

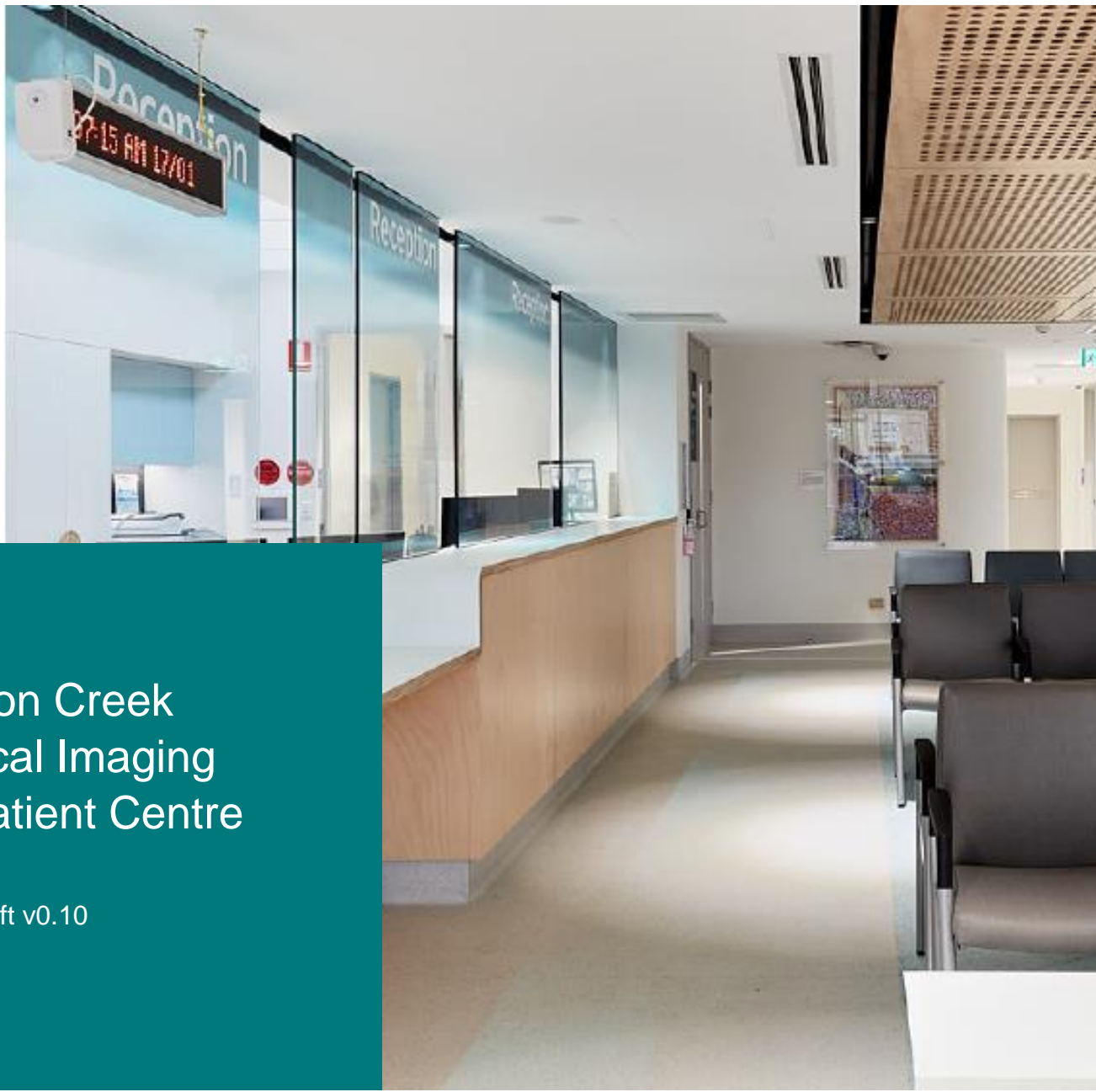


**ACT**  
Government

**Canberra Health  
Services**



# Model of Care



Weston Creek  
Medical Imaging  
Outpatient Centre

2022 Draft v0.10

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## Document version history

Version	Issue date	Issued by	Issued to	Reason for issue
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Final endorsed version will be v1.0

DRAFT

# 1. Introduction

This Model of Care (MoC) is for the Weston Creek Community Health Centre (WCCHC) Medical Imaging (MI) Outpatient Centre (Official name TBA). The MoC sets out the evidence-based framework for describing the right care, at the right time, by the right person / team and in the right location across the continuum of care. A clearly defined and articulated MoC helps ensure that all health professionals are 'viewing the same picture', working towards common goals and most importantly evaluating performance on an agreed basis.

This MoC:

- outlines the principles, benefits and elements of care
- provides the basis for how evidenced-based care is delivered to every patient, every day through integrated clinical practice, education and research; and
- contains information of patient / client flows (the areas from where individuals enter and exit the service) and service co-ordination, that is the linkages required for seamless treatment.

A MoC is a dynamic document and will be updated over time to support new evidence and improved ways of working. Any updates will include relevant change management principles and processes to ensure clear engagement and communication. This MoC will be stored on the Canberra Health Services (CHS) 'Model of Care' intranet site. It will be reviewed and updated regularly through consultation with the relevant stakeholders.

CHS provides health services to the ACT, a catchment of approximately 400,000 people, and services the surrounding Southern NSW region which includes the Bega Valley, Bombala, Cooma-Monaro, Eurobodalla, Goulburn, Mulwaree, Palerang, Queanbeyan, Snowy River, Upper Lachlan Shire and the Yass Valley.

CHS administers a range of publicly funded health facilities, programs and services including but not limited to:

- **Canberra Hospital (CH):** a tertiary hospital providing trauma services and most major medical and surgical sub-specialty services.
- **Centenary Hospital for Women and Children (CHWC):** located on the CH campus and offers a range of services for women, children and families.
- **University of Canberra Hospital (UCH) Specialist Centre for Rehabilitation, Recovery and Research:** a rehabilitation facility, with inpatient beds, day programs and outpatient services.
- **Mental Health, Justice Health, Alcohol and Drug Services:** provide a range of health services from prevention and treatment through to recovery and maintenance at a number of locations and in varied environments for people requiring mental health care and support.
- **Dhulwa Secure Mental Health Unit:** a purpose designed and built facility providing clinical programs and treatment options for people suffering from acute mental health issues.
- **Community health centres and community-based health services:** providing a range of general and specialist health services to people of all ages.
- **Walk-in Centres (WiC):** which provide free treatment for minor illness and injury.

