18.0 Emergency Unit

18.1 Introduction

18.1.1 Description

The function of the Emergency Unit is to receive, stabilize and manage patients (adults and children) who present with a large variety of urgent and non-urgent conditions whether self or otherwise referred. The Emergency Unit also provides for the reception and management of disaster patients as part of the Unit's role within each region.

It is recommended that Hospitals that do not provide an Emergency Service display a prominent exterior sign at the main entrance stating this and giving the location of the nearest Hospital with an Emergency Service.

18.2 Planning

18.2.1 Operational Models

The Emergency Unit may be configured in a number of models that may influence facility design including

Fast-Track

Specific patient groups may be assessed and treated via a separate 'fast' track to other EU presentations. This may occur at the triage point, or immediately after triage but in a separate zone. Patient types suitable for this area may include contagious diseases, minor injuries, ambulatory pediatrics. Assessment and treatment may be carried out in Consult/Examination rooms.

Grouping by Patient Acuity

Patients of similar acuity (urgency) or staff intensity may be treated in the same zone. Facilities for this model will include separate areas for resuscitation, acute monitored beds, acute non-monitored beds and ambulatory treatment spaces. There may be separate entry-points (or triage points) for the different areas. Staff may be separately allocated to different areas for each shift, and may require separate Staff Stations and private workspace.

Grouping by Specialty

Patients may be managed in different areas according to the specialty of service they require e.g. acute treatment, complex investigation, complex discharge planning, or pediatrics. Patients may be triaged from a central arrival point, or from separate ambulance and ambulant entry points. Within each Functional Area, patients would be prioritized according to acuity. In this model, separate staffing for each area is required, which would also include separate workspaces for staff.

Other Special Functions

Short Stay Wards/Emergency Medicine Unit/Observation Units may be located adjacent or incorporated into the Emergency Unit. This may allow sharing of administrative, staff and support facilities.

18.2.2 Functional Areas

An Emergency Unit may include the following Functional Areas:

Entrance/Reception/Triage

- Receiving of patients and visitors and administration
- Waiting area for patients, relatives and children
- Assessment for patients.

Patient Treatment Areas

- Assessment and treatment areas including Resuscitation, Acute Treatment bays/rooms, Seclusion Room and Decontamination Facility, Pediatric patient areas, Procedure Rooms
- Short-Stay Ward/Emergency Medicine Unit/Observation Unit
- Primary Care Area – for patients with low acuity conditions
- Stepdown Area – for patients awaiting test results, considered safe, but requiring observation prior to admission or discharge.

Staff and Support Areas

- Clean and Dirty Utility Rooms
- Store rooms
- Linen
- Waste Holding/Cleaners rooms
- Staff amenities, administrative and teaching functions
- Ambulance facilities
- Grieving Room.

The main aggregation of clinical staff will be at the Staff Station in the Acute Treatment/Resuscitation Area. This should be the focus around which the other clinical areas are grouped. The Entrance/Reception Area is the focus of initial presentation.

In addition to standard treatment areas, some departments may require additional, specifically designed areas to fulfil special roles, such as:

- Management of pediatric patients
- Management of major trauma patients
- Management of mental health patients
- Management of patients following sexual assault
- Extended observation and management of patients
- Undergraduate and postgraduate teaching
- Transport and retrieval services
- Tele-medical referral/consultation service.

Entrance Area

The entrance to the Emergency Unit must be at grade-level, well-marked, illuminated, and covered. It shall provide direct access from public roads for ambulance and vehicle traffic, with the entrance and driveway clearly marked. A ramp shall be provided for pedestrian and wheelchair access.

The entrance to the Emergency Unit shall be paved to allow discharge of patients from cars and ambulances. Temporary parking should be provided close to the entrance.

Waiting Area

The Waiting Area should provide sufficient space for waiting patients as well as relatives/escorts. The area should be open and easily observed from the Triage and Reception areas. Seating should be comfortable and adequate. Space should be allowed for wheelchairs, prams, walking aids and patients being assisted. There should be an area where children may play.

Support facilities, such as a television should also be available. Fittings must not provide the opportunity for self-harm or harm towards staff.

Waiting Areas shall be negatively pressured.

From the Waiting Area there must be access to:
- Triage and Reception Areas
- Toilets
- Baby Change Room
- Light refreshment facilities which may include automatic beverage dispensing machines
- Telephone and change machines
- Health literature.

It is desirable to have separate Waiting Areas, particularly for children. Child play areas will provide equipment suitable for safe play activities, including a television. It shall be separated for sound from the general Waiting Rooms and must be visible to the Triage Nurse.

The area should be monitored to safeguard security and patient wellbeing.

Reception/Clerical Areas

The Reception Area is required to accommodate:
- Reception of patients and visitors
- Registration interviews of patients
- Collation of clinical records
- Printing of identification labels.

The counter should provide seating and be partitioned for privacy at the interview area. There should be direct communication with the Reception/Triage area and the Staff Station in the Acute Treatment/Observation Area.

The Reception/Clerical Area should be designed with due consideration for the safety of staff. This area requires a duress alarm.

Reception/Triage

The Reception/Triage and Staff Station shall be located where staff can observe and control access to treatment areas, pedestrian and ambulance entrances and public waiting areas. This area requires a duress alarm.

