

Interventional Neuroradiology Scope of Clinical Practice Clinical Guideline

Version 1.2

Approval date: 14 March 2023



Interventional Neuroradiology Scope of Clinical Practice Clinical Guideline

Contents

1. Name of clinical guideline	3
2. Introduction	3
3. Background	3
4. Definitions	4
5. Principles of the standard	4
6. General	5
7. Determining risk factors	6
8. Models of care	6
9. Workforce implications	6
10. Safety, quality and risk management	6
11. Pathway / protocol	6
12. General considerations	6
13. Eligibility criteria	6
14. Administration	6
15. Observations	6
16. Implementation and monitoring	6
17. Appendices	6
18. Associated policies / guidelines / clinical guidelines / resources	7
19. Reference	7
20. Document Ownership and History	8

Interventional Neuroradiology Scope of Clinical Practice Clinical Guideline

1. Name of clinical guideline

Interventional Neuroradiology Scope of Clinical Practice

2. Introduction

The purpose of this Clinical Guideline is to define a set of interventional neuroradiology (INR) procedures and the training requirements which allow medical practitioners to perform INR procedures in SA Health facilities.

INR is the term used in Australia and New Zealand to describe image-based minimally invasive techniques to diagnose and treat intracranial, spinal and head and neck diseases. (*Conjoint Committee for Recognition of Training in Interventional Neuroradiology (CCINR)*)

INR also requires a specific health environment which has all of the following:

- > multidisciplinary care with neurosurgery, vascular surgery, neurology and intensive care services.
- > readily accessible computed tomography (CT), magnetic resonance imaging (MRI) and ultrasound facilities.
- > audit support.

Some health procedures and practices require specific credentialling for safe and effective performance. Specific credentialling and determination of a specific scope of clinical practice is required where it cannot be reasonably assumed the health practitioner's qualifications include a specific competency. The gaining of a specific competency may involve additional training, experience or both training and experience in addition to ongoing proficiency. (*Credentialling health practitioners and defining their scope of practice: A guide for managers and practitioners, Australian Commission on Safety and Quality in Health Care, Dec 2015*).

This Clinical Directive should be read in conjunction with the SA Health *Credentialling and Defining the Scope of Clinical Practice for Medical and Dental Practitioners Policy Directive*, and *Credentialling and Defining the Scope of Clinical Practice for Medical and Dental Practitioners Policy Guideline*

3. Background

INR

INR is the term used in Australia and New Zealand to describe medical sub specialists who use image-based minimally invasive techniques to diagnose and treat intracranial, spinal and head and neck diseases. INR stands for interventional neuroradiologist, but as the subspeciality includes neurosurgeons and neurologists as well as radiologists, the contraction INR is usually preferred. INR is also used to refer to the practice as well as the practitioner (interventional neuroradiology). For the purposes of this document the term INR is used to describe both this work and the appropriately trained practitioners who practice in this subspecialty.

Mechanical Thrombectomy in Australia

From 01 November 2017, the Australian Government Department of Health added a Medical Benefits Schedule item for mechanical thrombectomy. The item (35414) may only be claimed where the service is performed by a specialist consultant physician with appropriate training recognised by the Conjoint Committee for Recognition of Training in Interventional Neuroradiology, in an eligible stroke centre, where the diagnosis is confirmed by an appropriate imaging modality.

Interventional Neuroradiology Scope of Clinical Practice Clinical Guideline

4. Definitions

- > **CCINR** – Conjoint Committee for Recognition of Training in Interventional Neuroradiology
- > **Credentiailling** refers to the formal process used to verify the qualifications, experience professional standing and other relevant professional attributes of medical practitioners for the purpose of forming a view about their competence, performance and professional suitability to provide safe, high quality health care services within specific organisational environments (*Standard for Credentiailling and Defining the Scope of Clinical Practice - A National Standard for credentiailling and defining the scope of clinical practice of medical practitioners, for use in public and private hospitals, Australian Council for Safety and Quality in Health Care, 2004*)
- > **Defining the scope of clinical practice** follows on from credentiailling and involves delineating the extent of an individual medical practitioner's clinical practice within a particular organisation based on the individual's credentials, competence, performance and professional suitability, and the needs and the capability of the organisation to support the medical practitioner's scope of clinical practice. (*Standard for Credentiailling and Defining the Scope of Clinical Practice - A National Standard for credentiailling and defining the scope of clinical practice of medical practitioners, for use in public and private hospitals, Australian Council for Safety and Quality in Health Care, 2004*).
- > **INR** – Interventional Neuroradiology, or Interventional Neuroradiologist

5. Principles of the standard

5.1 Scope

This Policy applies to all specialists performing INR procedures in SA Health facilities.

5.2 INR Training Requirements

It is acknowledged that the training requirements to perform INR procedures are evolving and that there is not universal agreement amongst all medical practitioners in Australia and New Zealand. At the date of writing this Clinical Guideline, the minimum training requirements to perform INR procedures in an SA Health facility are for INR specialists to be listed on the Conjoint Committee for Recognition of Training in Interventional Neuroradiology (CCINR) register. If the training requirements in Australia and New Zealand to perform INR procedures or a sub-set of INR procedures change then this Clinical Guideline will be reviewed and amended accordingly.

The CCINR is an Australian and New Zealand body comprising equal representation from the Australian and New Zealand Society for Neuroradiology (ANZSNR), the Australian and New Zealand Association of Neurologists (ANZAN) and the Neurosurgical Society of Australasia (NSA). It has responsibility for the provision of the *Conjoint Committee Guidelines for Recognition of Training in Interventional Neuroradiology 2018* relevant to certification of training in INR, the assessment of applicants from the ANZSNR, ANZAN and NSA seeking certification of relevant training and experience, and the maintenance of the Register of members who have been certified under the Guidelines. The CCINR is not an accrediting or credentiailling body, but rather recognises training and experience – the formal credentiailling process for INR Practitioners in SA Health remains the responsibility of the SAMI Credentiailling Committee.