## 2. Principles

The CHS vision and role reflects what the health service stands for, to be known as and delivers every day. The vision and role are more than just words, they are a promise to all, the patients and their families and to the community. All CHS staff have a role to play in delivering on this promise:

- Vision: Creating exceptional health care together
- Role: To be a health service that is trusted by our community

The values together with the vision and role, tell the world what CHS stands for as an organisation. They reflect who CHS is now, and what CHS wants to be known for. They capture CHS commitment to delivering exceptional health care to the community. The CHS values are:

- We are reliable - we always do what we say
- We are progressive - we embrace innovation
- We are respectful - we value everyone
- We are kind - we make everyone feel welcome and safe.

The CHS [Strategic Plan](#) sets out the path forward as an organisation for the next three years. It is values driven—it outlines how CHS will deliver against the vision of ‘creating exceptional health care together’ for consumers, their families, and carers.

The CHS [Partnering with Consumers Framework](#) provides clear principles for a shared understanding of approach and what is required from all team members for effective partnerships with consumers and carers in line with the organisations values. The principles have been developed in collaboration with consumer and carer organisations and underpin this Framework.

The MI Outpatient Centre vision statement and motto is *“To provide state of the art quality care, diagnosis and treatment in a productive team-based environment which excels through communication”* and *“Medical Imaging – Central to Care”*.

## 3. Care Setting / Description of Service

The MI Outpatient Centre forms part of the CHS Medical Services Group and is located at the WCCHC, 24 Parkinson Street, Weston ACT 2611. The WCCHC is managed by the Division of Rehabilitation, Aged and Community Services (RACS) and the location brings together a range of CHS community services, being:

- The Weston Creek WiC, Division of Cancer and Ambulatory Support (CAS)
- ACT Pathology, Pathology Division, Medical Services Group
- Community Nursing, RACS
- Renal Dialysis Unit, Division of Medicine
- Maternal and Child Health Service, Division of Women, Youth and Children (WYC); and
- Access and Sensory Covid Vaccination Clinic, CAS.

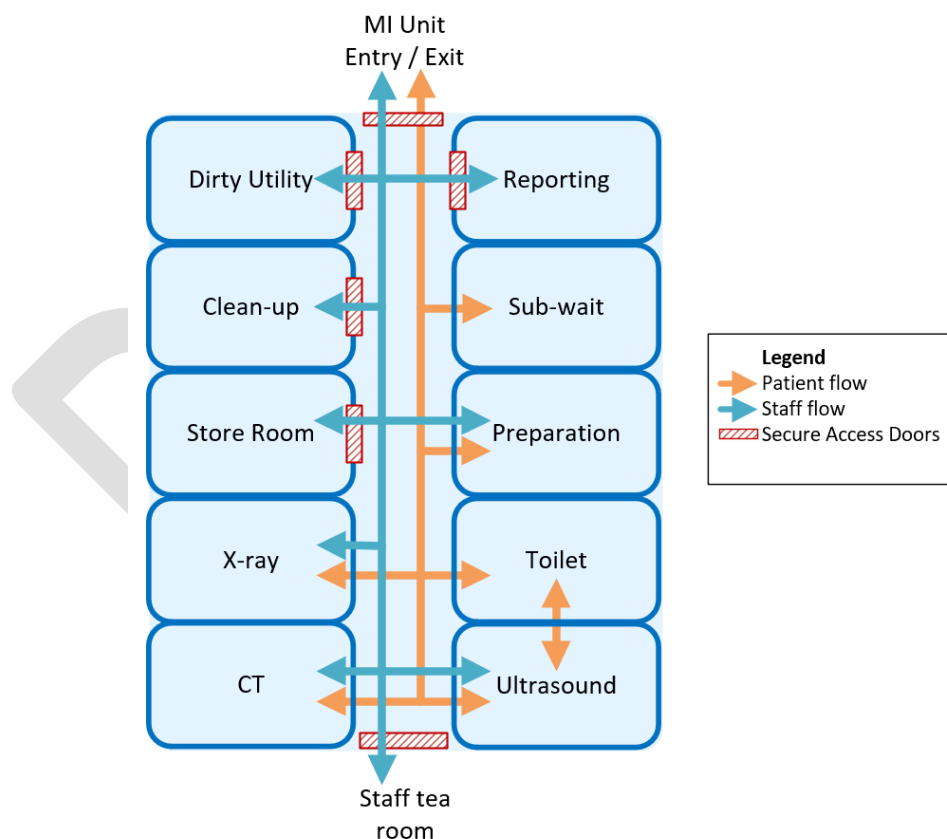
Operating as a Level 2 Role Delineation<sup>1</sup> Core Service, the MI Outpatient Centre provides low risk ambulatory diagnostic imaging services between the hours of 9am to 5pm, weekdays. Imaging services include:

- Computed Tomography (CT)
- Ultrasound (US); and
- General X-ray.

Functional areas within the MI unit of the WCCHC include an X-ray Imaging Room, CT Imaging Room, US Imaging Room, accessible change / toilet, two standard size change rooms, Cannulation Bay, Sub Wait and clinical support staff only areas consisting of two Imaging Control Rooms, a Reporting Room, Disposal Room, Clean up Room and General Storeroom. WCCHC spaces that support the MI service include the Reception and Waiting Room, shared staff amenities and Staff Tea Room (Diagram 1).

The centre also allows for accessibility for those (both clients and visiting family / carers) with mobility aids and the size of the imaging rooms are designed to accommodate procedural imaging if warranted in the future. The design, layout, wayfinding and inclusion of artwork elements ensures a welcoming environment that enhances client, visitor and staff experience and promotes general wellbeing.

Diagram 1. Care Setting



1. NSW Guide to the Role Delineation of Clinical Services 2021 (5th Edition). Available online: [Guide to the Role Delineation of Clinical Services \(2021\) - Services \(nsw.gov.au\)](https://www.nsw.gov.au/guide-to-the-role-delineation-of-clinical-services-2021-services)

## Target Population

Target population are eligible adults, youths and children requiring low risk ambulatory CT, X-ray, and US diagnostic imaging requirements. Clients will include those referred from pre-booked CH outpatient appointments, community walk-ins referred by public and or private GPs. WiC nurse-initiated X-ray referrals accepted as per scope of practice.