The Emergency Unit should be accessible by two separate entrances: one for ambulance patients and the other for ambulant patients. It is recommended that each entrance area contains a separate foyer that can be sealed by remotely activating the security doors. Access to Treatment Areas should also be restricted by the use of security doors. The Ambulance Entrance should be screened as much as possible for sight and sound from the ambulant patient entrance. Both entrances should direct patient flow towards the Reception/Triage Area.

The Reception/Triage area should have clear a vision to the Waiting Room, the children's play area (if provided) and the ambulance entrance. The Reception/Triage Area may perform observations and provide first aid in relative privacy.

Acute Mental Health Emergency Care Area

The patient who is suffering from an acute psychological or mental health crisis has unique and often complex requirements. An Emergency Unit should have adequate facilities for the reception, assessment, stabilization and initial treatment of patients presenting with acute mental health problems.

It is not intended that this be used for prolonged observation of uncontrolled patients. The main purpose of such an area is to provide a safe and appropriate space to interview and stabilize patients. Acute mental health presentations have the potential to disrupt the normal operation of an Emergency Unit. Conversely, the busy environment of an Emergency Unit may not be conductive to the care of patients with acute mental health crises.

Patient flows should be separated where possible to maximize privacy and minimize disruption. A separate secure entrance for use by community emergency mental health teams and police may be desirable. Patients should be continuously observable by staff either directly or via closed circuit television

The designated area should be within close proximity of other continuously staffed areas of the department, with ready access to assistance when required, As far as possible; the facility should not contain objects that could be thrown at staff. There should be two separate exits to allow the exit of staff if one exit is blocked. The exit doors should open outwards, and should be lockable from the outside but not from the inside. If a window is incorporated, any drapes or blinds shading the window should be operable from outside. All areas should have easily accessible duress alarms.

As far as possible, the area should be free of heavy or breakable furniture, sharp or hard surfaces that could injure an uncontrolled patient, and should incorporate tamper resistant electrical fittings. It should also incorporate interior design features that promote calmness, such as muted colors and soft furnishings and appropriate lighting. Patient tracking devices may enhance security.

The Acute Mental Health Emergency Care Area should be separate enough from adjacent patient care areas to allow privacy for the mental health patient and protection of other patients from potential disturbance or violence. There should be acoustic and visual separation from adjacent clinical areas, but ready access for staff in the event of an urgent need for intervention. The incorporation of sound-insulating material is recommended.

Ideally the Acute Mental health Emergency Care Area facility should contain at least two separate but adjacent areas:

Interview Room (Mental Health)

This room should have two exit doors, swinging outward and lockable from outside, to allow for the escape of staff members when one exit is blocked.
One door should be large enough to allow a patient to be carried through it. Consideration should be given to installing a solid door with safety viewing glass.

The Interview Room should also be:
▪ Shielded from external noise
▪ Furnished with only soft furnishings with no hard edges
▪ Designed in such a way that observation of the patient by staff outside the room is possible at all times; this may be backed up with closed circuit television for the safety of staff
▪ Arranged to ensure that patients have no access to air vents or hanging points
▪ Fitted with a smoke detector
▪ Fitted with duress alarm at each exit.

Examination/Treatment Room (Mental Health)

The Examination/Treatment Room should be immediately adjacent to the Interview room. It should contain adequate facilities for physical examination of the patient; however the inclusion of unnecessary and easily dislodged equipment should be avoided.

If operational policy dictates that intravenous sedation is to occur in this area, it should contain the appropriate facilities and monitoring equipment, -mounted out of reach of a potentially violent patient. It should contain the minimum of additional fittings or hard furnishings that could be used to harm an uncontrolled patient. It should be of sufficient size to allow a restraint team of five people to surround a patient on a standard Emergency Unit bed and should be at least 12m² in floor area.

Acute Treatment Areas

Acute Treatment Areas are used for the management of patients with acute illnesses. Requirements are as follows:
- Areas to fit a standard mobile bed
- Storage space for essential equipment
- Space to allow monitoring equipment to be housed
- Minimum space between beds is 2. 4m
- Each treatment area must be at least 9m² in area.
- All Treatment Areas, including Triage, require the following:
- Service panel
- Examination light; the examination light must be a high standard focused light with a power output of 30,000 lux, illuminate a field size of least 15mm and be of robust construction
- Wall--mounted sphygmomanometer
- Shelving
- Waste bins and sharps containers
- Patient call and emergency call facilities.

Patient Toilet/Showers

In an Emergency Unit the following Patient Toilet/Ensuite facilities will be required,(separate Male and Female):
- Up to eight treatment bays – two Patient Toilets/Ensuite, one each for male/female
- Between nine and 20 treatment bays – four Patient Toilets/Ensuite, two each for male/female
- Between 21 and 40 treatment bays – six Patient Toilet/Ensuite, three each for male/female
- More than 40 treatment bays – eight Patient Toilet/Ensuite, four each for male/female
- At least two of the above Toilets/Ensuites to be Accessible for wheelchairs, one each for male/female.

Consultation Areas

Consult Rooms are to be provided according to Unit size and requirements for examination and treatment of ambulant patients. Consult Rooms are to comply with Standard Components – Consult Room.

