AusHFG
Australasian Health Facility Guidelines

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General X-Ray Room

Room Code	XRAY
Briefed Area	38.00 m²
Ceiling Height	3.0 m
Occupancy	1 patient; 1-2 staff
Hours of Operation	Up to 24 hours

Description — The General X-ray Room provides the space and equipment for undertaking general radiographic imaging. This Standard Component may be located within a Medical Imaging Unit or Emergency Unit.

Electrical
- PROTECTION: body protected ✓
- PROTECTION: cardiac protected ☐

Lighting
- LIGHTING: general ✓
- LIGHTING: colour corrected ✓
- LIGHTING: dimmable ✓
- LIGHTING: indirect ☐

Nurse Call and Duress
- NURSE CALL SYSTEM: buttons / handset ✓
- NURSE CALL SYSTEM: annunciator ☐
- DURESS: fixed ✓
- DURESS: wireless coverage ✓

Security
- ACCESS CONTROL: to door ☐
- ACCESS CONTROL: to item / joinery ☐
- INTERCOM: service communications ✓
- INTERCOM: security and access control ☐
- CCTV: camera coverage within room ☐
- INTRUSION DETECTION: door monitoring ☐
- INTRUSION DETECTION: spatial monitoring ☐

ICT and Audio Visual
- AUDIO VISUAL: patient entertainment system ☐
- AUDIO VISUAL: visitor experiance system ☐
- AUDIO VISUAL: virtual collaboration system ☐
- AUDIO VISUAL: clinical support system ☐
- AUDIO VISUAL: digital operating room system ☐

Accessibility
- AUDIO: hearing augmentation ☐
- VISUAL: luminance contrast ✓
- SIGNAGE: accessible, statuatory ☐

HVAC
- AIRCONDITIONING: general ✓
- AIRCONDITIONING: HEPA filtered ☐
- AIRCONDITIONING: positive pressure ☐
- AIRCONDITIONING: negative pressure ☐
- VENTILATION: exhaust ☐
- VENTILATION: supply ☐
- VENTILATION: natural ☐

Medical Gas
- MEDICAL GAS: general anaesthesia ☐
- MEDICAL GAS: special care ☐
- MEDICAL GAS: special care, neonatal ventilation ☐
- MEDICAL GAS: birthing ☐

Hydraulic
- WATER: drinking ✓
- WATER: specialty ☐
- DRAINAGE: sanitary ✓
- DRAINAGE: specialty ☐

Fire
- DETECTION: smoke ✓
- DETECTION: heat ☐

Shielding
- SHIELDING: ionising radiation ✓
- SHIELDING: magentic and radio frequency ☐

Acoustics

SPEECH PRIVACY:
not private ···· moderate ···· ▼private ···· confidential

NOISE SENSITIVITY:
not sensitive ···· ▼medium sensitive ···· sensitive

NOISE GENERATION:
low ···· ▼moderate ···· high ···· very high

Additional Considerations

● Equipment is to be installed to manufacturer's specifications with sufficient clearances for maintenance access. Installation and replacement access routes should also be considered. Additional building services connections and outlets are to be coordinated to suit equipment requirements. Cable ducts for services between the patient table, vertical bucky, imaging device and the control area will be required and must be coordinated with the MME vendor.

● A unistrut type ceiling may be required depending on equipment to be installed.

● Radiation shielding requirements are to be assessed and advised by a qualified Radiation Consultant to suit the practice, workload and equipment procured, and all shielding on the Standard Component is indicative. Depending on the equipment selected, a door may be required between the imaging area and the control area to provide adequate shielding.

● An 'X-ray in Use' light system is required with signs that are illuminated when the imaging device is on and turned off when it stops. Signs are to be at all doors entering the room.

● The room may need to accommodate a patient on a bed to either be transferred to the x-ray table or have the x-ray performed while they are on the bed. Bed movement into, around and out of the room, and patient transfer should be considered during planning to reduce manual handling.

● Provision of additional speakers and microphones within the room for communication between staff and the patient from the control area will be dependent on service requirements, final room layout and equipment selection.

● Provision of height adjustable workstations or fixed joinery is to be in line with service requirements and local WHS policies.

● The type, extent and configuration of storage within the room for consumables, linen, equipment, etc. will be dependent on service requirements, operational policies for stock centralisation/decanting and infection prevention and control policies.

● Hours of operation depend on the service in which this room is located. Ambulatory medical imaging services may only operate during business hours or extended business hours, some small hospital services may have an on-call, after-hours service. Large units are likely to provide a 24-hour service, especially where a satellite service is provided with an emergency department.

● Size, type and quantity of waste bins is dependent on waste management policies (e.g. for waste separation, frequency of waste removal, etc.) and service requirements.

● Requirement for fixed and/or mobile duress to be confirmed to suit service requirements.

● An operational model for responding to calls from staff/patients will be needed to support the inclusion of a nurse call system and is to be determined based on service requirements.