Each modality has specific eligibility and service exclusions such as age limits and types of referral / scans. Overarching service exclusions are provided below, with individual modality eligibility provided in the Service Overview section.

### Service exclusions:

- Urgent referrals
- clients unable to self-transfer
- co-existing health conditions, complex comorbidities and / or cytotoxic precautions
- clients receiving Chemotherapy and / or within the seven-day precaution observation period
- history of challenging venous access / central venous access and / or allergy to contrast mediums (CT only)
- suspect / confirmed infectious respiratory illness or worsening respiratory status.

To access the MI Outpatient Centre, clients will need to be ambulant and / or able to self-change into a gown / scrub if required, and self-transfer from mobility aid to scanning equipment. Clients with complex health requirements will be referred to the CH MI Department for imaging services. Clients who are Medicare ineligible will be advised of costs and privately billed.

If it is identified through the booking process that the client requires an interpreter, it will be documented as part of the scheduling notes and a National Translating and Interpreting Service (TIS) telephone interpreter will be utilised for the appointment.

## Service Overview

MI is the production of images of the internal structure of the human body that enables diagnosis and monitoring of disease progression and contributes to the planning of treatment. MI at critical points in a persons' health care journey directs resources by rationalising the need for intervention and targeting it where it will have the greatest benefit.

### CT

CT scanning uses X-ray and computer technology to create detailed tomographic (cross-sectional) digital images, both two and three dimensional. CT scanning equipment consists of a rotating tube on a fixed ring with a sliding table for the client to lie on. Multiple images are taken in slices which are combined using computer technology.

A CT scan can be done for the head or brain, neck, chest, abdomen, pelvis, sinus, spine and also utilised to detect bone and joint problems; cancer; heart, lung, and liver problems; internal injuries caused by accidents; tumour; internal bleeding and blood clot; excess fluid; and infection. CT scan results can determine how the body is responding to ongoing treatment and / or part of planned surgery requirements.

The MI Outpatient Centre has one CT scanner. General CT diagnostic imaging services will be provided with some studies requiring oral contrast and / or intravenous (IV) iodine contrast as per the referring practitioner specifications. The administration of IV contrast will require the insertion of an IV cannula.

#### Service Eligibility

Clients aged over 16 years and > 50kg requiring non-complex, low risk CT scans with or without contrast.

#### Service Exclusions

Clients < 16 years of age, interventional CT, cardiac CT, scans requiring sedation, clients requiring IV contrast who have a history of complex venous access and / or prior history of allergenic response to contrast are out of scope for this service. Clients who fit any of these exclusion criteria's will be referred to the CH MI Department.

On occasion, clients who initially present as suitable for the service may be deemed not suitable following unsuccessful IVC access and / or complications with scanning preparation. Clients deemed not suitable will be referred to the CH MI Department for their scanning requirements.

## X-ray

Plain X-rays are the simplest of medical images created through X-radiation absorption by different structures or parts in the body. A dense structure, such as bone, absorbs a high percentage of the X-ray beam (which appears light grey on the image), whereas low-density structures, such as soft tissues, absorb a small percentage (which appears dark grey on the image).

X-ray imaging is performed to see if different organs in the body are injured, check for fractures, diagnose, and manage disease processes, and to check the location of foreign objects that may have been swallowed. The speed of the test will vary depending on the part of the body being examined, position (i.e. standing, sitting or lying), and the number of X-rays taken.

The MI Outpatient Centre has one X-ray room and will provide a range of general imaging services for all ages who meet service eligibility.

#### CH Outpatient Fracture Clinic

Clients requiring an X-ray prior to attending the Outpatient Fracture Clinic will be required to book an appointment the day prior to a morning clinic appointment, or in the morning for an afternoon clinic. Walk-in appointments may not be available during busy periods.

#### Service Eligibility

Adults and children requiring non-complex, low risk X-ray examinations. Walk in X-ray clients must present prior to 4pm to ensure the scan can be performed.

#### Service Exclusion

Nil specific.

## US

US utilises high frequency sound waves for diagnostic purposes and is effective in examining abdominal and other organs, to watch blood flow in the arteries or veins throughout the body, and to



evaluate the musculoskeletal system (muscles, bones and joints). The MI Outpatient Centre has one room equipped with an US for general imaging requests. Room layout enables dual side scanning.

#### Service Eligibility

Adults and children requiring non-complex, low risk US scans.

#### Service Exclusion

Procedural and Obstetric US (i.e injections and biopsies, pregnancy viability, nuchal translucency, morphology, and anomaly scans) are out of scope for this service.

## 4. Workflow and Client Journey

The MI Outpatient Centre client journey workflow will enable the service to operate from 9:00am to 5:00pm business days with the aim to operate all equipment to maximum efficiency, whilst enabling a training pathway and program that complements the main MI Department at CH.

The client journey (Diagram 2) presents the pathway of progression through the stages of referral, protocolling, scanning to final report circulated to the care provider/s. The journey aims to ensure people get the right care, at the right time, by the right team and in the right place. An overview of the client's journey through the MI unit is provided in Diagram 2.

The following work process outlines the client pathway from referral, scheduling an appointment, undergoing an imaging procedure and receiving the MI report.

#### Referral and service eligibility

All imaging requests must have a valid referral. Clinicians referring from CHS or Calvary Public Hospital Bruce (CPHB) are to utilise the electronic referral processes through the Digital Health Record (DHR) electronic system.

External referrers (GPs, Specialists) should complete a paper request that can be faxed or otherwise delivered to the CH MI Department (i.e in person or electronically) for US and CT, or in person for X-ray only. External requests must be complete, legible, and able to be scanned or attached into the DHR by MI staff / WCCHC Administration staff when they are received.

MI Outpatient Centre X-ray requests will be accepted for walk-in (non-appointment) attendance for same day / next day imaging service, where scheduling availability and capacity permits. Clients presenting for CT or US without a scheduled appointment, inclusive of those who are deemed not suitable for the service following further pre-screening preparation, will be directed to schedule an appointment or to access the main CH MI Department.

