

## 24.0 Medical Imaging Unit- General

### 24.1 Introduction

#### 24.1.1 Description

The Medical Imaging Unit is a discrete unit of the hospital which provides for General X-ray diagnostic investigations. Depending on the level of service the unit may also provide for diagnostic screening (fluoroscopy), ultrasound, mammography, computed tomography (CT) or interventional radiographic procedures.

The Medical Imaging Unit may be co-located with or incorporate other specialties including Nuclear Medicine, Angiography, MRI, and PET Units.

### 24.2 Planning

#### 24.2.1 Planning Models

The layout of a Medical Imaging Unit should be developed in compliance with manufacturer's recommendations, because area requirements may vary from machine to machine. Since technology changes frequently and from manufacturer to manufacturer, rooms should be sized larger to allow upgrading of equipment in the future.

#### PRIVATISATION OF SERVICES

Increasingly Medical Imaging services are being delivered as a privately owned and operated service. This option needs to be identified early in the planning process as there may be considerable spatial, design and cost implications.

#### OFF-SITE SERVICES

In smaller hospitals that cannot justify a full Medical Imaging Unit, access to off-site services is an important consideration in the planning phase, in particular, the selection of the site.

#### 24.2.2 Functional Areas

The Medical Imaging Unit may consist of the following Functional Areas depending on the Operational Policy and service demand:

- Reception and Waiting Areas
- Imaging and screening rooms with access to patient change areas and toilets
- Support areas including preparation areas, storage, disposal and utility rooms
- Film processing areas - both daylight and darkroom areas as required; alternatively, medical imaging may be based on a filmless digital imaging system with its own equipment and storage requirements
- Film storage areas
- Viewing and Reporting areas
- Administrative and Office areas
- Staff Amenities areas including Staff Room, Staff Change Rooms and Toilets and access to Meeting Rooms

#### CLEAN UTILITY/ PREPARATION AREAS

The Clean Utility / Preparation Room shall provide for preparation and mixing of contrast media, storage of medications and sterile supplies. The Clean Utility / Preparation Room, if conveniently located, may serve any number of rooms. The Clean Utility / Preparation Room shall comply with requirements identified in Standard Components - Clean Utility. When pre-prepared media is used, additional storage shall be provided for the media

#### FILM PROCESSING AREAS

Film processing if required shall be located convenient to the Imaging Rooms and to the quality control area and will normally involve daylight processing equipment. A Darkroom may be provided for specialised processing if required. The Darkroom, if provided will require



special attention to lighting and ventilation.

If the Medical Imaging Unit operates with a filmless, digital imaging system, the appropriate areas for image processing and printing will be required according to the type of system installed.

#### FILM STORAGE

For digital imaging applications, there will need to be an area for the PACS (Picture Archiving and Communications System) archive storage units.

A room with cabinets or shelves to file hard copies of patient film shall be provided, located close to the Reception/ administration area. Archived film may be stored outside the Imaging Unit, but must be properly secured to protect films against loss or damage.

#### GENERAL RADIOLOGY / TOMOGRAPHY

Each General will include an upright Bucky stand for chest films. Where volumes are low, OPG, Mammography and Tomography may be added to the General room equipment. This will necessitate a slightly larger room. Tomography is becoming less used with the advent of CT but may be required/ preferred by a Urology service. The necessary attachments may be incorporated into a General Room.

At least one General X-ray room must be sized and located to facilitate transfer of patients from Emergency Unit, if a dedicated room in the EU is not provided.

#### ORTHOPANTOMOGRAPHY (OPG)

OPG is a method of obtaining films of the upper and lower teeth-bearing jaws that supports Trauma, Dental and Facio maxillary services. This equipment may be incorporated into a General Room, a separate bay or within the Dental Unit.

#### MAMMOGRAPHY

Mammography imaging may be included for diagnostic purposes. It should be sized to allow prone positioning for some interventional biopsy procedures. Mammography should be located adjacent to an Ultrasound Room for fine needle biopsies. Change Rooms should be discreet and access to an Interview Room will be required.

