated area, should provide a colourful, welcoming physical environment with separation from adult activity flows and associated distressing sights and sounds. The design should encourage parents to remain with their child and provide a dedicated waiting space including play area that is separate from the general ED waiting area. A paediatric zone will require a greater proportion of standard isolation rooms compared with an acute adult ED zone, as well as close access to a procedure room.

#### 2.4.6 Short Stay Unit (SSU)

The SSU will be part of the ED but designed as a self-contained area and will require:

- a staff station located to oversee bed spaces so patients can be observed;
- bathroom / ensuite facilities separate to the main ED;
- at least one standard isolation room for patients requiring contact isolation, palliative patients, and paediatrics; and
- visitor access that avoids the needs to traverse clinical zones within the ED.

If children and adults are managed in the SSU, ideally children will be physically, visually and acoustically separated from adult patients.

### 2.4.7 Support Areas

A range of support spaces will be provided to support patient care including storage and utility rooms. These rooms and spaces need to be located so that staff can access them easily. Where possible, these rooms will be shared between smaller treatment zones. Increasingly, mobile equipment will be accommodated in mobile equipment bays close to the point of care. These bays will be suitable for recharging equipment.

Items requiring storage include:

- mobile equipment - for equipment that needs to be close at hand, such as trolleys used for clinical procedures and mobile medical imaging equipment;
- linen;
- clinical consumables including local provision and a bulk storage area;
- pharmacy store;
- pathology (point of care testing);
- disaster equipment;
- patient meals;
- stationery; and
- other equipment.

### 2.4.8 Staff Areas

Staff work areas and meeting rooms will generally be collocated in a zone that is accessible only by staff. Staff amenities including change rooms will also be collocated and accessible only by staff. Depending on the size of the ED, some staff toilets may be located near treatment areas so that travel is reduced.

Staff work areas associated with coordination of the overall department should be located close to the reception/triage area.

## 2.5 FUNCTIONAL RELATIONSHIPS

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### 2.5.1 External

The ED will require direct access to a Medical Imaging Unit, although consideration may be given to a satellite imaging service within larger EDs.

A rapid, non-public connection is also needed to the:

- operating unit;
- cardiac catheter laboratories;
- intensive care unit / coronary care unit; and
- helipad (where provided).

Ready access is also required to:

- security personnel, unless the security service is collocated with the ED; and
- pathology unit including blood bank (specimens may be sent to pathology via a pneumatic tube system).

Easy access is needed to:

- inpatient units;
- medical / surgical assessment units;
- pharmacy;

- ambulatory care unit;
- mortuary; and
- retail areas.

Some jurisdictions may promote the collocation of ED with other short stay units such as medical assessment units and PECCs.

### **2.5.2 Internal**

Internal relationships are shown in the functional relationship diagrams with detailed information relating to treatment areas. The arrangement of areas within the ED should promote forward movement of the patient episode.

## 03 DESIGN

### 3.1 ACCESS

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Traffic flows relating to emergency vehicles, public vehicles and pedestrian routes will be separated to avoid accidents and delays.

Patients transferred to the ED by ambulance services will utilise the ambulance entry. Other patients will arrive via various means and provision will need to be made for an ambulant ED entry point, a drop-off area and short-term parking spaces.

In many cases, entrances to EDs are separate to the main entry. As patients may present to the main entry, a clear, direct path of travel connecting these two areas will need to be provided. This point of connection will also support hospital operations should the ED provide the out-of-hours entry point to the hospital.

### 3.2 PARKING

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Some vehicle parking spaces should be located close to the entrance of the ED. These spaces will provide short-term parking for patients and their carers. Undercover vehicle parking should be available for:

- a defined number of ambulances;
- private vehicles that drop off and pick up patients adjacent to the ambulance entrance;
- taxis; and
- other emergency service vehicles e.g. police and corrective services.

The number of ambulance vehicle parking bays will be informed by the peak number of ambulance offloads per hour to the facility. Other key considerations relating to the ambulance vehicle parking area include:

- vehicle and stretcher specifications – refer to jurisdictional specific requirements, ensuring that the parking bay dimensions are sufficient to accommodate the vehicle and the patient trolley that is removed from the rear of the vehicle;
- provision of one larger parking bay for bariatric capacity vehicles that are often multifunctional in use, e.g. they may be designed for use in CBR incidents and counter terrorism;
- gradient of the parking bays to ensure they support safe transfer of the patient out of the ambulance;
- provision of a level, undercover surface to push stretchers from ambulance vehicles into the ED (there should be no inclines on this path of travel);
- visual privacy of the ambulance parking area and ambulance entry from the public;
- access to equipment for cleaning and decontamination of vehicles including appropriate drainage; and
- access to clean and dirty linen facilities.

Refer to AusHFG Part C, Section 6 Security for other considerations relating to parking.

### 3.3 MAJOR INCIDENT MANAGEMENT

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Depending on the hospital's disaster response role the ED will require associated support areas. Flexible planning is required to accommodate the large workloads, critically ill and/or infectious patients, relatives, friends and hospital staff involved in managing a disaster situation. The flexibility to expand into adjoining areas should be considered.

Although some emergency services will decontaminate patients prior to transfer to the ED, a decontamination room will be required near to all EDs and must be accessible from the ambulance bay without the need for the patient to enter the ED.

Some services will require mass decontamination capability in addition to a room (e.g. through fixed shower heads or erectable systems). Mass decontamination should be located on the hospital site in the vicinity of the ED but external so that patients requiring decontamination do not enter the ED and the ongoing operation of the ED is not impeded. These facilities are often provided next to the ambulance vehicle area and must include a floor drain and contaminated water trap. Contaminated waste water will need to be captured in line with local requirements and as such other components as prescribed by the local authority will need to be included

The ED should also accommodate a disaster equipment store that is easily accessible and contains sufficient supplies to fully equip the disaster team for either on-site or off-site function. Retrieval equipment may also be stored here for regional or rural facilities.

Depending on the designated role of the ED, the service may become a communication hub during formal disaster function, although this is more commonly provided from the Executive Unit.

Disaster planning is discussed in more detail in Part B: Section 80 General Requirements.

### **3.4 INFECTION CONTROL**

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As the diagnosis or infectious status of patients may not be known on admission, standard precautions must be used at all times.

The entire ED must be capable of being “locked-down” in the event of a chemical, biological or radiological event or security issue, with a clear separate ‘clean corridor’ access point to the ED.

#### **3.4.1 Isolation Rooms**

The design and layout of the ED should allow for the movement of patients to an isolation room due to suspected or known infectious disease.

Class S rooms will be required in ED Acute Care and the Short Stay Unit. A Class N room is usually only required within ED Acute Care. Class P rooms are not usually required within EDs. The location of isolation rooms requires careful consideration to ensure they are located to minimise passing traffic whilst supporting efficient staffing models and monitoring of patients accommodated within these rooms.

Requirements for isolation rooms will need to be confirmed through a risk assessment process that will include consideration of the role delineation of the health service and patient profile. Each Class N isolation room will contain a dedicated patient toilet and anteroom. The position of the anteroom should not block visibility into the room. Refer to jurisdictional infection control policies and AusHFG Part D: Infection Prevention and Control.

#### **3.4.2 Hand Hygiene**

Hand wash basins will be required within each treatment area. In addition, staff and visitors will have access to alcohol based hand rub at each treatment space and in other locations throughout the ED. More detail on hand wash basins is provided in the Room Data Sheets, Room Layout Sheets, Part D: Infection Prevention and Control and Hand Hygiene Australia.

### **3.5 ENVIRONMENTAL CONSIDERATIONS**

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#### **3.5.1 Acoustics**

Many functions undertaken within an ED require consideration of acoustic privacy and noise attenuation. Requirements will differ in various rooms and functional zones within the ED and consideration needs to be given to minimising noise transfer between zones where necessary.