● Provision of an intercom for staff communication within the department is dependent on service requirements. This function may be provided as part of the telephone system.

● The final services and configuration of the Medical Services Panel (MSP) - medical gases, nurse call, power and data - will be dependent on service requirements.

● The need for and extent of emergency power and UPS must be reviewed to suit site specific requirements and confirmed based on risk assessment considering the impact of a power outage on patient care/safety.

Doors and Windows

CODE	DESCRIPTION	COMMENT
DOHI-204.02	DOOR: hinged, 2 leaves, 1800 clear opening, solid, shielded	to imaging area
AFDPR-006.01	DOOR PROTECTION: plate, to 900H	to both sides of door
DOHI-003.02	DOOR: hinged, 1 leaf, 900 clear opening, solid, shielded	optional - to control workstation area
AFDPR-001.01	DOOR PROTECTION: kickplate, to 300H	to control workstation side
AFDPR-006.01	DOOR PROTECTION: plate, to 900H	to corridor side, extent dependent on movement of beds and mobile equipment
DOHI-003.02	DOOR: hinged, 1 leaf, 900 clear opening, solid, shielded	optional - to change room if provided
AFDPR-001.01	DOOR PROTECTION: kickplate, to 300H	to change room side
AFDPR-006.01	DOOR PROTECTION: plate, to 900H	to imaging room side
WIFX-008.03	WINDOW: fixed, internal, single glazed, sill at 1050H, shielded, lead glass	for observation from control room

Finishes

CODE	DESCRIPTION	COMMENT
FLVY-101	FLOOR FINISH: vinyl, seamless, standard slip resistance	minimum slip rating R10 / pendulum P3 or agreed equivalent to extend under basin or inset section of non-slip vinyl required
FLSK-021	SKIRTING: vinyl, integral with floor vinyl, coved	
WLFI-002	WALL FINISH: paint, clinical areas	
WLFI-101	SPLASHBACK: vinyl	to basin
WLFI-011.06	WALL FINISH: vinyl, to 2100 AFFL	
CLTI-021	CEILING: drop-in tiles, prefinished	
CLCN-041	CORNICE: wall trim fixing, prefinished	

Joinery

CODE	DESCRIPTION	GROUP	QTY	COMMENT
JOBE-061	BENCH: 750D, laminate	1	1	to control workstation area
JOBE-251	CAP: cable access	1	2	

Fittings, Furniture and Equipment (FF&E)

CODE	DESCRIPTION	GROUP	QTY	COMMENT
FIBM-019	WHITEBOARD: fixed, magnetic	2	1	to control workstation area
FIDI-101	DISPENSER: PPE, disposable masks, wall mounted	2	1	optional
FIDI-106	DISPENSER: PPE, disposable gloves, wall mounted	2	1	
FIDI-111	DISPENSER: PPE, disposable gowns/aprons, wall mounted	2	1	optional
FIDI-181	DISPENSER: cleaning wipes, wall mounted	2	1	optional - for microfibre wipes
FIDI-181	DISPENSER: cleaning wipes, wall mounted	2	1	
FIDI-191	DISPENSER: emesis bags, wall mounted	2	1	optional
FIDI-231	DISPENSER: paper towel, wall mounted	2	1	to basin
FIDI-241	DISPENSER: alcohol-based hand rub, wall mounted	2	1	
FIDI-256	DISPENSER: soap, wall mounted	2	1	to basin
FIDI-261	DISPENSER: soap, antiseptic, wall mounted	2	1	to basin
FIHR-030	HOOK: equipment, patient slide	1	1	optional - provide if patient slide required
FIHR-101	BRACKET: suction bottle, wall mounted	2	1	
FIHR-126	RACK: lead apron, multi, wall mounted	2	1	with in wall structural support to product specifications
FIHR-201	BRACKET: central processing unit (CPU), under bench/desk	2	2	1 to PACS CPU, 1 to x-ray CPU
FIHR-221	BRACKET: computer display screen, dual, articulated, bench/desk mounted	2	1	
FQBS-101	CHAIR: visitor, clinical areas	3	1	
FQBS-172	CHAIR: office, ergonomic, high	3	1	
FQCL-211	LINEN CARRIER: dirty, single skip	3	1	
FQGE-121	CLOCK: analogue, battery operated	3	1	
FQSM-287	CABINET: mobile, 1800H nominal, tambour unit	3	1	type and extent of storage to suit service requirements, operational policies for stock centralisation/decanting and infection prevention and control policies
FQWS-051	BIN: general waste, 20L	3	1	to basin
FQWS-231	BIN: clinical waste, 20L	3	1	
HYBA-121	BASIN: type B, handwashing	1	1	
HYTP-067	TAPWARE: basin, tap set, wall mounted, lever handles	1	1	
ITAV-152	SPEAKER: AV system, ceiling recessed	1	1	
ITNE-076	TELEPHONE: handset, wall mounted	2	1	to control workstation area
ITNE-153	COMPUTER: central processing unit (CPU), PACS	3	1	
ITNE-171	DISPLAY SCREEN: computer	3	1	on dual arm bracket
ITNE-172	DISPLAY SCREEN: computer, PACS	3	1	on dual arm bracket