#### ULTRASOUND

Ultrasound imaging is used in a variety of specialties including Obstetrics, Medicine, Surgery, Cardiology and Vascular Surgery. Ultrasound rooms may be provided within the specialty departments or within the Medical Imaging Unit. One ultrasound room should be sized to allow for interventional procedures. There must be access to a toilet and drinking water for ultrasound procedures that require the patient to have a full bladder.

#### FLUOROSCOPY

Fluoroscopic/radiographic imaging procedures involve administration of contrast media to the patient, serial repositioning of the patient and the timed use of a fluoroscopic imaging system. The Fluoroscopy room will require a preparation room for barium preparation and an adjacent toilet / shower, accessed from inside the room and from the external corridor.

With the general decline in use of barium contrast studies and advances in equipment technology, fluoroscopy and angiography may be combined in one room. The room must be equipped for anaesthesia.

#### DIGITAL SUBTRACTION ANGIOGRAPHY (DSA).

Simple angiography involves injection of a radiographic contrast agent into blood vessels so that vascular structures are enhanced and revealed together with surrounding bony and soft tissue structures. This procedure is used for simple peripheral studies and can be done on a fluoroscopy table.

With DSA, a contrast agent is administered directly, via a catheter, into an artery close to the area to be examined. The subtraction of a pre-contrast mask suppresses interfering structures



from the image so that the arteries become clearly defined. This process enables a full spectrum of vascular and non-vascular procedures including angiography, angioplasty, arterial and venous stents, biopsy and drainage procedures, and biliary and urologic procedures.

#### COMPUTERISED TOMOGRAPHY (CT SCANNING)

Refer to the Standard Component for CT Scanning. A Control Room may service 2 rooms. The room may need to be serviced for general anaesthesia. A bed/ trolley bay adjacent to each room is required for staff to observe waiting patients.

#### MAGNETIC RESONANCE IMAGING (MRI)

MRI will require a dedicated area or suite for access control and protection of/from the magnet (fringe field), and preparation/nursing support areas.

Requirements include:

- Interview room for patient consents and explanations in close proximity
- storage for MRI-compatible (non-ferrous) equipment
- lockers for patient property that may interfere with or be damaged by the magnet such as credit cards and keys.

Careful consideration must be given to the location of the MRI in order to minimise the provision and cost of shielding required including the following:

- MRI should not be located under a helipad or next to a sub-station
- floor / slab must be structurally capable of carrying the weight of the MRI
- good external access is required for the installation of the MRI; a removable side panel may be more cost effective than dismantling a RF shielded door
- room size and shape must be able to contain the 5 Gauss magnetic field with the room and consideration should be given to the needs for future 3T MRIs
- access control needs to be included to ensure only authorised staff enter the MRI room
- locate away from moving ferrous objects which can interfere such as lifts, cars moving through car parks, construction sites
- ensure that emergency equipment such as fire extinguishers and medical gas bottles in the vicinity are not made of magnetic iron.

#### ENDOSCOPIC RETROGRADE CHOLEOPANCREATOGRAPHY (ERCP)

ERCP is a diagnostic procedure for examination of the biliary and pancreatic ducts system and may be a therapeutic intervention for removal of gall stones etc. It is a procedure used by gastroenterologists, and may be performed in the Medical Imaging Unit or in an Endoscopy Unit.

#### 24.2.3 *Functional Relationships*

The location of the Medical Imaging Unit, if provided, is variable. Consideration must be given to its proximity to Accident and Emergency, and to the Operating Unit where dedicated in-theatre X-ray is not provided. The requirement for an Outpatient X-ray Service may also dictate where in the facility it is located. In most instances, a compromise between travelling distance for inpatients (minor role) and convenience for outpatients (major role) will be made.

## 24.3 Design

#### 24.3.1 *Construction Standards*

Special attention is to be given to the following in the design of a Medical Imaging Unit:

- Structural support for equipment including equipment mounted to ceilings
- Level floor for equipment positioning and safe patient movement
- The impact on room space of large diameter electrical cable support tray (in floor and surface mounted)
- Equipment ventilation
- Procedure timing (clocks)
- Task lighting/dimming
- Room blackout, as required.