Solutions to be considered include:

- selection of sound absorbing materials and finishes such as high performance acoustic tiles across the majority of areas;
- additional treatment of staff station areas by using acoustic tiles and a bulkhead around the perimeter. In addition, a sound absorbing material can be used on walls above the desk height;
- some means of physical separation between patient bays e.g. a fixed wall;
- separation of quiet areas from noisy areas including consideration of the impact of noise from medical equipment;
- access to appropriate areas that can be used for private staff only discussions within the clinical zone; and
- separating staff offices and amenities from patient areas.

In addition, interview and quiet rooms used for distressed relatives should have a high level of sound control to ensure privacy.

### **3.5.2 Natural Light**

Natural lighting contributes to a sense of wellbeing, assists orientation of building users and improves service outcomes. The use of natural light is highly desirable especially in the SSU, paediatric zone, safe / behavioural assessment room, the main waiting area and staff room.

### **3.5.3 Privacy**

Client privacy and confidentiality are important considerations to be addressed. The facility should be designed to:

- ensure confidentiality of client discussions and records;
- provide appropriate areas for staff to undertake discussions / briefings in private;
- provide discrete sub-waiting areas for clients wishing or needing to be separated;
- enable the reason for attendance to be kept confidential e.g. through use of generic consultation rooms. This is particularly important for services such as mental health, sexual health, drug and alcohol etc.; and
- appropriately located windows and doors to ensure privacy of clients.

### **3.5.4 Interior Décor**

Décor includes furnishings, style, colour, textures, ambience, perception and taste. Décor can assist in relaxing clients and preventing an institutional atmosphere. However, cleaning, infection control, fire safety, client service and the clients' perception of a professional environment must always be considered.

The ED should be light, clean and uncluttered. Specialised areas, such as the paediatric zone and safe / behavioural assessment rooms, will require specific attention to décor.

Some colours and patterns can be disturbing to some clients. Bold primaries and green should be avoided in areas where clinical observation is required such as consultation / treatment areas.

### **3.5.5 Signage and Wayfinding**

The ED must be clearly identified from all approaches. Signposting will be illuminated to allow visibility at night. As visitors enter the ED, they should easily be able to identify key service points including triage and reception. Ease of wayfinding within the ED, including clear directions to exit points and consistent provision of signage, is also essential.

Refer to Part C: Design for Access, Mobility, Safety and Security, Section 5 Wayfinding.

## **3.6 SPACE STANDARDS AND COMPONENTS**

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In addition to the information below, project teams should refer to

- Part C: Design for Access, Mobility, Safety and Security; and,
- AusHFG Standard Components for ED specific rooms

### **3.6.1 Human Engineering**

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

The requirements of occupational health and safety and antidiscrimination legislation will apply.

### **3.6.2 Access and Mobility**

The facility must comply with the Commonwealth Disability and Discrimination Act (DDA) and the following standards where applicable:

- Disability (Access to Premises – Buildings) Standard 2010
- National Construction Code
- AS1428 (SET)-2010 Design for access and mobility; and
- NZS 4121: Design for access and mobility: Buildings and Associated Facilities.

### **3.6.3 Building Elements**

Building elements include walls, floors, ceilings, doors, windows and corridors.

Ceiling mounted hoists may be provided in some of the treatment bays within the ED for the management of immobile and/or bariatric patients. These are a key consideration during design owing to structural requirements. Hoist ratios and type will be guided by service planning and local requirements.

### **3.6.4 Door and Doorways**

Doorways must be sufficiently wide and high to permit the manoeuvring of beds, wheelchairs, trolleys and equipment without risk of damage or manual handling injury, particularly in rooms designed for bariatric patients.

An airlock/lobby should be provided for external doors. Doorways from the ambulance entry will be wide enough to accommodate bariatric stretchers. Automatic doors may be used in high traffic routes to facilitate patient flow.

Where card readers are used to gain access to corridors and staff are transferring patients on beds, the location of the card reader should be considered so that staff can access quickly and easily.

Vision panels with integral venetians may be provided for selected rooms, e.g. safe / behavioural assessment rooms and negative pressure isolation rooms, with controls located to facilitate the required access.

Doors should be able to be locked/closed automatically in the event of an incident necessitating partial or full lockdown.

## **3.7 SAFETY AND SECURITY**

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### **3.7.1 General**

The ED receives a large number of patients and visitors, including a number of who may be distressed, intoxicated or involved in violence. The hospital has a duty of care to provide a safe and secure environment for employees, patients and visitors. The precise details of security features should be developed in conjunction with a security risk assessment for the specific site.

The design of the ED must seek to mitigate the risks identified. This will include ensuring the layout does not create entrapment or concealment risks and establishing a design that supports optimal patient pathways.

General safety and security considerations relating to healthcare facilities is covered in detail in AusHFG Part C and a list of specific safety and security considerations for EDs is attached to this document.

### **3.7.2 Safety within the ED Waiting and Triage Area**

As the first point of address for visitors to the Unit, the reception/triage area may be a risk area for violence. Careful thought should be given to the design of this area to minimise this risk.

The waiting room should be a pleasant, safe environment where patients, families and carers can be comfortable. The following design solutions will support the provision of safe ED waiting areas for patients, visitors and staff:

- entrances should be well lit and designed to prevent hiding spaces;
- CCTV should be installed both outside and inside the waiting room;
- ensure that adequate signage is provided and is culturally appropriate;
- the waiting room should provide security and protection for ED staff while still enabling clear communication with patients and visitors;
- staff should have appropriate visibility of patients and accompanying persons within the waiting room;
- adequate seating should be provided that allows some separation between groups;
- amenities such as toilets, drinking water and vending machines must be easy to locate;
- the design should prevent unauthorised entry into the clinical areas of the ED; and
- consideration should be given to appropriate lighting, noise levels and, distractions e.g. art and multimedia activities.

Further advice regarding ED waiting room design is provided within the ACEM (2017) 'Policy on Violence in Emergency Departments' and the NSW Health policy document (PD 2018\_010) 'Emergency Departments Patients Awaiting Care'.

The safety of staff working within the reception and triage areas is a high priority and needs to be balanced with the need to ensure optimal communication between staff and patients is achieved. Design solutions may include consideration of a high and wide reception desk that provides a level of protection for staff; glazing with sufficient openings for communication at each triage or reception workstation; or other protective barriers.

Access to fixed duress alarms are required in the reception/triage area.

### **3.7.3 Security Personnel**

Security personnel may be required at very short notice to assist with a safety or security issue. Their base should be positioned either within or in close proximity to the ED. The Unit should have rapid communication links to enable staff to respond to disturbances in other areas of the ED.

### **3.7.4 Crime Prevention through Environmental Design**

Crime prevention through environmental design (CEPTED) provides the opportunity through the planning and design phase to maximise natural surveillance and incorporate features that minimise the reliance on overt security measures. Some key strategies that can be applied in ED design include:

- easily identifiable public entrances;



- natural surveillance of the public and patients in all accessible areas of the ED. For example, triage staff and security will actively supervise and view the entry and waiting areas. Assessment and treatment zones will have staff stations that oversight these areas;
- other surveillance such as CCTV may be needed in high risk locations; and
- clearly defined pathways to the ED with strategic positioning of 'borders' e.g. bollards to prevent accidental or deliberate vehicle access to entry or waiting room area.

## **3.8 FINISHES**

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### **3.8.1 General**

Finishes in this context refers to walls, floors, windows and ceilings. Refer to Section 3.5.1 Acoustics and the following references for further information:

- AusHFG Part C: Design for Access, Mobility, Safety and Security;
- AusHFG Part D: Infection Prevention and Control; and
- AusHFG Standard Components for specific ED rooms.

