

# Position Statement on Initial Certification and Maintenance of Recognition in Cardiac MRI



The Royal Australian and New Zealand  
College of Radiologists®

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The Faculty of Clinical Radiology

Position Statement on Initial Certification and Maintenance of Recognition for Cardiac MRI  
ANZCMR/CSANZ/RANZCR

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Disclaimer: The information provided in this document is of a general nature only and is not intended as a substitute for medical or legal advice. It is designed to support, not replace, the relationship that exists between a patient and his/her doctor.

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## 1. PREAMBLE

The Position Statement was commissioned after consultation with the Cardiac Society of Australia and New Zealand (CSANZ) Imaging Council and the Royal Australia and New Zealand College of Radiologists (RANZCR), with members appointed by both. The Chair was appointed by the working group (financial disclosures and conflicts of interest appear at the end). Multiple teleconference and face-to-face working group meetings were held, and the document developed in light of other international standards as well as the training and workforce requirements particular to Australia and New Zealand. The final document underwent external review via membership consultation, was reviewed by the RANZCR Professional Practice Committee and Faculty Council of Radiology (FCR) and the CSANZ Quality Standards Committee and was finally approved by both CSANZ Board and RANZCR FCR.

This Position Statement is intended to support and foster the provision of quality, safe cardiac MRI services in Australia and New Zealand. This document specifically pertains to Cardiac MRI in adults, as distinct from general vascular MRI or paediatric imaging.

In conjunction with the RANZCR and the CSANZ Imaging Council, the ANZCMR formulated this document with reference to the various global guidelines including the American College of Radiology (ACR), the Society for Cardiovascular Magnetic Resonance (SCMR), the European Association of Cardiovascular Imaging (EACVI), expert consensus statements on the training and appropriate use of cardiac MRI, as applied to Australia and New Zealand.

The Australian and New Zealand Working Group for Cardiovascular Magnetic Resonance (CMR) (ANZCMR) is a special interest group comprised of specialists with expertise in adult cardiac MRI and is a Chapter of the Society of Cardiovascular Magnetic Resonance.

(see Appendix 1 for Disclosures).

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## 2. INTRODUCTION/PURPOSE

### 2.1 Purpose of this document

Cardiac MRI is an increasingly utilised technology, offering unparalleled image quality and diagnostic performance. The acquisition, analysis, and interpretation of cardiac MRI datasets require substantial training and expertise for both the provider and for the overall cardiac MRI service (including radiographers / technologists, nursing staff, allied health and associated professionals). This document outlines the training requirements for adult cardiac MRI in Australia and New Zealand, including initial certification as well as maintenance of recognition. Key components of both processes are continuing involvement in medical education and maintenance of professional standards, with a strong emphasis placed on collaboration with specialists who use cardiac MRI data for clinical decision making, and engagement in cardiac MRI-specific education.

### 2.2. Background

In 2014 the EACVI published Core Syllabus [1], which is a jointly produced radiology-cardiology position statement by respected leaders in the field developed for candidates seeking to sit the EuroCMR exam. This syllabus is a recommended structured learning framework for those training to perform cardiac MRI in Australia and New Zealand. The present document provides a rationale for single level training across both groups and to incorporate them into general radiology and cardiology training.

In 2007, the SCMR published the first Guidelines for Training in Cardiovascular Magnetic Resonance, followed by the Guidelines for Reporting Cardiovascular Magnetic Resonance Examinations in 2009 [2, 3], and subsequently the Task Force 12 statement on training in Cardiac MRI

Cardiac MRI [4]. These documents together outline a framework of training requirements for performance and reporting of cardiac MRI studies.

Subsequently, a multi-partite consensus document “ACCF/ACR/AHA/NASCI/SCMR 2010 expert consensus document on cardiovascular magnetic resonance: a report of the American College of Cardiology Foundation Task Force on Expert Consensus Documents” [5], provided information regarding basic instrumentation, physics and scan techniques; the clinical uses of cardiac MRI for assessing patients with cardiovascular cardiac disease processes; and gives recommendations on the appropriate use of this technology.