Consultation – Outpatients

If an Outpatient Consultation Service is to be provided according to the service plan, the following facilities shall be provided:
- Entrance and Reception; this may be a shared facility with the hospital or other specialty departments
- Waiting Area may be shared
- Consulting/Examination rooms
- Treatment Rooms
- Nurses Office; dependent upon the size of the outpatient service
- Medical Laboratory/Utility Room; the size and type of this facility will be determined by the size of the outpatient service and whether or not shared facilities are available within the hospital
- Dirty Utility/Disposal Room
- Staff Room; may be shared with the hospital
- Toilets and Change Rooms; may be shared with the hospital
- Storage, as required
- Cleaner's Room; may be shared with the hospital

- Environmental Requirements; special attention is to be given to the visual and acoustic privacy of patients when being interviewed and also to the quality of light when being examined (the latter requires adequate natural light or color corrected artificial lighting or task lighting)
- Miscellaneous: construction, finishes, design for disabled access, parking, signposting etc. shall be in accordance with the other relevant sections of these Guidelines.

Decontamination Area

A Decontamination Room should be available for patients who are contaminated with toxic substances. The Decontamination room must:
- Be directly accessible from the ambulance bay without entering any other part of the unit
- Have a flexible water hose, floor drain and contaminated water trap.

Laboratory Area

A designated area for performing laboratory investigations such as arterial blood gas analysis and microscopy should be considered in Units of Levels 5 or 6.

Pharmacy/Medication Area

A Pharmacy/Medication area is required for the storage of medications used within the Emergency Department. Entry should be secure with a self-closing door. The area should be accessible to all clinical areas and have sufficient space to house a refrigerator, which is essential for the storage of heat sensitive drugs.

Resuscitation Area

The Resuscitation Room/Bay is used for the resuscitation and treatment of critically ill or injured patients. The Resuscitation Room/Bay requires:
- Space to fit a specialized resuscitation bed
- Space to ensure 360 degree access to all parts of the patient for uninterrupted procedures
- Circulation space to allow movement of staff and equipment around the work area
- Space for equipment, monitors, storage, wash up and disposal facilities
- Appropriate lighting and equipment to hang IV fluids
- Maximum possible visual and auditory privacy for the occupants of the room and other patients and relatives
- Easy access from the ambulance entrance and separate from patient circulation areas
- Easy access to the Acute Treatment/Observation area from the Staff Station
- A full range of physiological monitoring and resuscitation equipment
- Workbenches, storage cupboards, handbasins, X-Ray viewing facilities (or digital electronic imaging system) and computer access
- Solid partitions between this and other areas are recommended.

Each Resuscitation Bay should be equipped with:
- Service panel, service pendants or pods to maximize access to patients
- Physiological monitor with facility for ECG, printing, NIBP, SpO2, temperature probe, invasive pressure, C02 monitor
- A light similar to a small, single arm operating light
- Resuscitation patient trolley
- Wall -mounted diagnostic set (ophthalmoscope/auroscope)
- Overhead IV track.

Imaging facilities should include:
- Overhead X-Ray
- X-Ray screening (lead lining) of walls and partitions between beds
- Resuscitation trolley with X-Ray capacity.

Staff Station

The Staff Station should have an uninterrupted vision of the patients. It should be centrally located and be constructed as an enclosed area to ensure confidential information can be conveyed without breach of privacy and to provide security to staff, information and privacy. The use of sliding windows and adjustable blinds can be used to modulate external stimuli and a separate write-up area may be considered.

Short Stay Ward/Emergency Medical Unit (EMU)

This facility may be provided either within or adjacent to the Emergency Unit for the prolonged observation and ongoing treatment of patients who are planned for subsequent discharge (directly from the EU). Patients may be kept in this Unit for diagnosis, treatment, testing or for medical stabilization.

The length of stay in the Unit is generally between four and 24-hours, although Unit policy may require longer stays.

The Unit may also be situated separately to the Emergency Unit, although functionally linked.
According to the service plan, dedicated beds for short stay are separately designated and staffed. The types of patients planned to be admitted to this Unit will determine the number and type of beds provided, and the design of associated monitoring and equipment. Staff Stations, work and storage and other support areas will need to be available and may be shared if the unit is located physically close to other treatment areas.

Ambulance Unit

General

Specific requirements of the Ambulance Service/s serving the area shall be obtained and complied with. These requirements will be in relation to areas such as ramp gradients, ambulance parking/unloading area gradients, height clearance and ambulance bay dimensions. Specific information about emergency vehicles and ambulances that will be used for the facility should be acquired from local public and private Ambulance Services.

The following consideration shall be given while designing the Ambulance unit.
- Access for Ambulances shall not conflict with other vehicular or pedestrian traffic
- The Ambulance access to a hospital shall be located away from public entrances and shall be reasonably screened from public view. A separate entrance is required and cannot be shared with the Main Public Entrance
- If the Ambulance Access is directly connected to a Hospital Department (such as Emergency Unit), an air lock shall be provided between the inside and the outside. Ambulance Access to an Emergency Unit shall not be via hospital corridors that are open for public access
- The Ambulance Collection/Drop-off Points in any Hospital must be discreet and shall be covered.