### **3.8.2 Floor Finishes**

The floor finishes in all patient care areas and corridors within the ED should:

- have a slip resistant surface;
- be impermeable to water and body fluids;
- be durable and easy to clean;
- minimise sound transmission; and
- provide shock absorption to optimise staff comfort but facilitate movement of beds.

More detail is provided in Department of Health, NSW, 2009, Technical Series TS7 - Floor Coverings in Healthcare Buildings.

### **3.8.3 Ceiling Finishes**

Ceiling finishes should be selected with regard to appearance, cleaning, infection control, acoustics and access to services for ongoing maintenance.

### **3.8.4 Wall Protection**

Due to the large number staff, patient and trolley movements in the ED suitable wall protection must be provided. Walls should be of robust construction and resistant to damage. This applies particularly in high risk areas, e.g. in areas where patients presenting with behavioural disturbances may be managed.

## **3.9 FIXTURES, FITTINGS & EQUIPMENT**

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The Room Data and Room Layout Sheets in the AusHFG define Fixtures, Fittings and Equipment. Refer to:

- Part C: Design for Access, Mobility, Safety and Security; and,
- AusHFG Standard Components for ED specific rooms.

## **3.10 BUILDING SERVICE REQUIREMENTS**

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### **3.10.1 General**

In addition to topics addressed below, project teams should also refer to the following references:

- AusHFG Part C: Design for Access, Mobility, Safety and Security;
- AusHFG Part E: Building Services and Environmental Design –refer to this for relevant jurisdictional references relating to engineering services guidelines; and
- AusHFG Standard Components for specific ED rooms.

### **3.10.2 Clocks**

The accurate tracking of time within the ED is critical. A wall clock should be visible in all clinical areas and waiting areas. Times displayed in all clinical areas must be synchronised and clocks in resuscitation areas require the facility to track elapsed time.

### **3.10.3 Information Communications and Technology (ICT)**

As a rapid patient turnover and multidisciplinary clinical care environment, EDs are high-volume users of a wide range of telecommunications and information technology tools. Communications requirements and the associated technology are rapidly growing and developing. Planning should anticipate new and developing technologies and future functions, and make allowances for growth and development in this area.

Key ICT considerations include:

#### **Clinical technology and communications systems**

- **Electronic ED information systems:** These systems are provided to support clinical management, patient tracking and departmental administration. Access to information systems should be enabled both at the patient bedside to support point of care clinical systems and at staff station/write up areas. Access at the patient bedside may be provided through wall mounted computers, workstations on wheels and/or other mobile devices. Workspace design should include sufficient bench widths or suitable suspension devices for terminals, keyboards, drives and printers. Sufficient terminals should be available to ensure that queuing does not occur, even at peak times.
- **Telemedicine:** In smaller units, especially in more remote areas, telemedicine is becoming increasingly common and important for day to day operation. Allowance should be made for connection of critical care telemedicine equipment in all treatment areas. A telemedicine strategy will need to be considered in the early stages of planning that is consistent with jurisdictional approaches and service networking arrangements. Tertiary centres that support these smaller units will need a quiet location for telemedicine related activities to discuss cases, review patients and their results. A camera in the paediatric resuscitation zone is required to communicate with neonatal emergency transport services.
- **Communication systems to support interactions within the ED:** This should include the use of a dedicated PA system that provides control over zoning to minimise noise disruption across the ED.
- **Communication systems to support interactions outside the ED:** Access to ambulance notification phone/radio is required in close proximity to the resuscitation zone and a dedicated direct phone line should also be provided for referring medical practitioners.
- **Clinical Support:** Considerations include the use of pneumatic tubes and automated trolley systems for efficient physical transfer of items; electronic medication management systems; nurse call systems (refer to Section 3.10.5 below) and electronic journey boards.
- **Education and Training:** ICT systems to support simulation training require consideration including access to live video and audio outputs by external viewers.

- Wi-Fi density needs to be sufficient to support real time location systems (RTLS) and mobile duress functions.

### **Security and facilities management systems**

- CCTV surveillance systems.
- Location-finding duress alarms.
- Consideration of RFID tracking systems.
- Disaster communication including systems to enable rapid lockdown.

### **Patients and visitors**

- Access to Wi-Fi and mobile phone charging capability.
- Use of technology in the waiting room for health promotion, communication and positive distractions (e.g. television, digital art).

#### **3.10.4 Duress Alarms**

Duress alarms should be provided in accordance with local policies. For additional information refer to AusHFG Part C.

#### **3.10.5 Nurse / Staff Call System**

All treatment spaces, including toilets and bathrooms, should have access to an emergency call system so staff can summon urgent assistance. The emergency call system should alert to a central module situated adjacent to the staff station, as well as to the staff and tutorial rooms. The call system should:

- allow change of the call notification between end users and the system;
- operate within acceptable noise levels; and
- provide sufficient capacity in terms of the anticipated level of use.

#### **3.10.6 Lighting**

The lighting design needs to provide for both comfort (patients and staff) and function, and should have inherent flexibility. There are different considerations for different types of patient care areas and staff areas. It should be possible to vary lighting conditions between individual beds and rooms. Functional requirements for lighting of clinical treatment spaces include the ability to dim for comfort, the ability to focus strong light for bedside procedures, and there should be no colour distortion to ensure accurate assessment of skin tone.

Overhead pendant lights, where provided, should be located to ensure that all parts of the body are illuminated.

#### **3.10.7 Medical Services**

Medical gases should be provided in accordance with the RDSs and RLSs.

#### **3.10.8 Monitoring**

Bedside electronic monitoring needs to provide for both local visual display and electronic data or information transfer. Where possible, the bedside monitoring system should be integrated with (or interface with) the electronic patient information system (or future capacity for this should be provided). Central monitoring should be available within each Unit.

The design and complexity of bedside clinical monitoring will depend on the function of each clinical area. Local function will determine the proportion of acute beds that have bedside monitoring at any one time. However, the design should facilitate future flexibility in the location of bedside monitoring.

## 04 COMPONENTS OF THE UNIT

### 4.1 STANDARD COMPONENTS

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Rooms / spaces are defined as:

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

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

The current Standard Components can be found at:

<https://www.healthfacilityguidelines.com.au/standard-components>

### 4.2 NON-STANDARD COMPONENTS

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Provide the Non-Standard Components as described in this section, according to operational policy and service demand.

#### 4.2.1 Shower - Decontamination

##### Description and Function

A decontamination room is provided to shower patients who arrive in the Unit contaminated with toxic and / or infectious substances. It must include a flexible water hose, floor drain and contaminated water trap. Consideration should be given to inclusion of a personal protective equipment bay with the decontamination shower.

##### Location and Relationships

Accessible from and / or next to the ambulance bay, so that patients do not enter the ED.

##### Considerations

A minimum water temperature may be specified so that the patient's body temperature is maintained.

Design considerations relating to **mass decontamination capability** (e.g. through fixed shower heads or erectable systems) is described in Section 3.3 'Major Incident Management'.

#### 4.2.2 Patient Bay, Emergency – Treatment/Resuscitation

##### Description and Function

This space is used in smaller facilities and fulfils the role of both treatment and resuscitation bays.

##### Location and Relationships:

Collocated with acute bays for efficient staffing models and observation of patients.

#### 4.2.3 Consult Room – Dental

##### Description and Function

A consult room that is equipped with a fixed dental chair to undertake emergency dental procedures within the ED. As it is likely that this room will not be fully utilised, it is recommended that it be fitted out so that it can be used for other consults when not used for oral health care.