#### Appointment scheduling

Referrals received for CT, US and X-ray (where relevant) will be scheduled through the main CH MI reception once a referral is received and clinically vetted for MI Outpatient Centre location eligibility.

All clients requesting an appointment (i.e by phone) will be pre-screened for service eligibility. Clients will be asked to bring a copy of their referral, Medicare card and any concessions to the appointment.

Clients will be recommended to wear comfortable clothing with easy access to the body area being examined. Walk in X-ray clients must present prior to 4pm to ensure the scan can be performed.

## Arrival

On arrival all clients will be welcomed by the main WCCHC reception and entered as arrived for their appointment. Pre scan screening and consent forms will be provided by WCCHC reception staff and completed by the client whilst waiting. Clients will be asked to wait in the main WCCHC waiting room until called by the Radiographer or Sonographer.

## Delays

In some circumstances appointment delays may occur. Arrived clients waiting for scanning who are impacted by delays will remain in the main reception waiting area or the sub wait until called by the Radiographer / Sonographer. Information regarding delays will be communicated to the arrived clients via text message prompted by the modality staff member. Scheduled clients will be advised to arrive on time for appointments to prevent delays and X-ray walk-in requests will occur based on order of arrival and scheduling capacity.

## Preparation

Depending on the imaging service required, the Radiographer or Sonographer may ask clients to change into gowns or scrubs prior to a scanning procedure. Change facilities are provided, with personal belongings and valuables placed into a plastic carrier tub and will remain with the client during scans, for all modalities.

Some CT procedures require the administration of oral or IV contrast. IV cannulation (IVC) insertion and removal procedures will occur in the Cannulation Bay or the CT Imaging Room if required.

## Sub Wait

Clients who are required to change from street clothes into a gown or scrubs may be required to wait for a short period in the MI Sub Wait if the Change Cubicle, Cannulation Bay or relevant Imaging Room is occupied. During peak periods the Sub Wait will need to be reserved for those wearing a gown / scrubs and clients completing their post CT scan (15 minute) recovery wait.

## Imaging Procedure

During the imaging procedure, clients will be reassured, and staff will endeavour to resolve any concerns raised. Depending on the scan being performed, the client may be asked to either stand, sit or lie down. Comfort and privacy will be maintained by the Radiographer or Sonographer for the duration of the scan. For CT scans requiring IV contrast, this will be administered during the imaging procedure.

Depending on the type of scan, typical imaging procedure durations for each modality are:

- CT: 20 minutes
- X-ray: 6 - 10 minutes
- US: 30 minutes

## Recovery

There is no recovery period following an X-ray or US. Clients undergoing a CT scan with contrast will be required to wait 15 minutes post scan to ensure nil ill effect from the contrast. IVC removal will occur following the 15-minute recovery period.

## Departure

Following an imaging procedure, and / or removal of IVC, clients will change back into their street clothes. Used gowns / scrubs will be placed, by the client, into the provided plastic carrier tub for transfer to the soiled linen skip in the Disposal Room by the Radiographer / Sonographer. Each plastic tub will be cleaned prior to next use.

All used imaging equipment will be cleaned prior to next client use and dirty linen placed in the provided skips.

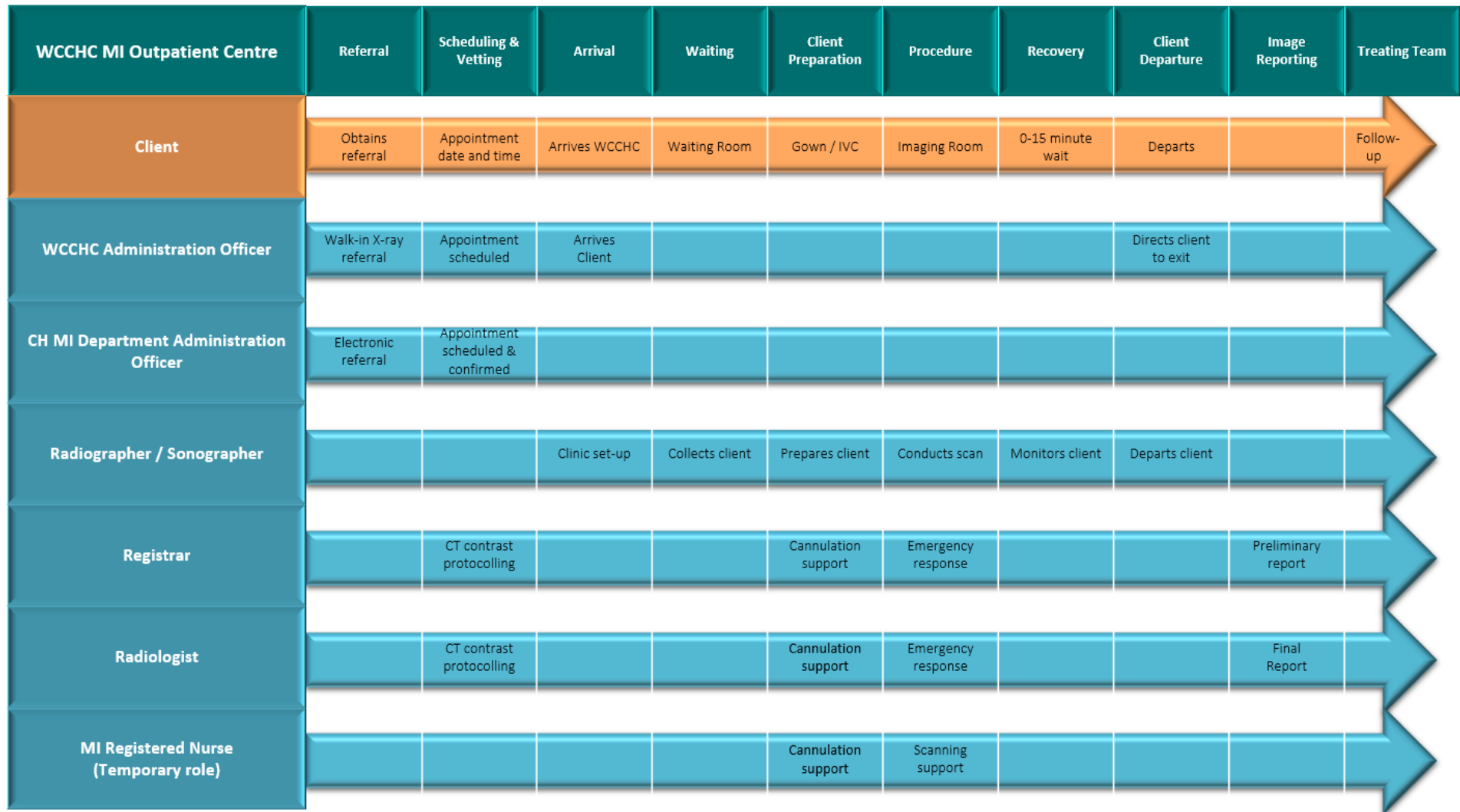
## Adverse Reactions and Medical Emergencies