Emergency Units

In Ambulance Bays serving Hospitals which include an Emergency Unit, the following additional requirements shall apply:
- A lockable storage cupboard or room no less than 2m² shall be provided for Ambulance supplies. The cupboard or room shall have adjustable shelves and be lockable with a separate key or keypad lock
- A hose cock with attached hose shall be located close to an Ambulance Bay serving an Emergency Unit. It is recommended that the hose cock and hose be located in a discrete cabinet or recessed bay
- An intercom system shall be provided between the Ambulance door and the Emergency Unit Reception/Clerical Area, Triage Area or Staff Station. The Intercom system shall be integrated with a security CCTV system located to clearly show those requesting entry.

- Emergency Units in Level 5 or 6 Facilities will require a Decontamination Area. If provided, this may be integrated with the Ambulance Bay by incorporating shower heads in a section of the Ambulance Bay ceiling. This may be further enhanced by a retractable plastic screen to contain the water flow. Any water flowing out of such a decontamination area shall be treated as contaminated water and treated accordingly.

Signage

All Ambulance Bays shall be clearly marked and sign-posted. The external signage system shall direct ambulances and vehicles carrying emergency cases to the Ambulance Bays. These signs shall be clearly visible at the entrance to the Hospital and/or any major change of direction. Signs directed to ambulance bays intended for emergency units or birthing units shall be permanently lit during the night. In order to avoid confusion, the signage system shall be designed in such a way that ambulant patients, including ambulant access to an emergency unit are not to be directed to the ambulance bay or ambulance door.

18.2.3   Functional Relationships

The design should allow for rapid access to every space with a minimum of cross traffic. There must be close proximity between the Resuscitation/Acute Treatment areas for non-ambulant patients, other treatment areas for non-ambulant patients and other treatment areas for ambulant patients, so that staff may be relocated at times of high workload. Visitor and patient access to all areas should not traverse clinical areas. Protection of visual, auditory and olfactory privacy is important whilst recognizing the need for observation of patients by staff.

The Emergency Unit will require ready access to the following key functional areas:
- Medical Imaging Unit
- Operating Unit – rapid access is highly desirable for surgical emergencies
- Coronary Care Unit
- Pathology/Blood Bank Unit
- Clinical Records Unit
- Inpatient Accommodation Unit
- Pharmacy Unit – proximity is required
- Outpatients (if an outpatient service is provided adjacent to the Emergency Unit)
- Mortuary.

Clinical Records

Access to clinical records is required so that patients' previous medical histories are obtainable without delay. A system of mechanical or electronic clinical record transfer is desirable to minimize delays and labor costs.
Access to clinical records must be available 24-hours per day.

Medical Imaging

The Medical Imaging Unit should have a general X-Ray table and upright X-Ray facilities. It is possible to provide Medical Imaging as a satellite facility within the Emergency Unit. Additionally, an overhead gantry in the resuscitation area may be provided. The presence/absence of a film processor is dependent upon close proximity to the main Medical Imaging Department or the use of digital radiology. Immediate access to CT scanning, Ultrasound and Nuclear Medicine modalities will enhance the Emergency Unit's effectiveness. A system of electronic display of imaging is desirable.

Pathology

Rapid access to Pathology services is highly desirable to minimize turnaround times for laboratory investigations. Mechanical or pneumatic tube transport systems for specimen and electronic reporting of results are recommended.
Point of care access for electrolyte and blood gas analysis is highly desirable.

Pharmacy

Proximity to the Pharmacy Unit is desirable to enable prescriptions to be filled by patients with limited mobility.

18.3 Design

18.3.1 General

Location and Design

Decisions regarding the site location have a major influence on the eventual cost and operational efficiency of the Emergency Unit staff. The site of the Emergency Unit should, as much as possible, maximize the choices of layout. In particular, sites of access points must be carefully considered.

The Emergency Unit should be located on the ground floor for easy access. It should be adequately signposted.

18.3.2 Car Parking

Car parking should be close to the Entrance, well lit and available exclusively for patients, their relatives and staff. Parking areas should be available close to the Emergency Unit for urgent call in staff.

Undercover car parking should be available for:
▪ Appropriate number of ambulances which will be determined by the case load and the availability of ambulance access to other parts of the hospital for non-emergency patients
▪ Taxis and private vehicles that drop-off/pick-up patients adjacent to the ambulance entrance.

18.3.3 Signage

The emergency unit should be clearly identified from all approaches. Signposting that is illuminated is mandatory to allow visibility at night. The use of graphic and character displays such as a white cross on a red background is encouraged.

18.3.4 Environmental Considerations

Acoustics

Clinical Areas should be designed to minimize the transmission of sound between adjacent treatment areas.

The following areas will require acoustic consideration:
▪ Consult/Interview and triage areas for discussions/interviews with clients
▪ Seclusion and mental health assessment rooms
▪ Treatment and Procedure Rooms
▪ Waiting areas
▪ Staff Stations.

Natural Light

The use of natural light should be maximized throughout the Unit. Natural lighting contributes to a sense of well-being and assists orientation of patients and visitors and minimizes staff disorientation.

18.3.5 *Infection Control*

Hand basins for hand-washing should be available within each treatment area and should be accessible without traversing any other clinical area. All hand basins in clinical areas should be of surgical type with hands-free activation (Type A). Dispensers for non-sterile latex gloves should be available in the vicinity of each hand basin and each treatment area.