This room should contain:

- a fixed dental chair ideally with a knee break;
- stools for dentists and assistant;
- examination light;
- a hand wash basin, Type B;
- some fixed joinery to store dental equipment but this will be minimal and include some bench space;
- a desk, with office chair;
- visitor chair; and
- trolley.

#### **Location and Relationships**

Located with other specialist consult rooms. The room should be able to accommodate a trolley as not all patients will easily transfer to a dental chair.

#### **4.2.4 Store - Crutch**

##### **Description and Function**

An area for the storage of crutches, splints and other aids to mobility. Crutches should be hung on hooks so that the space remains well organised and the right size can be easily located.

##### **Location and Relationships**

Close to, and easily accessible from, the plaster room.

## AX APPENDICES

### AX.01 SCHEDULE OF ACCOMMODATION

The application of the schedule of accommodation below will require confirmation of the ED models of care and associated capacity requirements through detailed clinical services planning.

The schedule of accommodation provided is based on the following indicatively sized EDs. The spatial allocations will need to be adjusted accordingly to meet project specific capacity requirements.

**Figure: Summary of Indicative ED Capacities Included in the Schedule of Accommodation**

ED Zone	Indicative number of ED treatment spaces			
Acute	5	10	14	30
Paediatric	Included above	Included above	6	15
Fast Track	Included above	5	10	15
Total ED Capacity*	5	15	30	60
Resuscitation Zone	1 treatment bay	1	3	5
ED Short Stay Unit	No allocation	6	12	20

\*The Total ED Capacity is used as the reference to guide indicative support area allocations.

For the purposes of defining indicative support area requirements, including entry/waiting, triage, ambulance, clinical support and staff amenities, the Schedule of Accommodation is based on assumed total ED capacities of 5, 15, 30 and 60 bays. These total capacity figures include acute (adults and paediatrics) and fast track zones, and exclude resuscitation bays, short stay bays and specialty treatment and consult rooms, however it is acknowledged that the types of ED bays included in a defined total ED capacity will vary between jurisdictions,

Space for satellite medical imaging services has not been included in this Schedule of Accommodation. If this model is adopted, refer to AusHFG Part B: HPU 440 Medical Imaging Unit for further details.

The 'Room/ Space' column describes each room or space within the Unit. Some rooms are identified as 'Standard Components' (SC) or as having a corresponding room which can be derived from a SC. These rooms are described as 'Standard Components –Derived' (SC-D). The 'SD/SD-C' column identifies these rooms and relevant room codes and names are provided. All other rooms are non-standard and will need to be briefed using relevant functional and operational information provided in this HPU.

In some cases, Room/ Spaces are described as 'Optional' or 'o'. Inclusion of this Room/ Space will be dependent on a range of factors such as operational policies, clinical services planning and opportunities to share with an adjoining service or zone within the ED.

ENTRY / PUBLIC AMENITIES

AusHFG Room Code	Room / Space	SC / SC-D	5 bays (Acute + Fast Track)		15 bays (Acute + Fast Track)		30 bays (Acute + Fast Track)		60 bays (Acute + Fast Track)		Remarks
			Qty	m2	Qty	m2	Qty	m2	Qty	m2	
AIRLE-12	Airlock	Yes	Shared		1	10	1	10	1	10	Offset doors
WAIT-20	Waiting	Yes	Shared		1	25	1	35	1	50	Open, dedicated waiting area observed from Triage & Reception. Area recommendations are indicative and will depend on the approach to sub-wait areas and consideration of local demographics. 1.2m2 recommended per seat, 1.5m2 per wheelchair space. A separated paediatric waiting area is required and may be collocated with the paediatric zone where provided.
PAR	Parenting Room	Yes	Shared		1	6 (o)	1	6	1	6	Accessible from waiting areas.
BPH	Bay - Public Telephone	Yes	Shared		1	2 (o)	1	2 (o)	1	2 (o)	
BVM-3	Bay - Vending Machines	Yes	Shared		1	3 (o)	1	3	2	3	
BWD-1	Bay - Water Dispenser	Yes	Shared		1	1	1	1	1	1	
WCPU-3	Toilet - Public	Yes	Shared		2	3	3	3	4	3	Allocation dependent on nearby amenities. Changing Places toilet amenities should also be provided in this area if not provided elsewhere in the facility.
WCAC	Toilet - Accessible	Yes	Shared		1	6 (o)	1	6	1	6	
	Discounted Circulation		30%		30%		30%		30%		

Some facilities may include a security 'base' within the ED waiting area.

TRIAGE / REGISTRATION

AusHFG Room Code	Room / Space	SC / SC-D	5 bays (Acute + Fast Track)		15 bays (Acute + Fast Track)		30 bays (Acute + Fast Track)		60 bays (Acute + Fast Track)		Remarks
			Qty	m2	Qty	m2	Qty	m2	Qty	m2	
REC-E	Reception, Emergency	Y	Shared		1	15	1	20	1	30	Staff to be able to observe & control access to treatment areas. Area allocation will be dependent on number of nursing and clerical staff to be accommodated.
TRIAGE -1/2	Triage Assessment Room, Emergency		Shared		1	13	2	13	3	13	No. dependent on operational arrangements.
BHW	Bay - Weight	Yes	Shared		1	2	1	2	1	2	
BMEQ-6	Bay - Mobile Equipment	Yes	Shared		1	6	1	9	1	12	Wheelchair/ trolley hold
OFF-S9	Office - Single Person	Yes			1	9	1	9	1	9	NUM / Front of House coordinator. Requirements will depend on staff profile and local jurisdictional policies.
	Gun Safe		1	1	1	1	1	1	1	1	To be located in a non public area.
	Discounted Circulation		30%		30%		30%		30%		

In smaller hospitals, it is likely that the ED will be located alongside the main hospital entry point and it has been assumed that these areas may share space and staffing with adjacent areas.

AMBULANCE AREAS

AusHFG Room Code	Room / Space	SC / SC-D	5 bays (Acute + Fast Track)		15 bays (Acute + Fast Track)		30 bays (Acute + Fast Track)		60 bays (Acute + Fast Track)		Remarks
			Qty	m2	Qty	m2	Qty	m2	Qty	m2	
	Shower - Decontamination	Yes	1	8	1	8	1	8	1	8	Check local authority requirements for waste water detention requirements.
AIRLE-12	Airlock	Yes	Shared		1	12	1	12	1	12	Ambulance entry
PBAT	Patient Bay, Emergency - Ambulance Triage	Yes			2	6.5	3	6.5	6	6.5	No. dependent on operational arrangements and peak ambulance offloads per hour. Access to patient toilets, dirty utility room and clean/dirty linen required.
	Ambulance Write Up				1	3	1	5	1	8	Ambulance service write up. 2 write up spaces within 5m2
BHWS-B	Bay - Handwashing, Type B	Yes			1	1	1	1	2	1	1 basin per 4 holding bays.
BBEV-OP	Bay - Beverage, Open Plan	Yes	Shared		Shared		Shared		1	2	
BMEQ-4	Bay - Mobile Equipment	Yes	Shared		Shared		Shared		1	2	For return of ambulance equipment.
	Discounted Circulation		30%		30%		30%		30%		

A blood alcohol sample storage box is required in the ED and may be wall mounted.

## TREATMENT AREAS

Recommended area allocations for resuscitation, acute/sub-acute and fast track zones are provided below. For smaller facilities these zones may be contiguous and it is important that connection and visibility between zones is achieved to optimise staff efficiencies and safety. A number of rooms and support areas may also be shared between smaller treatment zones.