- Construction Standards for a Medical Imaging Unit include the following:
- Provision for cable trays, ducts or conduits should be made in floors, walls, and ceilings as required.
- Ceiling heights may be higher than normal.
- A lay-in type ceiling should be considered for ease of installation, service, and remodelling.

#### STANDARDS & CODES

Radiological facilities are to comply with relevant State legislation, regulations and statutory requirements.

#### 24.3.2 *Environmental Considerations*

##### ACOUSTICS

Acoustic privacy should be provided in all imaging rooms, interview rooms and particularly in reporting areas. Please refer to Part C, 9.2 “Acoustic Solutions for Healthcare Facilities”

##### LIGHTING

Provide indirect and dimmable lighting required in all examination rooms for patient comfort.

Ceiling mounted shadowless lighting is required in CT and Angiography imaging rooms.

##### PRIVACY

Visual patient privacy is an important consideration to be addressed in the design of imaging rooms and waiting spaces. Privacy screens will be required to imaging and screening rooms.

#### 24.3.3 *Infection Control*

Hand-washing facilities shall be provided for each Imaging Room, located within or outside the entry to the room. Refer to Part D - Infection Control: Handwashing Facilities for a discussion on the types of basins suitable for this area.

#### 24.3.4 *Space Standards and Components*

Rooms shall be sized to suit the design requirements of the equipment to be used, to provide a safe working environment and to allow the effective movement of staff and patients.

Ceiling heights shall suit the equipment, but shall not be less than 3000 mm for ceiling tube mount installations.

Special consideration should also be given to the width and height of doorways to ensure delivery and removal of equipment is not impeded or prevented, and that patient trolley and bed movement is not hampered.

#### 24.3.5 *Building Service Requirements*

##### RADIATION PROTECTION

Most Medical Imaging requires radiation protection. Plans and specifications will require assessment for radiation protection by AERB. The radiation protection assessment will specify the type, location and amount of radiation protection required according to the final equipment selections and layout. Radiation protection requirements shall be incorporated into the final specifications and the building plans.

##### COMMUNICATIONS

##### Nurse call system

Nurse call buttons shall be located in or near change cubicles, patient-use toilets, showers and at every holding/ recovery bay.

Staff Assist and Emergency Call buttons are required in all Imaging rooms, Holding and Recovery areas



Annunciator panels in corridors must be located for optimum viewing.

#### Voice/ data communications

Voice/ data installation may include:

- Voice / data cabling for phones and computers
- Dictation system for reporting and / or voice recognition system
- High speed network for digital and CR equipment
- PACS
- Patient or Medical Records Systems
- Radiology Information System ideally linked to the Patient Information System
- Conferencing facilities

## 24.4 Components of the unit

The Medical Imaging - General 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.

### 24.4.1 *Non Standard Components*

#### DIGITAL (PACS) REPORTING AREA

##### Description and Function

PACS reporting areas will include Radiologist workstations for viewing and reporting on procedures using high resolution (LCD) monitors on which images can be manipulated. A minimum of two linked monitors are required, occasionally four screens are provided.

In addition to the reporting monitors, a dedicated computer will be required for access to the Patient Information System and a system for dictating reports. .

##### Location and Relationships

Locate in a quiet area with ready access to the imaging rooms. Several workstations may be located in one room but will need to be visually and acoustically separated.