Refer to Part D – Infection Control for ratios of basins required in clinical areas.

Isolation Rooms

At least one negative pressure Isolation Room should be provided in Units in Level 5 and 6. The need for additional negative pressure Isolation Rooms shall be determined by the infection control risk assessment. Refer to Infection Control Part D.

18.3.6 *Space Standards and Components*

Bed Spacing

In the Acute Treatment Area there should be at least 2. 4m of clear floor space between beds. The minimum length should be three meters.

Corridors

In general, the total corridor area within the department should be minimized to optimize the use of space. Where corridors are necessary, they should be of adequate width to allow the cross passage of two hospital beds without difficulty. There should be adequate space for trolleys to enter or exit any of the Consulting Rooms, and to be turned around. Standard corridors should not be used for storage of equipment.

Note: Refer to Part C – Space Standards and Dimensions for corridor standards.

18.3.7 *Safety and Security*

The Emergency Unit receives a large number of patients and their visitors, many of whom may be distressed, intoxicated or involved in violence. The hospital has a duty of care to provide for the safety and security of employees, patients and visitors. Both policies and structures should be in place to minimize injury, psychological trauma and damage or loss of property. The precise details of security features should be designed in conjunction with a security risk assessment for the specific site.

The location of an office for security personnel near the entrance should be considered. This room should be positioned so that it allows Security Staff a clear view of the Waiting Room, Triage and Reception Areas. Immediate access to these areas is essential. Remote monitoring of other areas in the department by CCTV and of staff duress/personal alarms should also occur from this area.

Perimeter Access Control

Ambulatory and Ambulance entrances should be separate, with electronically operated locks. Access from the Waiting Areas to the treatment areas should be controlled; patients and visitors should be restricted from accessing these areas without staff authority. There should be restricted access from the remainder of the hospital into the Emergency Unit.

Reception/Triage Areas

The interface between the Waiting Areas and the Reception/Triage Areas should be carefully designed so as to permit communication and reassurance to distressed patients or visitors, yet provide safety and security for staff.
Counters should be of sufficient height and depth to minimize the possibility of them being jumped over or reached over.

The Reception Area should be elevated so that staff may sit at eye level with standing patients or visitors. The Reception/Triage area should have an unobstructed view of the entire Waiting Area.

Fixed and/or personal duress alarms should be positioned in suitable areas as suggested by the security risk assessment.

Uniformed security personnel may be required at very short notice to assist with a safety or security issue.

Relatively secluded or isolated areas should be monitored electronically (for example, by closed circuit television), with monitors in easily visible and continuously staffed areas.

18.3.8 Finishes

Wall Protection

Hospital beds, ambulance trolleys, and wheelchairs may cause damage to walls. All wall surfaces in areas which may come into contact with mobile equipment should be reinforced and protected with buffer rails or similar.

Floor Finishes

The floor finishes in all patient care areas and corridors should have the following characteristics:
- Non-slip surface
- Impermeable to water, body fluids
- Durable
- Easy to clean
- Acoustic properties that reduce sound transmission
- Shock absorption to optimize staff comfort but facilitate movement of beds.

Offices, Tutorial Rooms, Staff Rooms, Clerical Areas and the Distressed Relatives' Room should be carpeted.

18.3.9 Building Service Requirements

Communications

Emergency Units are high volume users of telecommunications and information technology. Telephones should be available in all offices, at all staff stations, in the clerical area and in all consultation and other clinical rooms. The use of multi-function, wireless communication devices should be considered. Additional phone jacks should be available for the use of facsimile machines and computer modems where required. A dedicated telephone to receive admitting requests from outside medical practitioners is desirable. A cordless phone or phone jack should be available for access to patients' beds.

An electronic Emergency Unit Information System may be installed to support clinical management, patient tracking and departmental administration. Sufficient terminals should be available to ensure that queuing does not occur, even at peak times. Workspace design should include sufficient bench-widths or suitable suspension devices for terminals, keyboards, drives and printers. Additional computer terminals, software and peripheral devices should be installed to enable other departmental functions

An intercom or public address system that can reach all areas of the Emergency Unit should be considered. Public telephones with acoustic hoods should be available in the Waiting Area. A direct line to a taxi company is desirable. Direct telephone lines bypassing the hospital switchboard should be available for use in internal and external emergencies or when the hospital PABX is out of service.

The Staff Station should have a dedicated inward line for the for the ambulance and police services. There should be facsimile lines in clerical areas as well as between the ambulance service and the

Emergency Unit, including incoming aero-medical transport.

Nurse Call

All patient spaces and clinical areas, including beds, toilets, bathrooms, treatment areas, patient day areas and lounges should have access to an emergency call facility so staff can summon urgent assistance. The emergency call facility should alert to a central module situated adjacent to the Staff Station, as well as to the Staff and Tutorial rooms.

Telemedicine

Emergency Units using telemedicine facilities should have a dedicated, fully enclosed room with appropriate power and communications cabling provided. This room should be of suitable size to allow simultaneous viewing by members of multiple service teams and should be close to the Staff Station.

18.4   Components of the Unit

The Emergency Unit will consist of a combination of Standard Components and Non Standard Components. Provide Standard Components to comply with details in Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets and Room Layout Sheets.