## RESUSCITATION

AusHFG Room Code	Room / Space	SC / SC-D	1 Treatment bay		1 Resus Bay		3 Resus Bays		5 Resus Bays		Remarks
			Qty	m2	Qty	m2	Qty	m2	Qty	m2	
PBTR-R	Patient Bay, Emergency - Resuscitation	Yes			1	25	3	25	4	25	Number of resus bays is indicative and dependent on clinical services planning.
PBTR-R	Patient Bay, Emergency - Resuscitation Trauma	Yes							1	30	Larger sized resuscitation bay for designated trauma services.
	Patient Bay, Emergency - Treatment/Resuscitation		1	16							
BMEQ-4	Bay - Mobile Equipment	Yes	Shared		1	4	2	4	3	4	Ultrasound, General X-Ray, other mobile equipment.
OFF-WI-5	Office - Write Up						1	3	1	5	
CLUR-12	Clean Utility/ Medication Room	Yes	Shared		Shared		1	12	1	14	Includes small medication store with fridge and drug safe, to be shared between resuscitation bays.
DTUR-10	Dirty Utility	Yes	Shared		Shared		Shared		1	10 (o)	Consider opportunities to share with adjacent
BPATH	Bay - Pathology	Yes	Shared		Shared		Shared		1	2	For POCT
INTF	Interview Room	Yes	1	12 (o)	1	12	1	12	2	12	For staff to meet with family and friends of patients. Also used as a quiet/ grieving space. Number will depend on size of service. Also refer to allocation in acute zone below.
	Discounted Circulation		40%		40%		40%		45%		



## ACUTE ZONE

In larger services, separate areas may be provided for acute and sub-acute beds. It is likely that services with significant attendances will develop a dedicated paediatric zone.

For the purposes of this indicative Schedule of Accommodation, it has been assumed that a standard patient bay will be provided for acute, sub-acute and paediatric zones, as well as for senior assessment and streaming and early treatment zones where provided. This increases standardisation and flexibility over time. The Service Plan will nominate the numbers of spaces to be provided within each zone.

AusHFG Room Code	Room / Space	SC / SC-D	5 bays (Adults + Paeds)		10 Acute Bays (Adults + Paeds)		14 Adult Acute Bays		30 Adult Acute Bays		Remarks
			Qty	m2	Qty	m2	Qty	m2	Qty	m2	
PBTR-A	Patient Bay, Emergency - Acute Treatment	Yes	5	12	8	12	10	12	25	12	May be a mix of adult and paediatric bays where a dedicated paediatric zone is not provided.
PBTR-AS	Patient Room, Emergency - Acute Treatment Special	Yes			2	15	2	15	3	15	May be a mix of adult and paediatric bays where a dedicated paediatric zone is not provided.
PBTR-AS	Patient Room, Emergency - Acute Treatment Special, Class N Isolation	Yes					1	15	1	15	Negative pressure isolation.
	Patient Bay, Emergency - Acute Treatment, Bariatric						1	15	1	15	Number dependent on local requirements.
ANRM	Anteroom	Yes					1	6	1	6	Dedicated to each Class N Room
ENS-ST-C	Ensuite - Standard	Yes			2	5	3	5	4	5	Dedicated to each Class N and Class S room
ENS-BA	Ensuite - Bariatric	Yes					1	7	1	7	Collocated with bariatric room
	Safe Assessment / Behavioural Assessment Room				1	16	1	16	1	16	For patients presenting with acute, severe behavioural disturbance where clinically indicated. Provision and location will depend on jurisdictional policies.
CONS	Consult Room - Sexual Assault	Yes							1	12 (o)	Dedicated room required where ED is a designated sexual assault examination site.
ENS-ST-C	Ensuite - Standard	Yes							1	5 (o)	Attached to the Consult Room, Sexual Assault
PROC-20	Procedure Room	Yes							1	20	Included under paediatric zone below for smaller services.
INTF	Interview Room	Yes			Shared		1	12	1	12	Number will depend on size of service. Also refer to allocation under resuscitation zone above.
WCPT	Toilet - Patient	Yes			2	4	2	4	4	4	
WCAC	Toilet - Accessible	Yes	1	6	1	6	1	6	1	6	
SHPT	Shower - Patient	Yes					1	4	3	4	
SHD	Shower - Accessible		1	4	1	4	1	4	1	4	
SSTN-14	Staff Station	Yes	1	10	1	14	1	20	1	30	
OFF-CLN	Office - Clinical Workroom	Yes					1	15	1	20	To support access to clinical information systems, staff debriefing etc.
CLUR-12	Clean Utility / Medication Room	Yes	Shared		1	10	1	12	2	12	Include medication store where not provided
STDR-10	Medication Room	Yes	Shared				1	10	1	10	
BHWS-B	Bay - Handwashing, Type B	Yes	2	1	2	1	3	1	7	1	1 basin per 4 treatment bays
BPTS	Bay - Pneumatic Tube	Yes			1	1	1	1	1	1	
BPATH	Bay - Pathology	Yes	1	2	1	2	1	2	1	2	For POCT. Size dependent on no. of devices used.
BRES	Bay - Resuscitation Trolley	Yes	1	1.5	1	1.5	1	1.5	2	1.5	
BMEQ-4	Bay - Mobile Equipment	Yes	1	4	1	4	2	4	3	4	Note also allocated under resus and fast track zones. May be provided as underbench storage with staff station.
BLIN	Bay - Linen	Yes	Shared		1	2	1	2	2	2	Also included under paediatric and fast track
BBEV-OP	Bay - Beverage, Open Plan	Yes	Shared		1	4	1	4	1	4	
DTUR-10	Dirty Utility	Yes	Shared		1	10	1	10	2	10	No. dependent on size and configuration of ED.
	Discounted Circulation		40%		40%		40%		45%		

## PAEDIATRIC ZONE

The areas below reflect the requirements of a dedicated paediatric zone where provided.

AusHFG Room Code	Room / Space	SC / SC-D	Paeds bays included above		Paeds bays included above		6 Paediatric Acute Bays		15 Paediatric Acute Bays		Remarks
			Qty	m2	Qty	m2	Qty	m2	Qty	m2	
WAIT-SUB	Waiting - Sub	Yes					1	10 (o)	1	15 (o)	Optional, where separate paediatric zone provided.
PLAP-10	Play Area - Paediatric	Yes					1	5 (o)	1	10 (o)	Optional. Collocated with paediatric zone where provided.
PBTR-A	Patient Bay, Emergency - Acute Treatment	Yes					4	12	11	12	
PBTR-AS	Patient Room, Emergency - Acute Treatment, Special	Yes					2	15	3	15	
PBTR-AS	Patient Bay, Emergency - Acute Treatment, Special, Class N isolation	Yes							1	15	Negative pressure isolation
ANRM	Anteroom	Yes							1	6	Dedicated to each Class N Room
ENS-ST-C	Ensuite - Standard	Yes					2	5	4	5	Dedicated to each Class N and Class S room
PROC-20	Procedure Room	Yes					1	20	1	20	
INTF	Interview Room						Share		1	12	
WCPT	Toilet - Patient	Yes					1	4	2	4	
SHPT	Shower - Patient	Yes					1	4	2	4	
SSTN-10	Staff Station	Yes					1	10	1	12	
CLUR-12	Clean Utility / Medication Room	Yes					1	8	1	12	
BHWS-B	Bay - Handwashing, Type B	Yes					1	1	3	1	1 basin per 4 treatment bays
BLIN	Bay - Linen	Yes					Share		1	2	
BMEQ-4	Bay - Mobile Equipment	Yes					1	2	1	4	
BBEV-OP	Bay - Beverage, Open Plan	Yes					1	4	1	4	
DTUR-S	Dirty Utility - Sub	Yes					1	8	1	8	No. dependent on size and configuration of ED
	Discounted Circulation			40%		40%		40%		45%	

## FAST TRACK

In smaller units the fast track functions may be combined with the triage assessment rooms for flexible use and efficient staffing arrangements.