##### Considerations

The reporting area will require:

- Ergonomic design of the workstation to accommodate the monitors.
- adequate ventilation and temperature control to individual spaces to minimise risk of monitor failure
- individual cubicle lighting (dimnable)
- Acoustic measures to ensure quality of voice recordings. Please refer to Part C, 9.2 "Acoustic Solutions for Healthcare Facilities"



## 24.5 Schedule of Accommodation

### 24.5.1 Medical Imaging-General Generic Schedule of Accommodation

Schedule of Accommodation for a Medical Imaging Unit - General for Level 2-6

#### ENTRY/RECEPTION/CLERICAL AREAS

ROOM/ SPACE	Standard Component	Level 2 Qty x m2	Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
PUBLIC WAITING	yes	1 x 20	1 x 20	1 x 30	1 x 30	1 x 40	
FAMILY WAITING	yes	1 x 10	1 x 10	1 x 20	1 x 20	1 x 50	
BAY – DRINKING FOUNTAIN	yes	1 x 1	1 x 1	1 x 1	2 x 1	2 x 1	Optional Vending bay may be added
CHILD PLAY AREA	yes	1 x 8	1 x 8	1 x 10	1 x 10	1 x 20	Adjacent to Family waiting
PATIENT TOILET – ACCESSIBLE	yes	1 x 5	1 x 5	1 x 5	2 x 5	2 x 5	
PUBLIC TOILET	yes	2 x 3	2 x 3	4 x 3	4 x 3	6 x 3	
RECEPTION	yes	1 x 9	1 x 9	1 x 12	1 x 12	1 x 15	
CLERICAL WORKROOM		1 x 9	1 x 10	1 x 15	2 x 20	2 x 20	
CURRENT FILM STORAGE		1 x 20	1 x 30	1 x 50	1 x 70	1 x 100	Depends of facility requirement
BAY – MOBILE EQUIPMENT	yes	1 x 4	1 x 4	1 x 6	2 x 6	2 x 6	Depends of facility requirement
BAY – WHEELCHAIR/TROLLEY PARK	yes	1 x 5	1 x 5	1 x 6	1 x 10	1 x 12	
TRANSPORT STAFF WORKBASE/ TROLLEY PARK				1 x 4	1 x 6	1 x 8	

#### SUPPORT AREAS

ROOM/ SPACE	Standard Component	Level 2 Qty x m2	Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
CLEANER'S ROOM	yes	shared	1 x 5	1 x 5	1 x 5	2 x 5	
HARDCOPY DIGITISER ROOM				1 x 6	1 x 6	2 x 6	
PACS SERVER ROOM			1 x 10	1 x 12	1 x 20	1 x 30	
STORE – GENERAL	yes similar	1 x 9	1 x 9	1 x 12	1 x 12	1 x 15	
STORE – FILM/ CASSETTES/PLATES	yes similar	1 x 9	1 x 9	1 x 12	1 x 12	1 x 15	
OPTICAL DISCS STORAGE ROOM		1 x 9	1 x 9	1 x 12	1 x 12	1 x 15	
PACS OPERATION/MANAGEMENT TEAM		1 x 9	1 x 9	1 x 12	1 x 12	1 x 15	



## GENERAL X-RAY & FLUOROSCOPY (SCREENING)

ROOM/ SPACE	Standard Component	Level 2 Qty x m2	Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
PATIENT BAY HOLDING	yes	2 x 10	2 x 10	4 x 10	4 x 10	4 x 10	For level 5& 6 refer to
BAY – LINEN	yes	1 x 2	1 x 2	1 x 4	1 x 4	1 x 6	
ROOM/ SPACE	Standard Component	Level 2 Qty x m2	Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
GENERAL X-RAY ROOM	yes	1 x 30	1 x 30	2 x 30	2 x 30	3 x 30	
PATIENT CHANGE	yes	2 x 2	2 x 2	4 x 2	4 x 2	6 x 2	
PATIENT CHANGE – ACCESSIBLE	yes	2 x 4	2 x 4	2 x 4	4 x 4	4 x 4	
CHANGED WAITING – MALE/FEMALE	yes	1 x 18 optional	1 x 18 optional	1 x 24	1 x 24	1 x 30	
PATIENT LOCKER BAY	yes	1 x 4	1 x 4	1 x 8	1 x 8	1 x 16	
COMPUTED RADIOLOGY (CR) PROCESSING				1 x 20	1 x 30	1 x 40	
DARK ROOM	yes	1 x 6	1 x 6	1 x 8	1 x 8	1 x 10	
SCREENING ROOM (FLUOROSCOPY)	yes		1 x 36	1 x 36	1 x 36	2 x 36	
CONTRAST MEDIA PREPARATION ROOM/BAY			1 x 5	1 x 5	1 x 5	2 x 5	
PATIENT TOILET –	yes		1 x 6	1 x 6	1 x 6	2 x 6	May include shower
PATIENT TOILET – ACCESSIBLE	yes		1 x 5	1 x 5	1 x 5	2 x 5	
BAY- RESUSCITATION TROLLEY	yes		1 x 2	1 x 2	1 x 2	2 x 2	