18.4.1   Non-Standard Components

Communications Room – Ambulance

Description and Function

The Ambulance Communications Room is occupied by up to three ambulance officers to communicate between major hospital centers and the ambulance service for coordination of Ambulance movements. The communications base is also a critical co-ordination center in the event of a disaster.

Location and Relationships

The room should be immediately adjacent to the Ambulance entry of the Emergency Unit with direct line of sight to incoming ambulance vehicles and the parking bays.

Considerations

The room will include:
- Workstation benches and chairs for three persons
- Telephones, computer and radio communications systems; radio communications systems may provide direct communication between ambulances and the Emergency Unit, according to Operational Policy.

18.5   Schedule of Accommodation

Typical Emergency Unit at Levels 1 to 6

ROOM/SPACE	Standard Component	Level 1/2 Qty x m²			Level 3/4 Qty x m²			Level 5/6 Qty x m²			Remarks
Entrance Area											
Airlock – Entry	AIRLE-10-SJ	1	x	10	1	x	10	1	x	10	
Reception (Emergency)	REC-E-SJ				1	x	20	1	x	30	Staff to be able to observe and control access
Waiting – Male/Female	WAIT-10-SJ WAIT-30-SJ	2	x	10	2	x	30	2	x	50	Open and fully observable from Reception and Triage
Waiting – Family	WAIT-20-SJ (SIMILAR)	1	x	25	1	x	25	1	x	30	
Play Area – Paediatric	PLAP-10-SJ				1	x	10	1	x	10	Adjoining Waiting area
Parenting Room	PAR-SJ				1	x	6	1	x	6	
Bay – Public Telephone		1	x	2	1	x	2	1	x	2	Accessible from waiting areas; May be combined with vending machines
Bay – Vending Machines	BVM-3-SJ				1	x	3	1	x	3	Accessible from waiting areas; May be combined with public telephones
Bay – Wheelchair Park	BWC-SJ Similar	1	x	2	1	x	4	1	x	8	Wheelchairs and trolley holding
Communications Base Ambulance								1	x	12	
Ambulance Triage	AMBTR-SJ							2	x	12	
Triage Cubicles	PBTR-H-10-SJ	2	x	10	3	x	10	4	x	10	
Meeting Room – 12m²	MEET-9-SJ Similar				1	x	12	1	x	12	May also be used as Grieving Room
Meeting Room – 9m²	MEET-9-SJ				1	x	9	1	x	9	For staff to interview/meet with family and friends of patients
Toilet – Public	WCPU-3-SJ	2	x	3	4	x	3	4	x	3	
Toilet – Accessible	WCAC-SJ	1	x	6	1	x	6	1	x	6	May also include facilities for baby change
Shower – Decontamination	SHDEC-SJ	1	x	8	1	x	8	1	x	8	Check waste water detention requirements
Body Holding		1	x	12	1	x	12	1	x	12	Optional; also used as 'Brought in Dead' room
Police Room	OFF-S9-SJ OFF-2P-SJ	1	x	9	1	x	12	1	x	12	
Patient Areas: Treatment											
Patient Bay – Resuscitation	PBTR-R-SJ Similar	1	x	28	4	x	28	6	x	28	Qty according to service plan. May include X-Ray gantry
Patient Bay – Acute Treatment	PBTR-A12-SJ				4	x	28	25	x	12	Qty according to service plan, including paediatrics
Patient Bay – Non Acute Treatment	PBTR-NA-SJ	2	x	28	6	x	28	35	x	10	Qty according to service plan, including paediatrics
1 Bed Room – Isolation – Negative Pressure	1BR-IS-N-SJ				1	x	18	2	x	18	For isolatable infections
Anteroom	ANRM-SJ				1	x	6	2	x	6	Accessible/adjacent to Isolation Room
Treatment Room – Multi-function	TRMT-SJ	1	x	14	1	x	14	2	x	14	Qty according to service plan
Treatment Room – Secure Assessment	TRSA-SJ				1	x	14	2	x	14	Qty according to service plan
Ensuite – Mental Health	ENS-MH-SJ				1	x	5	2	x	5	For Secure Assessment Rooms
Procedure Room	PROC-20-SJ				1	x	20	2	x	20	Qty according to service plan
Plaster Room	PLST-SJ	1	x	14	1	x	14	2	x	14	Qty according to service plan
Store – Crutches		1	x	2	1	x	2	1	x	2	Close to Plaster Room
General X-Ray	GENXR-SJ							1	x	30	Optional. May not be required if ED near Medical Imaging
Bay – Handwashing, Type A	BHWS-A-S	1	x	1	2	x	1	15	x	1	One Handwash Bay per four Treatment Bays
Bay – Pathology	BPATH-SJ	1	x	1	1	x	1	2	x	1	