AusHFG Room Code	Room / Space	SC / SC-D	5 Fast Track Spaces		10 Fast Track Spaces		15 Fast Track Spaces		Remarks		
			Qty	m2	Qty	m2	Qty	m2			
WAIT-SUB	Sub-Wait	Yes					1	10	1	15	
PBTR-FT	Patient Bay, Emergency - Fast Track	Yes			3	6.5	7	6.5	10	6.5	The mix of bays and consult rooms will be dependent on project requirements.
CONS	Consult room	Yes			2	12	3	12	5	12	The mix of bays and consult rooms will be dependent on project requirements.
CONS-ENT-OP	Consult - ENT/ Ophthalmology	Yes					1	16 (o)	1	16	
	Consult - Dental						1	12(o)	1	12(o)	Determined by need/ activity. A knee break chair might be included to increase flexibility.
SSTN-10	Staff Station	Yes			Shared		1	10	1	12	May be shared with an adjacent treatment area.
PLST	Plaster Room	Yes					1	14	1	14	
	Store - Crutch						1	2	1	2	
BHWS-B	Bay - Handwashing, Type B	Yes			1	1	2	1	3	1	No. dependent on no. patient bays.
BRES	Bay - Resuscitation Trolley	Yes			Shared		Shared		1	1.5	
BMEQ-4	Bay - Mobile Equipment	Yes			1	4	1	4	1	4	
BLIN	Bay - Linen	Yes			Shared		1	2	1	2	
WCPT	Toilet - Patient	Yes					1	4	2	4	
WCAC	Toilet - Patient, Accessible	Yes			1	6	1	6	1	6	
	Discounted Circulation					40%		40%		45%	

SHARED SUPPORT AREAS

AusHFG Room Code	Room / Space	SC / SC-D	5 bays (Acute + Fast Track)		15 bays (Acute + Fast Track)		30 bays (Acute + Fast Track)		60 bays (Acute + Fast Track)		Remarks
			Qty	m2	Qty	m2	Qty	m2	Qty	m2	
	Office - Telemedicine						1	12 (o)	1	12 (o)	Optional. Requirement depends on role of facility.
STGN-9	Store - General	Yes	Shared		1	20	1	30	1	40	May be decentralised for larger EDs
STEQ-14	Store - Equipment	Yes	Shared		1	14	1	20	1	30	May be decentralised for larger EDs
	Store - Disaster Equipment								1	8	Requirements will depend on disaster management role.
DISP-8	Disposal Room	Yes	Shared		1	8	1	10	1	12	Area requirement will depend on size of service.
CLRM-5	Cleaner's Room	Yes	Shared		1	5	1	5	2	5	Number will depend on size of unit.
WCST	Toilet - Staff	Yes	Shared		Shared		2	3	2	3	For close proximity from clinical areas.
	Discounted Circulation		40%		40%		40%		45%		

SHORT STAY UNIT

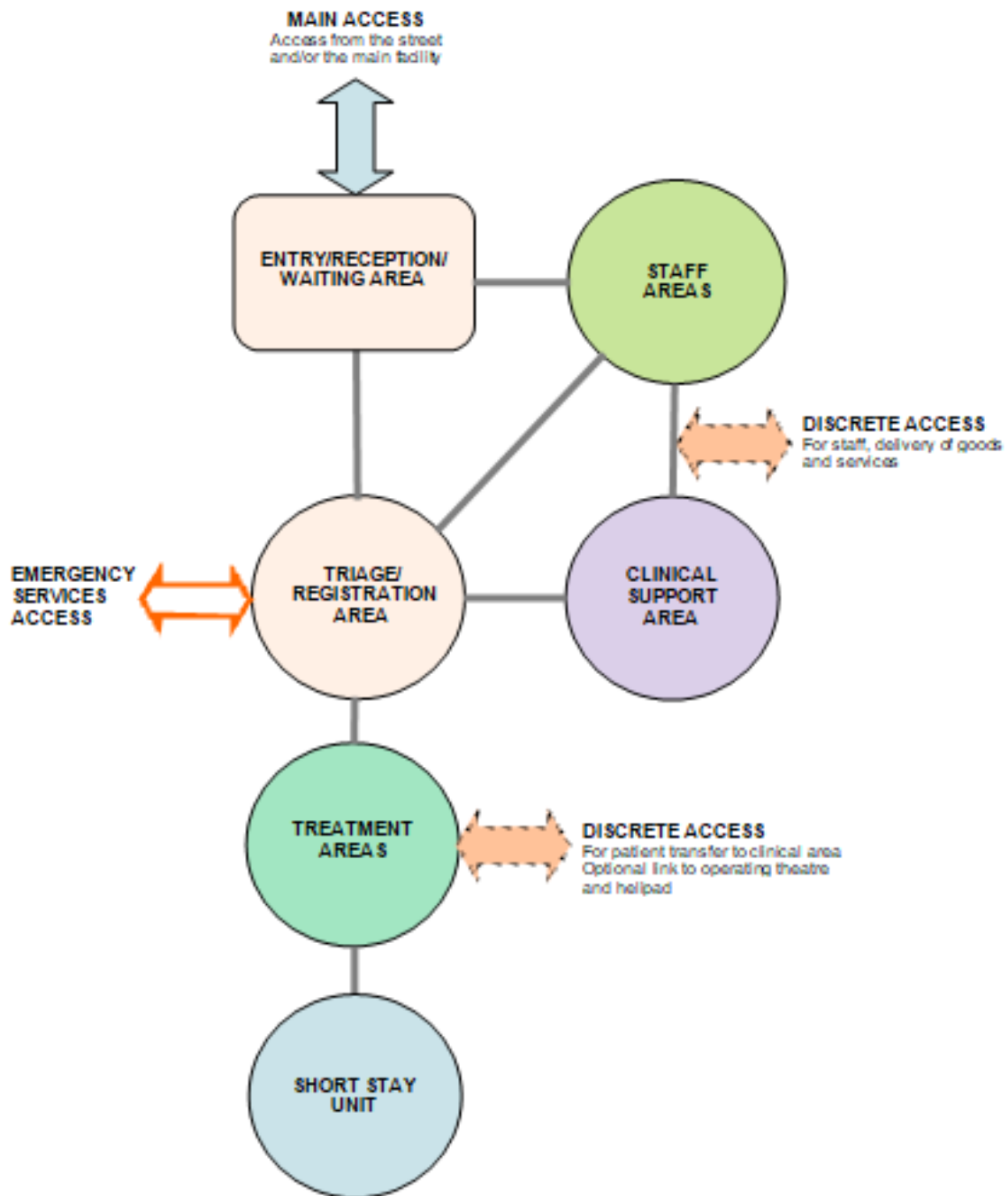
AusHFG Room	Room / Space	SC / SC-D	TBC		6 bays		12 bays		20 bays		Remarks
			Qty	m2	Qty	m2	Qty	m2	Qty	m2	
PBTR-NA	Patient Bay, Emergency - Non Acute Treatment	Yes			6	10	11	10	18	10	Refer to local jurisdictional requirements.
PBTR-AS	Patient Room, Emergency - Non Acute Treatment Special	Yes					1	15	2	15	Standard isolation
ENS-ST-C	Ensuite - Standard	Yes			1	5	3	5	5	5	Attached to S class isolation rooms and remainder shared between other bays.
ENS-ACC	Ensuite - Accessible				1	7	1	7	1	7	
SSTN-10	Staff Station	Yes			1	10	1	12	1	20	
BLIN	Bay - Linen	Yes			1	2	1	2	2	2	
BHWS-B	Bay - Handwashin, Type B	Yes			2	1	3	1	5	1	No. dependent on no. patient bays
CLUR-12	Clean Utility/ Medication Room	Yes			1	10 (o)	1	12	1	14	
DTUR-S	Dirty Utility - Sub	Yes			1	8 (o)	1	8	1	8	
BRES	Bay - Resuscitation Trolley	Yes			1	1.5	1	1.5	1	1.5	
CLRM-5	Cleaner's Room	Yes			Shared		Shared		1	5	May be shared with acute care zone depending on size of unit.
BBEV-OP	Bay - Beverage, Open Plan	Yes			Shared		1	4	1	4	
BMT-4	Bay - Meal Trolley	Yes			Shared		1	4	1	4	Inclusion dependent on operational policy
STEQ-14	Store - Equipment	Yes			Shared		1	10	1	12	May be shared with acute care zone depending on size of unit.
	Discounted Circulation		40%		40%		40%		40%		