A client may experience a reaction following the administration of IV or oral contrast that does not improve or self-resolve without specific medical treatment. An External Automated Defibrillator, portable oxygen tank and basic life support equipment is located within the unit and ACT Ambulance Service (ACTAS) will be directed to attend for emergencies. Operational emergency procedures will be in place and emergency medication (adrenaline, salbutamol and hydrocortisone) administration by a Medical Practitioner, if warranted, whilst waiting for ACTAS arrival. Adverse reaction and medical emergency response learning package competency will form part of service orientation and annually revalidated.

## Image Reporting

Scans undertaken in the MI Outpatient Centre will have a preliminary report prepared by a Registrar prior to a final report being validated by a Radiologist. This reporting process will be completed by close of business the following day. All diagnostic images will be available to be viewed through the EPIC Radiant, within the ACT Government network by authorised users. Upon request images may be transferred to digital media (i.e USB, CD / DVD) for viewing and / or distribution to external referrers with an accompanying validated MI report.

Diagram 2. Work process and client journey



## 5. Interdependencies

In line with CHS strong commitment for providing a patient / client centred health system, the MI Outpatient Centre will operate in close collaboration with other CHS services as part of contributing to clinical diagnosis and treatment pathways.

### CH MI Department

The CH MI Department is a Level 6 Role Delineation Clinical Support Service and provides diagnostic imaging to inpatient wards, theatres and outpatients referred from GPs, specialists, WiCs and clinics in the community with complex scanning requirements. The MI Department also works in close collaboration with the ED, Intensive Care Unit (ICU) and Operating Theatres as part of the provision of diagnostic imaging for trauma, acute and critically unwell patients, and surgical procedures.

The MI Department services includes:

- CT
- Magnetic Resonance Imaging (MRI)
- Angiography
- X-ray
- Orthopantomogram (OPG)
- Fluoroscopy
- Mammography
- Ultrasound
- Nuclear Medicine - iodine therapy, Positron Emission Tomography (PET) / CT, Gamma Cameras and Bone Mineral Density (BMD).

The CH MI Department also includes the MI Day Ward which provides preparation and post care support for outpatients requiring sedation as part of their imaging procedure.

### CH Outpatient's Department

CHS Outpatient services are provided for the assessment and management of conditions which require publicly provided specialist opinion above that available within the primary health care setting. A range of ambulatory outpatient services are provided and require MI as part of diagnosis and investigation for treatment of disease. Outpatient clinics are held at various times weekdays depending on the specialist involved. Clients referred for MI services who have complex health requirements will be referred to the CH MI Department for imaging services instead of the MI Outpatient Centre.

### WiC

WiCs provide one-off episodic care for non-life-threatening illnesses and injuries, including coughs and colds, ear problems, lower and upper limb fractures and cuts requiring suturing. The WiCs operate seven days per week from 7.30am to 10pm. WiC Advanced Practice Nurses and Nurse Practitioners can provide below the knee and below the shoulder arm injury X-ray referrals to the MI Outpatient Centre.

## Community Health Centres and Health Hubs

Community Health Centres provide a range of general and specialist health services to people of all ages. Locations are distributed across the main geographical regions of the territory and supported by smaller child and family health clinics and community Health Hubs.

Health Hubs provide the Canberra community with cost-effective, easily accessible health expertise as part of avoiding hospital admissions, improving hospital discharge transitions and providing care in the community, closer to home. This includes delivering clinical services and MoC that better support GPs, Specialist, community care providers and expanding partnerships with Non-Government Organisations (NGOs).

## 6. Workforce

The MI Outpatient Centre will operate through a workforce profile of Staff Specialist Radiologists, Registrars, Radiographers, Sonographers and Administration Support Officers (ASO). Daily staffing headcount and appointment scheduling will support a safe and high-quality service with sufficient staff breaks.

The MI Outpatient Centre service will operate from 09:00am to 5:00pm weekdays with last appointments scheduled at 4:00pm to allow for scans to be completed. The service will be closed from 12:30pm – 1:30pm to allow for morning scanning delays and staff lunch breaks.

Daily onsite staffing will consist of:

- Staff Specialist Radiologist
- Registrar
- Two CT Radiographers
- X-ray Radiographer
- Ultrasound Sonographer
- Registered Nurse (temporary three to six month duration)
- ASO support.

The MI Outpatient Centre workforce FTE and headcount is provided in [Appendix A](#) and role responsibilities outlined below:

- The Staff Specialist Radiologist will oversee clinical service provision, workflow, daily staffing requirements, referral protocolling, ordering CT contrast and IVC insertion and complete final interpretation, reporting and distribution of entire scan studies.
- Registrars will provide preliminary radiology reports, referral protocolling, ordering CT contrast and IVC insertion.
- Radiographers will prepare clients (screens / consents), including IVC insertion where required, perform X-ray and CT scans and monitor clients for 15 minutes post contrast administration. Two Radiographers will be rostered to CT each shift in response to the IVC procedural component, contrast administration and 15-minute recovery period to allow for service continuation.
- Sonographers will prepare clients and perform US scans.
- A Registered Nurse will be a temporary position for 3-6 months to support service commencement and IV cannulation whilst Radiographers complete IVC training / competency requirements.

- ASO within the CH MI Department will receive referrals, undertake initial service eligibility screening and scheduling appointments for eligible clients for CT, US and X-ray.
- The WCCHC ASO will work in consultation with CH MI Department ASO and greet, arrive all clients presenting to the centre and provide screening / consent forms for completion with the Radiographer. The WCCHC ASO will also schedule appointments for walk in X-ray clients.