CODE	DESCRIPTION	GROUP	QTY	COMMENT
ITNE-201	INPUT DEVICE: keyboard and mouse	3	1	
MIXR-033	HOLDER: general x-ray, detector, floor standing	3	1	to control workstation area, under bench, for storage of charged imaging plates
MIXR-034	CHARGER: general x-ray, detector, battery, desktop	2	1	
MIXR-041	STAND: general x-ray, image stitching, lead ruler, mobile	3	1	optional - may be shared between multiple rooms
MMBE-031	SLIDE: patient transfer	3	1	optional - patient transfer methods and equipment to meet local WHS policies
MMGE-191	CANNISTER: suction bottle	3	1	

Major Medical Equipment (MME)

CODE	DESCRIPTION	GROUP	QTY	COMMENT
MIXR-001	IMAGING DEVICE: general x-ray, tube head, ceiling suspended	2	1	
MIXR-005	IMAGING DEVICE: general x-ray, wall bucky, fixed	2	1	
MIXR-009	TABLE: patient, general x-ray	2	1	may be floating top or elevating table
MIXR-012	CONTROL CONSOLE: general x-ray, dual display screens, keyboard and mouse, control unit, desktop	2	1	
MIXR-016	COMPUTER: general x-ray, central processing unit (CPU)	2	1	
MIXR-023	BOARD: distribution, general x-ray	2	1	
MIXR-025	GENERATOR: general x-ray, floor standing	2	1	
MIXR-026	GENERATOR: general x-ray, wall mounted	2	1	

Engineering Services

CODE	DESCRIPTION	GROUP	QTY	COMMENT
ELGP-105	GPO: single, wall mounted, cleaner	1	1	
ELGP-161	GPO: single, UPS, wall mounted	1	3	to control workstation area, extent of UPS to be confirmed to suit service and equipment requirements
ELGP-201	GPO: double, wall mounted	1	1	to workstation, over desk for portable devices
ELGP-231	GPO: double, emergency power, wall mounted	1	4	to control workstation
ELGP-312	ISOLATOR: three phase, with socket outlet, wall mounted	1	1	to generator cabinet, power requirements to be confirmed with MME vendor
ELPR-071	RCD: residual current device, wall mounted	1	2	to control workstation area
ELSW-021	SWITCH: light, dimmer	1	2	to general room lighting, 1 to room entry, 1 to control workstation area
ELSW-121	BUTTON: emergency stop, wall mounted	1	1	to control workstation area, main power emergency stop, refer to equipment manufacturer for safety and compatibility with equipment
HYDR-201	DIRECT CONNECTION: waste water	1	1	to basin
HYTP-451	DIRECT CONNECTION: water, cold	1	1	to basin
HYTP-453	DIRECT CONNECTION: water, warm	1	1	to basin
ITCL-181	BUTTON: staff assist, with cancel, wall mounted	1	1	to control workstation area
ITCL-191	BUTTON: emergency, with cancel, wall mounted	1	2	1 above medical services panel, 1 to control workstation area

CODE	DESCRIPTION	GROUP	QTY	COMMENT
ITIN-016	OUTLET: data, single RJ45, wall mounted	1	1	to wall mounted telephone
ITIN-026	OUTLET: data, double RJ45, wall mounted	1	2	to control workstation
ITSE-061	BUTTON: security, duress, fixed, wall mounted	1	2	1 close to imaging device, 1 to control workstation area
ITSE-166	INTERCOM: audio, slave, wall mounted	1	1	optional - inclusion dependent on service requirements and ICT policies, may be integral function of telephone, to control workstation area
LIFX-213	LIGHT: illuminated sign, x-ray in use	1	3	outside all room entries, to automatically turn on when modality is in use

Medical Services Panels and Pendants

CODE	DESCRIPTION	GROUP	QTY	COMMENT
Panel 1				
MMSP-051	MEDICAL SERVICES PANEL: wall mounted	1	1	if this room is located within an emergency department the quantity of services may need to align with acute treatment bays to support use with trauma patients
ELGP-146	GPO: single, emergency power, on service panel	1	4	
ELPR-073	RCD: residual current device, on services panel	1	1	
ITCL-183	BUTTON: staff assist, with cancel, on services panel	1	1	
MGAS-022	OUTLET: medical air, on services panel	1	1	
MGAS-042	OUTLET: oxygen (O2), on services panel	1	1	
MGAS-062	OUTLET: suction, on services panel	1	1	
MGFP-021	FLOWMETER: medical air	3	1	
MGFP-041	FLOWMETER: oxygen	3	1	
MGFP-061	ADAPTER: suction	3	1	