## ULTRASOUND, MAMMOGRAPHY & C.T SCANNING

ROOM/ SPACE	Standard Component	Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
SUB WAITING	yes	2 x 6	2 x 6	2 x 10	2 x 12	
ULTRASOUND ROOM	yes	1 x 12	2 x 12	2 x 12	3 x 12	
PATIENT CHANGE	yes	2 x 2	2 x 2	4 x 2	4 x 2	
PATIENT CHANGE – ACCESSIBLE	yes	2 x 6	2 x 6	4 x 6	4 x 6	
MAMMOGRAPHY ROOM	yes		1 x 16	2 x 16	3 x 16	
PATIENT CHANGE – MAMMO.	yes		1 x 2	2 x 2	3 x 2	
MAMMOGRAPHY PROCESSOR			1 x 6	1 x 6	2 x 6	
ULTRASOUND/MAMMOGRAPHY PREP ROOM/LAB			1 x 9	1 x 9	2 x 9	
C.T SCANNING ROOM	yes	1 x 45	1 x 45	2 x 45	2 x 45	
C.T CONTROL ROOM	yes	1 x 12	1 x 12	1 x 12	1 x 12	Shared between 2 rooms
C.T COMPUTER ROOM	yes	1 x 12	1 x 12	2 x 12	2 x 12	Optional



ROOM/ SPACE	Standard Component		Level 3 Qty x m2	Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
SUPPORT AREAS							
PATIENT CHANGE	yes		2 x 4	2 x 4	4 x 4	4 x 4	
PATIENT CHANGE – ACCESSIBLE	yes		2 x 4	2 x 4	4 x 4	4 x 4	
PATIENT HOLDING	yes		2 x 8	2 x 8	4 x 8	4 x 8	
CLEAN UTILITY/PREP ROOM	yes			1 x 8	1 x 10	1 x 12	
BAY – LINEN TROLLEY	yes		1 x 1	1 x 1	2 x 1	2 x 1	
BAY – RESUSCITATION TROLLEY	yes		1 x 2	1 x 2	2 x 2	2 x 2	

### ANGIOGRAPHY/DSA

ROOM/ SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
ANAESTHETIC INDUCTION ROOM	yes			1 x 15	1 x 15	1 x 15	Optional
SCRUB-UP/GOWNING	yes			1 x 6	1 x 6	1 x 6	
STERILE STOCK/SET-UP ROOM	yes			1 x 16	1 x 18	1 x 24	
ANGIOGRAPHY ROOM	yes			1 x 42	2 x 42	3 x 42	
CONTROL ROOM – SINGLE	yes			1 x 14	shared	shared	Shared between 2 procedure rooms
CONTROL ROOM – SHARED	yes				1 x 24	1 x 24	
COMPUTER EQUIPMENT	yes			1 x 6	2 x 6	3 x 6	
REPORTING ROOM	yes			1 x 8	1 x 12	1 x 16	
BAY – RESUSCITATION TROLLEY	yes			1 x 2	1 x 2	2 x 2	
STORE – FILMS/CDs/VIDEOS				1 x 6	1 x 8	1 x 8	