All MI workforce roles will report up through their relevant position classifications as per the senior MI CHS organisational structure as per business as usual. Due to the service operating offsite to the main CH MI Department, the rostered Radiologist will be the first point of contact for all clinical issues arising. The WCCHC ASO support will report to the RACS Division and work in consultation with the CH MI ASO.

The MI Outpatient Centre recognises and promotes a culture that supports clinical supervision. Clinical supervision allows clinicians to examine and reflect on their own practice with the advice and support of colleagues. It supports professional standards of practice and quality of care within a clinical governance framework, enabling clinicians to assume responsibility for the development of their knowledge, skills, competency, practice, and professionalism. The MI Outpatient Centre will allocate adequate time and resources to ensure these needs are met. For further information, please refer to the: [SharePoint - CHS Clinical Supervision Policy](#)

The MI Outpatient Centre will work with the Clinical Placement Office to provide a teaching environment to intern medical and allied health students. Students will be ensured the professional supervision required as per their discipline and education level specific requirements.

The MI Outpatient Centre also acknowledges that the physical and psychosocial wellbeing of staff has a direct impact on workplace culture and customer service delivery. Staff are enabled and encouraged to focus on personal wellbeing in line with the [Healthy Minds - Thriving Workplaces Strategy 2019 - 2022](#) whole of Government strategy.

In line with the [ACT Whole of Government Respect, Equity and Diversity Framework](#), the MI Outpatient Centre is committed to providing a safe and harmonious work environment. The service endorses and supports a culture that respects diversity and values the contribution of people with diverse backgrounds, experience, and skills.

## 7. Service Support Elements

To enable smooth service delivery, the MI Outpatient Centre is supported by a number of clinical support and supply services, essential equipment facilities maintenance, and technology requirements.

### Clinical Support Services

#### Pharmacy

Services are provided by the CH Pharmacy and includes iodinated contrast media and emergency management medications. Bulk storage of contrast will be in the storeroom at room temperature away from direct light and contrast for immediate use will be kept in the thermostat controlled warmer within the CT scanning room.

Emergency medications will be stored within the CT Imaging Room and readily available when required. Contrast and emergency medication packs stock and expiration dates will be monitored by staff and replenished in consultation with Pharmacy services as required.

#### Infection Prevention and Control

The MI Outpatient Centre will comply with the National Safety and Quality Health Service (NSQHS) Standard on Prevention and Control of Healthcare Infections, CHS policy and procedure and work with the infection Prevention and Control Unit to minimise the risk of health care related infections.

Processes within the unit will include hand hygiene practices, standard precautions, aseptic technique for IV Cannulation procedures, high disinfection for US equipment, environmental cleaning and additional precautions if other risk exists, i.e personal protective equipment.

#### Health Care Technology Management (HTM)

HTM is a business unit within the Medical Services Division of CHS. HTM is responsible for the healthcare technology management (planning, assessment, risk assessment, procurement, installation, acceptance, commissioning, strategic maintenance planning, maintenance, replacement and disposal of CHS inventory of medical equipment, medical electrical systems and medical IT-networks, a significant component of which is located on the CH campus.

Biomedical Equipment support is provided by team of Biomedical Engineers, technician and technical officers.

HTM provides the following service:

- provides biomedical equipment support and advice to all clinical areas
- facilitate and support clinical trials of medical equipment including in-service and user training
- ensures technical compliance of all medical equipment, systems and technology to appropriate standards and regulations
- manages and maintains a register of all medical equipment and medical electrical systems owned by CHS
- liaises with other government departments, universities, and HTM departments on healthcare technology matters
- designs, modifies and manufactures medical devices and technical aids; and
- participates in clinical research for the improvement of health services.



HTM will support the medical equipment with calibration, troubleshoot and repairs. HTM will also be responsible for testing and providing asset labels for new equipment.

### **Medical Physics and Radiation Engineering**

Medical Physics and Radiation Engineering (MPRE) will continue to be responsible for the provision of expert advice on, services for, training in and management of the quality assurance, radiation safety and use of radiation producing devices used for the prevention, diagnosis and treatment of disease.

## **Patient Support Services**

### **Aboriginal Liaison Service**

The Aboriginal Liaison Service will continue to provide support to Aboriginal and Torres Strait Islander clients if required in the centre.

### **Interpreter Service**

Interpreter services in MI will also be provided as needed, either in person or via telephone. The same CHS-wide protocols for accessing interpreters apply.

## **Environmental and Supply Services**

### **Linen**

Linen supplies will be delivered to the General Storeroom twice a week and collected daily from the Disposal Room by a CHS nominated provider. Decanting of linen to the Imaging Rooms will be the responsibility of Radiographers and the Sonographers.

It is essential that clean linen is stored separately from dirty linen. Dirty linen will be stored in skips at point of use in the Imaging Rooms and transferred to the Disposal Room at the end of each day to await collection.

Linen requirements include:

- Patient gowns / scrubs
- Blankets
- Pillow covers
- Towels
- Sheets.

### **Clinical supplies**

Clinical supply usage and stock levels will be monitored and ordered by MI staff. Stock will be replenished against an inventory control system and delivered twice weekly to the MI General Storeroom. Items will be decanted as required by the Radiographer/ Sonographer to the imaging rooms to ensure availability when immediately needed.

### **Waste Management**

Waste management and removal will occur according to the CHS Policy for Waste Management. Waste will be segregated at the source and will include general, clinical, sharps and recyclable waste types as a minimum.

At point of care waste bins will be available in each clinical space and large waste receptacles located in the MI Disposal Room.

Cleaning staff are allocated to the WCCHC by a cleaning contractor. Their responsibilities include cleaning services and removal of waste from clinical and administrative areas for disposal. A cleaning schedule will ensure waste is removed daily from clinical spaces and large receptacles emptied as per a periodic schedule.

Cleaning contractor consumables and chemicals are currently stored in the WCCHC secure Cleaners Room external to the MI unit.

## Work Health Safety and Security

As required by legislation and governed by the WHS Policy, CHS adopts a systematic risk management approach to WHS. The CHS [Work Health Safety Management System](#) (WHSMS) provides a standardised framework for managing risks and opportunities to improve safety culture. The aim is to protect people from harm as they carry out their duties by providing a safe and healthy workplace, safe staffing levels, safe equipment, and necessary training and skills to manage risks. In accordance with the Work and Health Safety Act, 2011, the MI Outpatient Centre will have an appointed Health and Safety Representative (HSR) who will represent staff working within the unit for WHS matters.