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ROOM/SPACE	Standard Component	Level 1/2 Qty x m²			Level 3/4 Qty x m²			Level 5/6 Qty x m²			Remarks
Ensuite – Standard	ENS-ST-SJ				1	x	5	2	x	5	For Isolation Rooms
Shower – Accessible	SHD-SJ	1	x	4	1	x	4	2	x	4	Accessible from treatment areas
Shower – Patient (M/F)	SHPT-SJ							2	x	4	Accessible from treatment areas
Toilet – Patient (M/F)	WCPT-SJ	2	x	4	2	x	4	3	x	4	Accessible from treatment areas
Toilet – Accessible	WCAC-SJ	1	x	6	1	x	6	2	x	6	Accessible from treatment areas
Emergency Operating Room (Optional)											
Operating Room – Emergency	ORGN-SJ							1	x	42	Optional
Scrub Up/Gowning	SCRB-6-SJ							1	x	6	Optional, for emergency OR
Store – Sterile Stock	STSS-12-SJ							1	x	12	Optional, for emergency OR
Patient Bay – Holding	PBTR-H-10-SJ										
Clean-Up Room	CLUP-7-SJ							1	x	7	Optional, for emergency OR
Support Areas: Emergency Treatment											
Bay – Beverage	BBEV-OP-SJ				1	x	4	2	x	4	
Bay – Linen	BLIN-SJ	1	x	2	1	x	2	3	x	2	
Bay – Mobile Equipment	BMEQ-4-SJ				2	x	4	4	x	4	
Bay – Mobile Equipment	BMEQ-4-SJ (SIMILAR)	1	x	6	1	x	6	2	x	6	Optional. For mobile X-Ray
Bay – Resuscitation Trolley	BRES-SJ	1	x	1. 5	1	x	1. 5	2	x	1. 5	Rapid emergency access required
Clean Utility	CLUR-8-SJ CLUR-12-SJ	1	x	8	1	x	12	2	x	12	
Cleaner's Room	CLRM-5-SJ	1	x	5	1	x	5	2	x	5	May be shared
Dirty Utility	DTUR-10-SJ Similar	1	x	8	1	x	10	2	x	10	
Disposal Room	DISP-8-SJ	1	x	8	1	x	8	1	x	10	
Staff Station	SSTN-5-SJ SSTN-20-SJ	1	x	5	1	x	20	3	x	20	Direct oversight of Resus Bays and treatment spaces.
Store – Disaster Equipment	STDE-SJ				1	x	8	1	x	8	
Store – Drugs	STDR-5-SJ				1	x	5	1	x	10	
Store – Equipment	STEQ-16-SJ Similar				1	x	20	1	x	30	Major Store
Store – General Similar	STGN-20-SJ	1	x	10	1	x	20	1	x	30	
X-Ray Viewing and Reporting	XRRR-SJ				1	x	12	1	x	12	Optional
Patient Areas: Fast Track											
Consult Room	CONS-SJ	1	x	14	3	x	14	10	x	14	Qty determined by service plan; should be accessible to treatment areas
Dental Surgery	DENSR-14-SJ							1	x	14	Optional, Qty determined by service plan
Consult Room – ENT/Ophthalmology	CONS-ENT-OPT-SJ	1	x	14	1	x	14	2	x	14	Qty determined by service plan
Patient Bay – Non Acute Treatment	PBTR-NA-SJ				1	x	10	10	x	10	Qty determined by service plan; may have combined bed or recliner bays
Toilet – Accessible	WCAC-SJ							1	x	6	
Toilet – Patient (M/F)	WCPT-SJ				2	x	4	2	x	4	
Support Areas: Fast Track											
Bay – Beverage	BBEV-OP-SJ				1	x	4	1	x	4	
Bay – Handwashing, Type B	BHWS-B-SJ				1	x	1	6	x	1	One per four treatment bays
Bay – Linen	BLIN-SJ	1	x	2	1	x	2	2	x	2	
Bay – Mobile Equipment	BMEQ-4-SJ				1	x	4	1	x	4	
Bay – Resuscitation Trolley	BRES-SJ				1	x	1. 5	1	x	1. 5	Rapid emergency access required
Clean Utility	CLUR-8-SJ CLUR-12-SJ				1	x	8	1	x	12	