### MRI

ROOM/ SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
BAY – HANDWASHING (TYPE A)	yes			1 x 1	1 x 1	1 x 1	
MRI SCANNING ROOM	yes			1 x 42	1 x 42	2 x 42	
MRI CONTROL	yes			1 x 10	1 x 10	1 x 10	Shared between 2 MRI rooms
MRI COMPUTER ROOM	yes			1 x 10	1 x 10	2 x 10	
OFFICE/REPORTING	yes			1 x 9	1 x 9	2 x 9	
PATIENT CHANGE	yes			2 x 2	2 x 2	4 x 2	
PATIENT LOCKER	yes			1 x 4	1 x 4	1 x 8	





ROOM/ SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
SUB-WAITING	yes			1 x 20	1 x 30	1 x 50	
PATIENT TOILET	yes			2 x 2	2 x 2	4 x 2	
BAY – RESUSCITATION TROLLEY	yes			1 x 2	1 x 2	2 x 2	

#### PATIENT HOLDING/ RECOVERY AREAS

ROOM/ SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
PATIENT BAY – HOLDING/RECOVERY	yes			4 x 9	6 x 9	8 x 9	to be shared
STAFF STATION	yes			1 x 10	1 x 10	1 x 15	
CLEAN UTILITY	yes			1 x 10	1 x 10	1 x 12	
BAY – LINEN TROLLEY	yes			1 x 1	2 x 1	4 x 1	
BAY – RESUSCITATION TROLLEY	yes			1 x 2	1 x 2	2 x 2	
DIRTY UTILITY – SUB	yes			1 x 8	1 x 10	1 x 12	
DISPOSAL ROOM	yes			1 x 8	1 x 8	2 x 8	
STORE – EQUIPMENT	yes			1 x 9	1 x 12	2 x 12	
DISCOUNTED CIRCULATION				35%	35%	35%	

#### STAFF OFFICES & REPORTING AREAS

ROOM/ SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
OFFICE – SINGLE 12M2 (DIRECTOR)	yes			1 x 12	1 x 12	2 x 2	
OFFICE – SINGLE 9M2 (RADIOLOGIST)	yes			1 x 9	1 x 9	2 x 9	
OFFICE – SINGLE 9M2 (RADIOGRAPHER)	yes			1 x 9	1 x 9	2 x 9	
OFFICE – SINGLE 9M2 (NURSE MANAGER)	yes			1 x 9	1 x 9	1 x 9	
OFFICE – WORKSTATION	yes			2 x 6	4 x 6	6 x 6	Qty will depend on service plan
DIGITAL (PACS) REPORTING STATION				2 x 6	4 x 6	6 x 6	Qty will depend on service plan

#### STAFF AMENITIES

ROOM/ SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
FILM LIBRARY/STUDY				1 x 10	1 x 15	1 x 20	
QUIET STUDY ROOM					1 x 9	1 x 9	Optional
STORE – PHOTOCOPY/STATIONERY	yes				1 x 8	1 x 10	
MEETING ROOM – SMALL/MEDIUM	yes				1 x 15	1 x 20	