STAFF AREAS

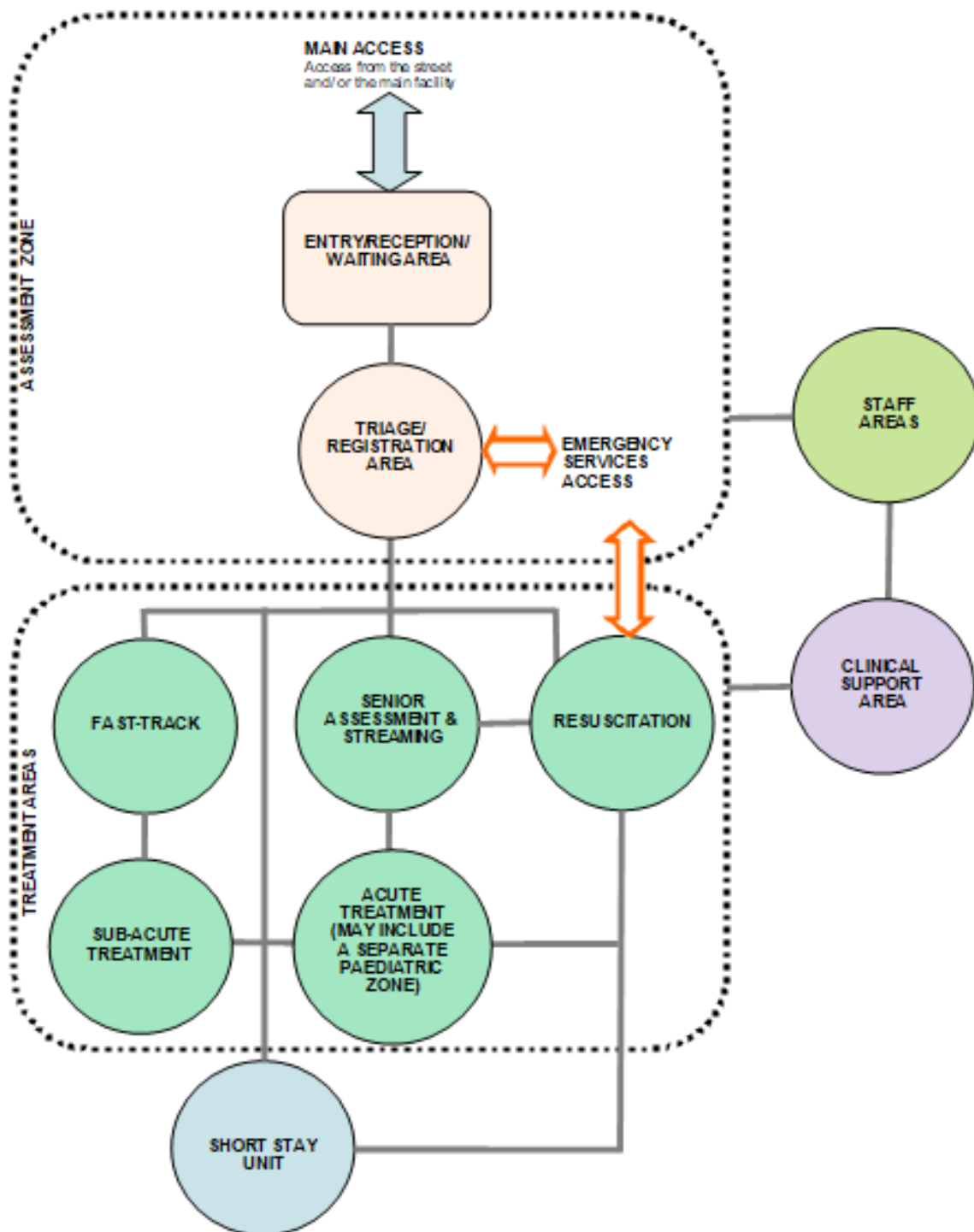
AusHFG Room	Room / Space	SC / SC-D	5 bays		15 bays		30 bays		60 bays		Remarks
			Qty	m2	Qty	m2	Qty	m2	Qty	m2	
SRM-15	Staff Room	Yes	Shared		1	15	1	20	1	30	
CHST-20	Change - Staff (Male/Female)	Yes	Shared		1	10	1	20	1	35	Includes staff toilets and showers. Requirements will depend on operational policy relating to staff arriving at work in uniform or changing at work.
WCAC	Toilet - Accessible	Yes					1	6	1	6	Unless readily available elsewhere
PROP-2	Property Bay - Staff	Yes	Shared		1	3	1	5	1	8	
OFF-S12	Office - Single Person	Yes					1	12	1	12	Allocation will be dependent on staff profile and jurisdictional policies relating to staff work areas.
OFF-S9	Office - Single Person	Yes		9		9		9		9	Allocation will be dependent on staff profile and jurisdictional policies relating to staff work areas.
	Office - Workstation			5.5		5.5		5.5		5.5	Allocation will be dependent on staff profile and jurisdictional policies relating to staff work areas.
	Office - Workstation			4.4		4.4		4.4		4.4	Allocation will be dependent on staff profile and jurisdictional policies relating to staff work areas.
STPS-8	Store - Photocopy/ Stationery	Yes	Shared		1	8	1	8	1	8	
MEET-L-20	Meeting Room	Yes	Shared		1	20	1	30	1	40	Consider operable wall to provide as two smaller rooms for higher utilisation.
MEET-12	Meeting Room	Yes	Shared				1	12	1	15	
	Discounted Circulation		25%		25%		25%		25%		

**AX.02 FUNCTIONAL RELATIONSHIPS / DIAGRAMS**

The following diagram details the relationships between zones in an Emergency Unit. Refer to the following diagram for further detail regarding the various assessment and treatment zones.



The following diagram details the arrangement for assessment and treatment zones in an Emergency Unit.



### AX.03 REFERENCES

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- AHIA, 2016, AusHFG Part B: Section 80 General Requirements, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney NSW.
- AHIA, 2018, AusHFG Part C: Design for Access, Mobility, Safety and Security, Space Standards and Dimensions, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW.
- AHIA, 2016, AusHFG Part D: Infection Prevention and Control, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney NSW.
- AHIA, 2016, AusHFG Part B: HPU 133 Psychiatric Emergency Care Centres (PECC), Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney, NSW.
- AHIA, 2018, AusHFG Part B: HPU 440 Medical Imaging Unit, Australasian Health Facility Guidelines, Australasian Health Infrastructure Alliance (AHIA), Sydney NSW.
- Australasian College for Emergency Medicine, 2012, S12 Statement on the Delineation of Emergency Departments (version 5), ACEM, West Melbourne VIC.
- Australasian College for Emergency Medicine, 2014, G15 Emergency Department Design Guideline (version 3.0).
- Australasian College for Emergency Medicine, 2012, S11 Statement on Hospital Emergency Department Services for Children (version 2.0).
- Australasian College for Emergency Medicine, 2018, P32 Policy on Violence in Emergency Departments (version 3.0).
- Australian Commission on Safety and Quality in Health Care, 2017, Improving Care for Aboriginal and Torres Strait Islander People, Section 4: Creating Safe and Welcoming Environments for Aboriginal and Torres Strait Islander Consumers.
- Australian Government Department of Health, 2015, 'Australian Clinical Guidelines for Acute Exposures to Chemical Agents of Health Concern: A Guide for the Emergency Department Staff'.
- He Korowai Oranga, New Zealand's Maori Health Strategy (2014).
- Little M and Murray L, 2004, Consensus Statement: Risk of Nosocomial Organophosphate Poisoning in Emergency Departments, Emergency Medicine Australasia, 16, pp. 456-458.