The American College of Radiologist’s (ACR) MRI Accreditation Program recognises the changes to patterns of practice and their program requirements evaluates the qualifications of individuals and the quality and safety specific to MRI. The MRI Accreditation Program Requirements document provides a mandate for those supervising and reporting Cardiac MRI [6]. The above documents should be familiar to providers of cardiac MRI services, in reference to global requirements for training and maintenance of standards.

### 3. TERMINOLOGY

**Live Case:** a primary operator live case is one in which the applicant is present during the acquisition, with active involvement in the scan technique and selection of pulse sequences, direct involvement in the technical analysis of datasets using dedicated cardiac MRI software, and supervised reporting by a Supervisor (as defined below).

**All** of these aspects must be fulfilled in order to claim a live case; if any one aspect is incomplete, the case may be counted as a library case. A maximum of 25 live cases undertaken as part of a course is allowed.

Certified providers performing live cases for maintenance of recognition do not require supervision.

Co-reports by certified radiologists or cardiologists allow both to claim a live case (limited to **2** primary signatories plus **1** trainee/fellow).

**Library Case:** is a previously acquired cardiac MRI dataset, which is reviewed using dedicated cardiac MRI software, including full technical analysis of datasets under the direct supervision of a Senior Supervisor (as defined below) Note: cases reviewed or presented at a multi-disciplinary meeting, or case presentation sessions, do not count as a library case, and instead would count towards the *Continuing Professional Development* (CPD) points of the relevant parent body.

**Supervisor:** Is a person who is certified by the Conjoint Committee for Certification in Cardiac MRI and is maintaining ongoing competency or international equivalent e.g. SCMR or EACVI Level 3 certified provider.

**Senior Supervisor:** Is a person who is certified by the Conjoint Committee for Certification in Cardiac MRI and is maintaining ongoing competency AND over a period of 2 consecutive 3-year certification cycles has reported a minimum of 450 live cases post training (although it is recognised that annual case numbers may fluctuate), or has been certified through the Established Provider Pathway. This provider is then able to sign off a trainee’s library cases and their participation in a core training syllabus such as the EACVI Syllabus or equivalent. Following attainment this Senior Supervisor status will be reviewed in 9 years (3 certification cycles).

**CMR-Specific CPD:** This may include a variety of activities such as a CMR-specific meeting or a dedicated CMR intensive session at a local, national or international meeting, journal reading, publications, clinical meetings and MDTs etc. Time spent on additional CMR activities as stipulated in accordance with the CPD program of RANZCR [7] or

CSANZ/RACP are also appropriate. These requirements cannot be met exclusively by inhouse meetings or within any one CPD category.

Evidence of CPD participation must be auditable.

#### 4. CORE PRINCIPLES

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a) Staff providing cardiac MRI services should be adequately trained and supported, and actively engage in ensuring quality, safe services are provided.

- Those undertaking cardiac MRI must be adequately trained and be working within their scope of practice and meet any requirements of their College, licensing authority or an equivalent body. Cardiac MRI should be included in the clinician's ongoing CPD activities along with quality assurance and audit activities.
- It is recommended that those providing cardiac MRI services do so as part of a multidisciplinary team approach that includes review of Cardiac MRI imaging in conjunction with other clinical information, and a quality assurance process.
- Staff in training must be supervised by a qualified individual.

b) Minimum Standards

An example of the expected minimum standards for performance of cardiac MRI are outlined in the “**Standardized cardiovascular magnetic resonance imaging (CMR) protocols: 2020 update**” [8] It is expected that these standards will be updated in the future.

#### 5. TRAINING REQUIREMENTS

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It is recognised that current and future providers of cardiac MRI services come from professional groups with significantly different primary scopes of practice, background training, ongoing clinical experience and CPD programs. Requirements should encompass specific training in cardiac MRI physics, sequences, acquisition protocols, data analysis, interpretation and reporting, along with any ongoing experience and CPD requirements.