Access and security key principles will be considered in establishing a safe and secure environment for all people and assets within the MI unit. Keeping staff safe in CHS operated buildings is vital, and this includes ensuring client safety and wellbeing when accessing facilities and services. Existing security policies and procedures, identification and access control, including key management, will ensure the workplace is safe and secure.

All staff and contractors will carry photo ID card with security access for spaces that are kept secured from public access. This includes WCCHC staff only areas, staff amenities, MI Storeroom, Reporting Room, Disposal and Clean Up Room. Client personal property and valuables will remain with the client at all times.

The workflow for clinical response for medical / staff emergencies will vary depending on the gravity of the event. MI Clinical / procedural support requested by staff and / or client will remain internal to the MI unit. Medical emergencies of a more serious nature, i.e adverse contrast reaction not resolving with low level treatment will entail a wider WCCHC response for additional medical / nursing staff assistance and escalation of care. Staff duress response will be local to the WCCHC facility, with Police attendance required in the event of a safety and /or security threats. This includes staff activating duress response in situations of occupational violence and / or threats to staff / client safety. WCCHC wayfinding external and internal to the MI unit will enable direct and clear pathways for staff, clients, contractors, Police and ACTAS attendance.

The MI Outpatient Centre will have an Emergency Response Plan (ERP) and a Business Continuity Plan (BCPs) outlining how service and business operations will continue during emergencies and interruptions to the facility such as medical, fire, power outages and disruptions to supply services.

## 8. Accreditation, Training, Education and Research

CHS is accredited with the Australian Council on Healthcare Standards (ACHS) as compliant against the eight NSQHS Standards. Accreditation occurs at four yearly intervals.

In addition to the ACHS accreditation, the MI Outpatient Centre provides diagnostic imaging and radiology services that meet the eligibility for the Diagnostic Imaging Accreditation Scheme (DIAS) which is required for the provision of Medicare eligible rebates. Accreditation with DIAS also occurs at four yearly intervals.

As part of DIAS accreditation for the MI Department, the service has a current Location Specific Practice Number (LSPN) with the Australian Government. The LSPN is a unique identifier specific to the service geographical site and itemised list of Major Medical Equipment (MME). The accrediting body which assesses CHS compliance against DIAS requirements, is the National Association of Testing Authorities (NATA) Australia.

MI diagnostic services also have quality assurance requirements for standards of practice. This includes maintaining the modality diagnostic image quality and the requirement for Radiologists to actively participate in Royal Australian and New Zealand College of Radiologists (RANZCR) Quality and Accreditation programs.

The MI Outpatient Centre will participate in CHS training commitments and responsibilities for a range of Medical (undergraduate and graduate), Specialist, and Allied Health professions, and is part of the:

- Australian National University (ANU) Medical School teaching for general medical undergraduate placements, and post-graduate specialist training in MI
- University of Canberra (UC), particularly for Radiographer (Medical Technologist) and Allied Health training; and
- Australian Catholic University, Charles Sturt University and the Canberra Institute of Technology (CIT) for Allied Health training.

It is recognised that the capacity to attract appropriately qualified and skilled staff to work in Canberra is challenging. This underscores the need for broader local education and training opportunities to support recruitment and retentions strategies for CHS.

## 9. Benefits to be realised

This MoC broadly defines MI service delivery which aims to provide a range of diagnostic imaging services for the Canberra community, in particular the local Weston Creek and Molonglo community by expanding the services available at the WCCHC. The MI Outpatient Centre is committed to providing clients with cost-effective, easily accessible subspecialty diagnostic expertise and contributing to research and training in advancing the use of imaging for the diagnosis and treatment of disease.

The MI Outpatient Centre aims too:

- improve community access to common diagnostic MI services
- relieve pressure on public hospital imaging services by providing access to community-based services
- be safe and welcoming, and accommodating the needs of a diverse community, including people from culturally and linguistically diverse backgrounds; and
- assist with client centred care, through increasing linkages with, and collaboration across, primary and community-based health care services.

The benefits of this MoC in terms of expected service delivery, access and patient outcomes must be measurable and can be determined as qualitatively or quantitatively.

### Qualitative benefits

Qualitative elements of the MoC will be measured through the client satisfaction surveys, staff satisfaction, and patient / client outcome measures. The other major source of qualitative feedback about the MoC will be through the existing consumer experience processes (Patient Liaison Service) at CHS in the form of any specific compliments or complaints. Other qualitative benefits include, but are not limited to:

- a CHS service trusted by the community
- reduction in client frustrations regarding wait times
- MI workforce working towards a common goal of creating exceptional health care together
- enhanced relationships between MI staff and other CHS services
- higher workforce morale across the wider CHS MI workforce; and
- improved efficiency in both inpatient and outpatient flow.

### Quantitative benefits

Quantitative benefits of the MoC will be demonstrated through the reduction of community wait times for MI services performed at the CH and enable more efficient scan times for CH Emergency Department (ED) and inpatient services. Other quantitative benefits include:

- improved scanning time turnaround (average time from image to report)
- efficient staff ratios and skill mix for high quality and safe service provision
- increased staff sustainability, retention and training opportunities; and
- enhanced patient and staff safety.

## 10. Implementation

The implementation of this MoC will be led by the Medical Services Division, in particular the MI Department. The MoC will be implemented in the lead up to the opening of the MI Outpatient Centre through the development and implementation of:

- service operational commissioning
- recruitment processes
- orientation and training program for existing CHS staff likely to work within the unit
- orientation and training program for new staff employed to work on the unit
- ongoing training program for staff working within the unit
- quality improvement activities; and

- processes and documentation used within the unit that support the principles of the MoC.

## 11. Monitoring and Evaluation

The MI Outpatient Centre will ensure the provision of a high-quality service through ongoing feedback from clients and who use the service, measurement of staff satisfaction and well-being and through the collection of data relating to the characteristics of service utilisation. The MI Outpatient Centre workforce will strive toward evaluating its performance against national service / care delivery standards and accreditation.

The MoC workforce will be reviewed within six months following service commencement with the aim to commence Radiographer led IV cannulation and IV iodine contrast administration. This is in alignment with Nationally recognised clinical scope and usual practice across the ACT and other jurisdictions.