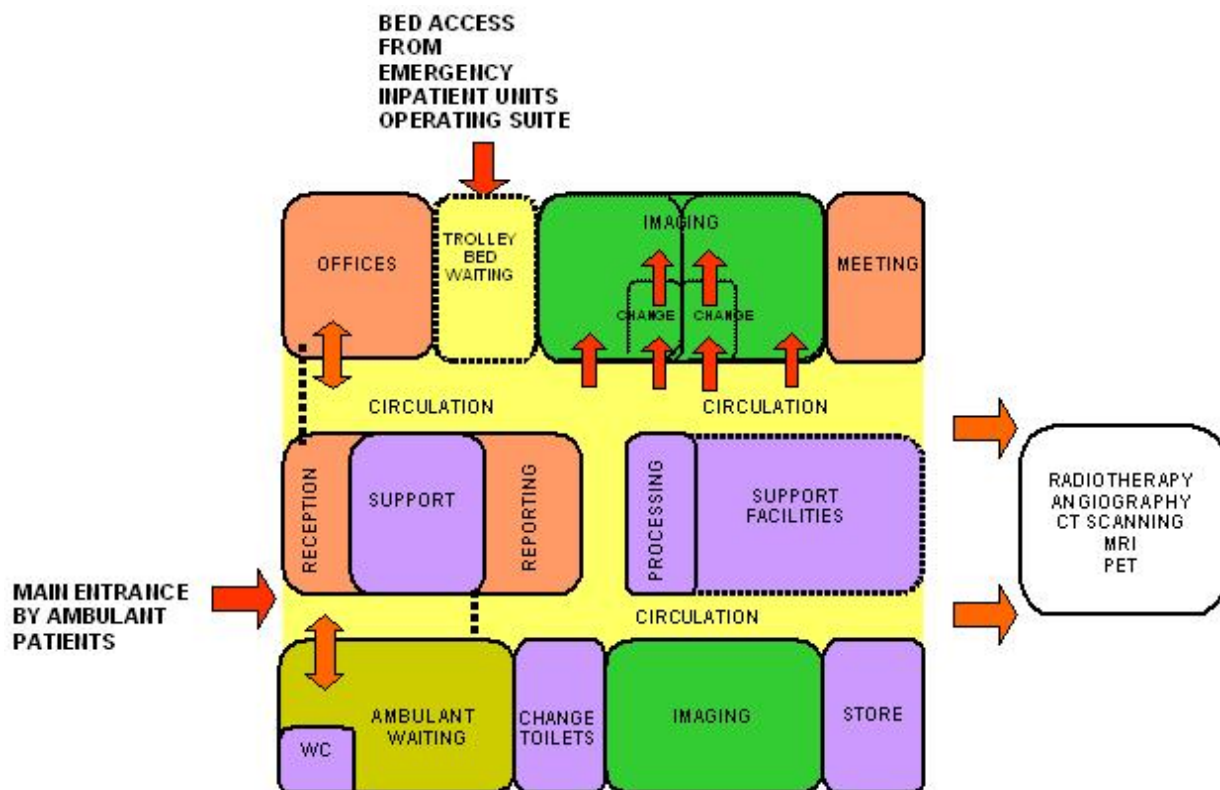
ROOM/ SPACE	Standard Component			Level 4 Qty x m2	Level 5 Qty x m2	Level 6 Qty x m2	Remarks
MEETING ROOM – LARGE	yes				2 x 15	2 x 20	
STAFF ROOM	yes			1 x 30	1 x 30	1 x 40	
STAFF PROPERTY	yes			1 x 4			
STAFF SHOWER	yes			2 x 2			
STAFF TOILET	yes			2 x 3			
STAFF CHANGE – MALE/FEMALE	yes				2 x 14	2 x 14	Separate male/female areas includes shower/toilets/locker

Please note the following:

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

## 24.6 Functional Relationship Diagram

### 24.6.1 Medical Imaging-General Functional Relationship Diagram



## 24.7 References and Further Reading

- Australasian Health Facility Guidelines. (AusHFG Version 3.0), 2009; refer to website [www.healthfacilitydesign.com.au](http://www.healthfacilitydesign.com.au)
- Guidelines for Design and Construction of Health Care Facilities; The Facility Guidelines Institute, 2010 Edition.
- Design Guidelines for Hospitals and Day Procedure Centres, Department of Human Services Victoria, 2005



The Indian Health Facility Guidelines recommends the use of **HFBS** “**Health Facility Briefing System**” to edit all room data sheet information for your project.

HFBS provides edit access to all HFG India standard rooms, departments, and more than 40 report templates.

## HFBS Health Facility Briefing System



### Briefing Module

The Health Facility Briefing System (HFBS) has numerous modules available via annual subscription. It suits healthcare Architects, Medical Planners, Equipment Planners Project Managers and Health Authorities.

Use the HFBS Briefing Module to quickly drag in health facility departments or pre-configured room templates from the HFG standard, edit the room features such as finishes, furniture, fittings, fixtures, medical equipment, engineering services. The system can print or download as PDF more than 100 custom reports including room data sheets, schedules, and more...

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## HFBS

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