Requirements for Specialists Supervising and Reporting Cardiac MRI	
Qualifications	Radiologists and Cardiologists
<b>Initial</b>	<ul style="list-style-type: none"> <li>• Fellowship of the Royal Australian and New Zealand College of Radiologists or a Fellowship of the Royal Australasian College of Physicians (SAC Cardiology), or equivalent; <i>and</i></li> <li>• Have performed and interpreted <b>150 live</b> cardiac MRI cases in the past 5 years (including those during the curriculum of training under appropriate supervision) under supervision by a credentialed Supervisor. Those cases must include a broad exposure of CMR cases covering all aspects of adult CMR as stipulated in the logbook (Appendix 2) and which must be signed by a Supervisor; * <i>and</i></li> <li>• Having undertaken a core training syllabus, such as the EACVI Syllabus (with a Senior Supervisor signing off in a modular fashion for each unit) <b>OR</b> an external exam that is satisfactory to the Committee and broadly equivalent to a core syllabus e.g. the EUROCMR or CBCMR Exam, <i>and</i></li> <li>• Completion of at least 30 hours of cardiac MRI-specific CPD within the last three years.</li> </ul> <p><i>* any Library cases included in the logbook must be signed-off by a Senior Supervisor</i></p>
<b>Maintenance of Recognition</b>	<ul style="list-style-type: none"> <li>• Ongoing competency requirement of <b>90</b> live cases over 3 years</li> <li>• Co-reports by certified radiologists or cardiologists allow both to claim a live case (limited to <b>2</b> primary signatories plus <b>1</b> trainee/fellow).</li> </ul> <p style="text-align: center;"><b>AND</b></p> <ul style="list-style-type: none"> <li>• Completion of at least 30 hours of CMR-specific CPD in a three-year period (in a variety of activities) recorded in a CPD program.</li> </ul>
<b>Lapsed Certification</b>	Requests for recertification from those who are lapsed will be considered on a case-by-case basis.

## 6. ESTABLISHED PROVIDERS

It was recognised that established specialists actively reporting cardiac MRI studies with a significant body of experience and caseload should be able to continue to perform and report Cardiac MRI. Established provider\* certification was granted for established Cardiac MRI providers who provided a declaration accompanied by ongoing evidence of CPD. Applicants who had attained formal certification or had equivalent fellowship experience could use this as evidence of certification to support their application for recognition as an established provider.

Certification was provided by the Conjoint Committee for Certification in Cardiac MRI. Established provider certification began in April 2018 and closed in December 2019. Some providers had extensive training and clinical experience, ongoing case load (Currency) and CPD, and were recognised. Other providers were granted 12 months to meet those requirements.

The Conjoint Committee recognised that this was a retrospective activity and specialists had a varied range of training and/or experience and will provide evidence to substantiate their applications in different ways. Evidence of training and experience was assessed against the domains of **Training**, **Currency**, and **CPD**.

*\*An Established Provider was defined as a specialist who has been performing Cardiac MRI as part of their ongoing role and practice and who has met all the required criteria identified in the relevant certification pathway prior to 1st May 2018.*

## **7. CARDIAC MRI INDICATIONS WITH SPECIFIC TRAINING REQUIREMENTS**

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Specific training requirements for reporting of Cardiac MRI in paediatric or complex congenital heart disease, and stress perfusion imaging, is beyond the scope of this document.

## **8. CHANGES TO THIS POSITION STATEMENT**

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The Conjoint Committee will review this Position Statement and other related documents 1 year after initial publication and every three years thereafter. The Conjoint Committee may amend this Position Statement at any time, with approval by the RANZCR and the CSANZ and ensure that future amendments comply with applicable law.

## 9. REFERENCES

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6. American College of Radiology. MRI Accreditation Program Requirements. 2013
7. RANZCR, Clinical Radiology Continuing Professional Development (CPD) Handbook 2013 - 2015, version 1. 2012.
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## Appendix:

## 1. Financial disclosures and conflicts of interest:

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