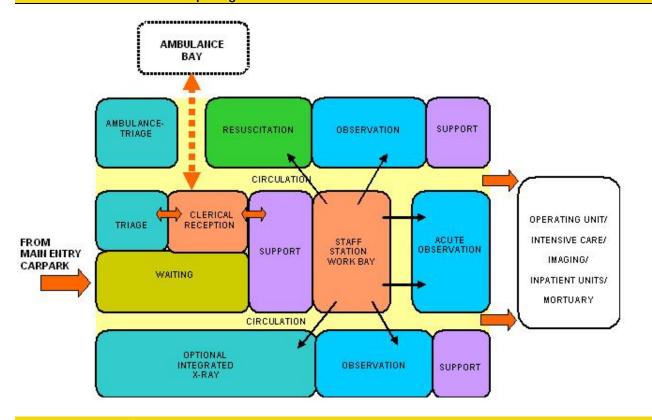| ROOM/SPACE	Standard Component	Level 1/2 Qty x m²			Level 3/4 Qty x m²			Level 5/6 Qty x m²			Remarks
Dirty Utility	DTUR-S-SJ DTUR-12-SJ				1	x	8	1	x	12	
Staff Station	SSTN-14-SJ Similar				1	x	8	1	x	12	Direct visual observation and access to treatment spaces.
Store – General	STGN-8-SJ				1	x	8	1	x	10	
Short Stay Ward/Emergency Medicine Unit (Optional)					**6 Beds**			**10 Beds**			
Patient Bay – Non-Acute treatment	PBTR-NA-SJ				5	x	10	9	x	10	
Anteroom	ANRM-SJ				1	x	6	1	x	6	Accessible/adjacent to Isolation Room
1 Bed Room – Isolation Room (Class N)	1 BR-IS-N-SJ				1	x	28	1	x	28	
Ensuite – Standard	ENS-ST-SJ				1	x	5	1	x	5	For Isolation Room
Toilet – Patient (Male/Female)	WCPT-SJ				1	x	4	2	x	4	
Shower – Patient (Male/Female)	SHPT-SJ				1	x	4	2	x	4	
Bay – Beverage	BBEV-OP-SJ				1	x	4	1	x	4	
Bay – Handwashing, Type B	BHWS-B-SJ				2	x	1	6	x	1	One per four treatment bays
Bay – Linen	BLIN-SJ				1	x	2	2	x	2	
Bay – Mobile Equipment	BMEQ-4-SJ				1	x	4	1	x	4	
Bay – Resuscitation Trolley	BRES-SJ				1	x	1. 5	1	x	1. 5	Rapid emergency access required
Clean Utility	CLUR-8-SJ				1	x	8	1	x	8	
Dirty Utility	DTUR-S-SJ				1	x	8	1	x	8	
Staff Station	SSTN-14-SJ Similar				1	x	8	1	x	12	Direct visual observation and access to treatment spaces.
Store – General	STGN-8-SJ				1	x	8	1	x	10	
Staff Areas											
Change – Staff (Male/Female)	CHST-12-SJ (SIMILAR				1	x	14	2	x	35	Size and qty for maximum staff per shift
Office – Single Person, 12m²	OFF-S9-SJ				1	x	12	1	x	12	Director
Office – Single Person, 9m²	OFF-S9-SJ	1	x	9	2	x	9	4	x	9	Nurse Manager, Secretary, Staff Specialists; Depends on service plan
Office – 2-Person	OFF-2P-SJ							3	x	12	Registrars
Office – 3-Person	OFF-3P-SJ							4	x	15	Medical, Nursing, general use
Overnight Stay – Bedroom	OVBR-SJ	1	x	10	1	x	10	1	x	10	Optional
Overnight Stay –	OVES-SJ	1	x	4	1	x	4	1	x	4	Optional
Meeting Room – Large	MEET-L-15-SJ MEET-L-30-SJ				1	x	15	1	x	30	
Meeting Room – Small/Medium	MEET-9-SJ MEET-L-15-SJ				1	x	12	2	x	15	
Staff Room	SRM-25-SJ Similar				1	x	20	1	x	35	Size for numbers of staff; Includes library area
Store – Photocopy/Stationery	STPS-8-SJ				1	x	8	1	x	8	
Toilet – Staff	WCST-SJ	1	x	3	1	x	3	2	x	3	In addition to Change areas
Staff Areas: Ambulance Service (Optional)											
Reception/Clerical	RECL-10-SJ							1	x	10	
Wash-Up Room	WASH-SJ							1	x	40	Optional
Office – Single Person	OFF-S9-SJ							1	x	9	Administrative activities
Office – 4-Person	OFF-4P-SJ							1	x	20	
Store – General	STGN-12-SJ							1	x	12	
Store – Drugs	STDR-5-SJ							1	x	5	
Net Department Total			363. 5			1270. 5			2768. 0		
Circulation %			40			40			40		
Grand Total			508. 9			1778. 7			3875. 2		

Notes:

- *Areas noted in Schedules of Accommodation take precedence over all other areas noted in the FPU*

- *Rooms indicated in the schedule reflect the typical arrangement according to the Role Delineation*

- *Exact requirements for room quantities and sizes will reflect Key Planning Units identified in the Service Plan and the Operational Policies of the Unit*

- *Room sizes indicated should be viewed as a minimum requirement; variations are acceptable to reflect the needs of individual Unit*

- *Office areas are to be provided according to the Unit role delineation and staffing establishment; Executives and Managers may be responsible for more than one area but should have only one office assigned within the campus*

- *Staff and support rooms may be shared between Functional Planning Units dependent on location and accessibility to each unit and may provide scope to reduce duplication of facilities.*

18.6   Functional Relationship Diagram

18.7   Further Reading

- Australasian Health Infrastructure Alliance (Aus.). '*Australasian Health Facility Guidelines'.* Retrieved from website: www. healthfacilityguidelines. com. au 2014

- Australasian Health Facility Guidelines (Aus.). '*Part B – Health Facility Briefing and Planning; 300 Emergency Unit Revision 4'* 2012. Retrieved from website: http://www. healthfacilityguidelines. com. au/AusHFG_Documents/Guidelines/Archive/AusHFG%20Complete%20Version%203. pdf 2014

- Department of Health (UK). '*Health Building Note 22; Accident and Emergency Facilities for Children and Adults'* 2005. Retrieved from website: http://www. wales. nhs. uk/sites3/Documents/254/HBN%2022%20v2%20ed2005. pdf 2014

- Welch, SJ. Healthcare Research and Design Journal. '*Using Data To Drive Emergency Department Design: A Metasynthesis'* 2012. Retrieved from website: https://www. herdjournal. com/article/using-data-drive-emergency-department-design-metasynthesis 2014

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