### AX.04 FURTHER READING

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- NSW Health, Protecting People and Property, NSW Health Policy and Standards of Security Risk Management in NSW Health Agencies, June 2013 (Refer Chapter 15 Security in the Clinical Environment).
- NSW Ministry of Health, 2012, Emergency Department Models of Care, NSW Ministry of Health, North Sydney NSW.
- NSW Health (PD 2018\_010) Emergency Departments Patients Awaiting Care, 2018.
- NSW Health, Ambulance Service of NSW, Ambulance Vehicle and Equipment Access Requirements, <http://www.ambulance.nsw.gov.au/about-us/Vehicles.html>
- NSW Health, Emergency Department Senior Assessment and Streaming Model of Care and Toolkit, June 2012.
- NSW Health, Guide to the Role Delineation of Health Services, 2017.

- Parliament of Victoria, Inquiry into Violence and Security Arrangements in Victorian Hospitals and, in particular, Emergency Departments - Final Report, December 2011.
- Queensland Health, Design Considerations and Summary of Evidence: children's emergency, inpatient and ambulatory health services, 2010
- Queensland Health, Capital Infrastructure Minimum Requirements (volume 2 & 3), 2017.
- Queensland Health, Emergency Department Short Stay Unit Policy, January 2012.
- Queensland Health, Emergency Department Short Stay Unit Implementation Standard and Procedure, January 2012.
- Queensland Health, Clinical Services Capability Framework, v3.2 Emergency Services, December 2014.
- Royal Australasian College of Physicians, Standards for the Care of Children and Adolescents in Health Services, 2008.

# ATTACHMENTS

## SECURITY CONSIDERATIONS

GENERIC SAFETY AND/ OR SECURITY RISKS	POTENTIAL SOLUTIONS
1. 24 hours per day, 7 days per week access to this Department.	<ul style="list-style-type: none"> <li>• A secure environment separating waiting from clinical areas.</li> <li>• Appropriately sized and maintained waiting area with arrangement of seating to enable separation of various groups where required (e.g. children)</li> <li>• Adequate vending machines, public telephones, toilet facilities including baby change facility, comfortable seating, etc.</li> <li>• Minimise entry and exit doors with close observation of these doors from triage and security base.</li> <li>• Triage station and the security base should have good natural surveillance of all approaches to the ED and the capacity to remotely lock entrance doors to prevent entry by persons who pose an immediate safety risk.</li> </ul>
SPECIFIC SAFETY AND/ OR SECURITY RISKS	POTENTIAL SOLUTIONS
2. Conflict with patients and relatives	<ul style="list-style-type: none"> <li>• Install CCTV with video playback in security office where necessary and provide additional monitor in staff station.</li> <li>• Install CCTV on 'after hours' access points to allow clinical and security staff to monitor this area.</li> <li>• Provide video and/or intercom points to 'after hours' access points.</li> <li>• Provide staff with appropriate security barrier/screens including appropriate provisions for patient contact and document transfer.</li> <li>• Provide staff with access to both 'fixed' and 'mobile' duress systems.</li> <li>• Provide good visibility from staff areas into waiting areas.</li> <li>• ED patients should be prevented from gaining access to other areas of the facility 'after-hours' unless escorted by a staff member.</li> <li>• Ambulance Bays screened and physically separated from public areas to ensure ambulance staff can go about their duties without duress.</li> </ul>
3. Access to Department	<ul style="list-style-type: none"> <li>• Control of patient/visitor access as above.</li> <li>• Provide separate, discrete access/egress to the Department for staff so they do not have to enter or leave the ED through the public waiting area.</li> <li>• Manage ambulance entrance to prevent unauthorised access.</li> <li>• Access to treatment and staff areas possible only through controlled access system.</li> <li>• Functional zones should be controlled so that patients may only move between them when authorised by a staff member.</li> </ul>
4. Furniture fittings and equipment	<ul style="list-style-type: none"> <li>• Implementation of an asset tracking system for all equipment above a predetermined value.</li> <li>• Keep equipment in a lockable area.</li> </ul>
5. Mental Health patients	<ul style="list-style-type: none"> <li>• Concealed medical services panel including electrical points behind the locked cabinet.</li> <li>• Alternate exit door to the consult/treatment room for staff in case of emergency.</li> <li>• Consider how patients will access toilet/shower facilities.</li> <li>• Direct line of sight from an occupied staff base.</li> </ul>
6. Presence of Police guns.	<ul style="list-style-type: none"> <li>• Provision of a gun safe in an appropriate location.</li> </ul>
7. Drugs storage	<ul style="list-style-type: none"> <li>• Dangerous drug safe within the clean utility area accessible only by staff.</li> </ul>
8. Furniture in Waiting Area	<ul style="list-style-type: none"> <li>• Ensure seating, etc., is either permanently fixed or is of sufficient 'bulk' to prevent its use as a weapon, i.e. cannot be picked up and thrown.</li> <li>• Do not include furniture or fittings that may be utilised as weapons.</li> <li>• Provide appropriate bench seating, selected so that the personal space of waiting people is not invaded.</li> </ul>
9. Staff personal effects	<ul style="list-style-type: none"> <li>• Provision for lockers in staff areas to keep small personal effects.</li> </ul>



**SECURITY CHECKLIST - EMERGENCY UNIT**

<b>FACILITY:</b>	<b>DEPARTMENT: EMERGENCY UNIT</b>	
<b>RISK ISSUE</b>	<b>DESIGN RESPONSE</b>	
1. Has a CCTV system been considered to monitor the waiting area and/or access to the public access points in the waiting area?		
2. How is 'after hours' access provided for patients and how is this access point monitored?		
3. Has a secure 'barrier' been installed between staff and the waiting area to: a) monitor the waiting area; b) provide staff contact with patients; c) provide adequate visual and audible communication; and d) allow for document and item transfer.		
4. Do staff have access to both fixed and mobile duress systems?		
5. Is access to patient records restricted to staff entitled to that access?		
6. Is a system implemented to prevent theft of equipment, files, personal possessions, etc?		
7. How does the ED address assessment / treatment of patients with acute, severe behavioural disturbances in the ED?		
8. Is a gun safe required and is it incorporated in the design?		
9. Are drug safes installed in accordance with current regulations?		
10. Is the waiting area furniture incapable of being utilised as a 'weapon'?		
11. How is unauthorised access prevented from Ambulance entrance?		
12. Is there a means of access/egress for staff other than through the waiting area?		
13. How is after-hours access provided for staff?		
14. How is this area secured during and after hours, and is access prevented to other areas of the facility after hours?		
15. Are there lockable storage areas available for specialised equipment?		
16. Is lockable furniture provided for storage of staff personal effects?		
17. Is appropriate bench seating provided for patients/visitors/relatives?		
18. If a TV is provided in waiting area, is it securely fixed and out of reach of visitors, etc?		
<b>DESIGN COMMENTARY/NOTES</b>	<b>DESIGN SIGN-OFF</b>	
	Name: .....	
	Position: .....	
	Name: .....	
	Position: .....	