Monitoring and evaluation of the MI Outpatient Centre and MoC will occur through a range of mechanisms, including:

- Operational and management Key Performance Indicators (KPIs) monitoring processes that indicate balanced scorecard, safety, synergy and efficiency measures
- CHS's Clinical Governance Structure and Committees
- CHS's Risk Management Processes
- CHS's structures for clinical Morbidity and Mortality (meetings); and
- Australian Council of Healthcare Standards (ACHS) accreditation requirements against the NSQHS Standards set by the Australian Commission on Safety and Quality in Health Care (ACSQHC).

## 12. Records Management

CHS provides a patient-centre digital health environment that delivers on the principle of the "One Person, One Record" and enables clinicians to access and utilise a record that supports the MoC, clinical workflows and other clinical guidelines and practices across disciplines, and physical locations.

The MI Outpatient Centre will commence services using the CHS existing AGFA information system and from November 2022 it is anticipated that the service will transition to the new Digital Health Record once this is implemented in late 2022, consisting of the EPIC Radiology Information System, Radiant.

EPIC Radiant provides both clinical and administrative needs from workflow, referral, vetting, protocolling, scheduling appointments, completing scans, complication tracking after invasive procedures and references seven years of historical radiology results.

EPIC Radiant is a patient centric system which captures all clinical interactions, appointments and patient information in a single system at the point of care across the Territory, in public hospitals and health services.

The EPIC Radiant system will ensure that CHS decisions are based on:

- Putting patients first – always
- Coordinated and safe person-centered care
- Ensuring clinical safety, quality, and excellence; and
- Improving accessibility of information and promoting ease of use.

DRAFT

## 13. Abbreviations

Abbreviation	Name
ACHS	Australian Council on Healthcare Standards
ACSQHC	Australian Commission on Safety and Quality in Health Care
ANU	Australian National University
BCP	Business Continuity Plan
CH	Canberra Hospital
CHS	Canberra Health Services
CHWC	Centenary Hospital for Women and Children
CIT	Canberra Institute of Technology
CPHB	Calvary Public Hospital Bruce
CT	Computed Tomography
DHR	Digital Health Record
DIAS	Diagnostic Imaging Accreditation Scheme
ED	Emergency Department
ERP	Emergency Response Plan
HTM	Healthcare Technology Management
ICT	Information and Communications Technology
ICU	Intensive Care Unit
IVC	Intravenous Cannula / Cannulation
KPI	Key Performance Indicator
LSPN	Location Specific Practice Number
MI	Medical Imaging
MoC	Model of Care
MPRE	Medical Physics and Radiation Engineering
MRI	Magnetic Resonance Imaging
NATA	National Association of Testing Authorities
NGO	Non-Government Organisation
NSQHS	National Safety and Quality Health Service
RANZCR	Royal Australian and New Zealand College of Radiologists
TIS	Translating Interpreting Services
UC	University of Canberra
UCH	University of Canberra Hospital
US	Ultrasound
WCCHC	Weston Creek Community Health Centre
WHSMS	Work Health Safety Management System
WiC	Walk-in Centre

# 14. Model of Care Development Participants

Position
Clinical Director, Medical Imaging
Director Business Operations, Medical Imaging
Director Allied Health, Medical Imaging
A/g Director Allied Health, Medical Imaging
Operations Manager, Medical Imaging
Quality and Safety Officer, Medical Imaging
Ultrasound Modality Manager, Medical Imaging
A/g CT Modality Manager, Medical Imaging
CT Modality Manager, Medical Imaging
X-ray Modality Manager, Medical Imaging
Assistant Director of Nursing, Medical Imaging
Administration Manager, Medical Imaging
Clinical Liaison – Major Projects, Capital Project Delivery



## 15. Appendix A – Staffing Profile

Position / Level	FTE	Headcount	Shift	Headcount per shift onsite WCCHC	Comments
	2022	2022			
MI Registered Nurse	1.0	MI Existing	8 hour shift 9:00am – 5:00pm	1	3–6-month temporary position to support new service commencement and Radiographer IVC competency
MI3	3.3	4	7:21 hour shift 8:30am – 4:30pm (36.75-hour week)	3	Prepare CT and X-Ray clients (screening, CT IVC insertion if required, gowning) and perform X-Ray and CT scans
			7:21 hour shift 9:00am – 5:00pm (36.75-hour week)		
MI4 Sonographer	1.1	2	7:21 hour shift 8:30am – 4:30pm (36.75-hour week)	1	Prepare clients (screening and gowning if required) and perform Ultrasound scans.
SSPEC Staff Specialist Radiologist	1.2	2	8 hour shift 9:00am – 5:00pm	1	Supervision, interpretation and reporting of the entire scan study, finalise Radiology reports for distribution to referrers, protocolling, ordering CT contrast and IVC insertion and oversee clinical service provision, workflow and staffing.
REG – Registrar	1.1	2	8 hour shift 9:00am – 5:00pm	1	Provide preliminary radiology reports, protocolling, ordering CT contrast and IVC insertion
CH MI Department ASO	Existing	MI Existing	8:30am - 5:06pm (38-hour week)	-	Receiving referrals, pre-screening and booking appointments for eligible clients for CT, US and X-ray
WCCHC ASO	Existing	WCCHC Existing	WiC ASO2/3 (CAS) - 7.30am to 3.51pm (AM shift), 2.09pm to 10.30pm (PM shift). RAC ASO2/3 – 1 x 9am to 5.30pm 1 x 8am to 4.21pm	Part of existing Reception Workforce	Greeting and registering clients on arrival and directing clients to the exit post scan. Scheduling walk in X-ray clients.
Students	Undergraduate and postgraduate students may undertake placements in the MI unit.				
<b>TOTAL</b>	<b>6.7 FTE</b>	<b>10 Headcount</b>		<b>7 Headcount</b>	

## ACKNOWLEDGMENT OF COUNTRY

Canberra Health Services acknowledges the Traditional Custodians of the land, the Ngunnawal people. Canberra Health Services respects their continuing culture and connections to the land and the unique contributions they make to the life of this area. Canberra Health Services also acknowledges and welcomes Aboriginal and Torres Strait Islander peoples who are part of the community we serve.

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