5.3 List of INR procedures

The following procedures must only be performed in SA Health facilities by an INR specialist meeting the above training requirements:

Interventional Neuroradiology Scope of Clinical Practice Clinical Guideline

- a) Endovascular treatment of intracranial arterial aneurysms.
- b) Endovascular clot (and other embolic particle) removal for the treatment of acute stroke (Including but not limited to mechanical thrombectomy)
- c) Endovascular treatment of carotid artery dissection and vertebral artery dissection where the dissection extends intracranially.
- d) Intracranial venous stenting
- e) Endovascular treatment of intracranial arteriovenous malformations and dural arteriovenous fistulae.
- f) Endovascular treatment of spinal cord arteriovenous malformations and spinal dural arteriovenous fistulae.
- g) Endovascular treatment of intracranial vasospasm using angioplasty balloons.
- h) Diagnostic cerebral angiography involving the selection of intracranial vessels.

5.4 Credentialling and Scope of Clinical Practice

All SA Health practitioners seeking INR credentialling in SA Health facilities must apply to the SA Medical Imaging (SAMI) Credentialling Committee for INR Credentialling and Scope of Clinical Practice endorsement. They will need to have a current listing on the CCINR register - this listing will be taken to fulfil Credentialling requirements for all procedures, or a subset of the procedures listed in 5.3. The SAMI Credentialling Committee will determine the length of Credentialling for INR procedures based on the time listed on the CCINR register for individual practitioners. Scope of Clinical Practice in INR procedures will be determined by considering both the ability of health care sites to support INR procedures and the time-limited listing on the CCINR register. A Scope of Clinical Practice will be provided to the practitioner and will list the relevant INR procedures, be time-limited and stipulate the health care site/s that the Scope of Clinical Practice relates to.

6. General

6.1 Roles and Responsibilities

Chief Executive Officers, Local Health Networks (LHNs) are responsible for:

- Ensuring all staff involved in INR procedures including executives, clinicians, bed managers and other relevant administrative staff are aware of this Clinical Directive.
- Ensuring local monitoring occurs in compliance with this Clinical Directive.

SAMI Credentialling Committee is responsible for credentialling INR specialists.

Clinical Director, South Australia Medical Imaging (SAMI) is responsible for maintaining this Clinical Directive.

SA Medical Imaging Campus Clinical Heads are responsible for ensuring that INR specialists working at their site are appropriately credentialed.

INR specialists are responsible for:

- Maintaining the training requirements to perform INR procedures as specified by this Policy.
- Participating in audits of INR procedures.
- Complying with the SA Health Policy Directive: Credentialling and Defining the Scope of Clinical Practice for Medical and Dental Practitioners.

Interventional Neuroradiology Scope of Clinical Practice Clinical Guideline

7. Determining risk factors

N/A

8. Models of care

N/A

9. Workforce implications

N/A

10. Safety, quality and risk management

Organisational responsibility for patient safety for INR procedures centres around ensuring that only appropriately qualified and credentialed medical practitioners can deliver INR services at SA Health facilities. Refer to section 5.4.

Risk assessment (using SA Health Risk Matrix) determined risk to be Medium (consequence: major; likelihood: unlikely).

Patient incidents will be reported to the SA Health Safety Learning System (SLS) as per the SA Health [Patient Incident Management and Open Disclosure Policy Directive](#).

11. Pathway / protocol

N/A

12. General considerations

N/A

13. Eligibility criteria

N/A

14. Administration

N/A

15. Observations

N/A

16. Implementation and monitoring

Monitoring occurs via the SAMI Credentialling Committee's monthly credentialling audit report.

17. Appendices

Appendix 1: [SA Medical Imaging Defining Scope of Clinical Practice – Consultants and Fellows form](#)

Interventional Neuroradiology Scope of Clinical Practice Clinical Guideline

18. Associated policies / guidelines / clinical guidelines / resources

1. [SA Health Credentialling and Defining the Scope of Clinical Practice for Medical and Dental Practitioners Policy Directive](#)
2. [SA Health Credentialling and Defining the Scope of Clinical Practice for Medical and Dental Practitioners Policy Guideline](#)
3. [SA Medical Imaging Credentialling Procedure](#)
4. [Conjoint Committee Guidelines for Recognition of Training in Interventional Neuroradiology \(INR\)](#)
5. [Interventional Radiology Society of Australasia \(IRSA\) Scope of Practice and credentialing guidelines for Interventional Radiologists in Australia and New Zealand](#)
6. [Australian and New Zealand Living Clinical Guidelines for Stroke Management, Reperfusion therapy: Neurointervention](#)
7. [The Royal Australian and New Zealand College of Radiology \(RANZCR\), Standards of Practice for Diagnostic and Interventional Radiology, Version 10.2 – 2017](#)
8. [The Australian and New Zealand Royal College of Radiology \(RANZCR\) Training Requirements in Interventional Neuroradiology Procedures Guidelines](#)
9. [SA Health: Performance Review and Development Policy Directive](#)
10. [Medicare Benefits Schedule, Mechanical Thrombectomy \(Item 35414\).](#)

19. Reference

1. [Conjoint Committee for Recognition of Training in Interventional Neuroradiology - website](#)
2. [Australian Commission on Safety and Quality in Health Care, Credentialling health practitioners and defining their scope of clinical practice – A guide for managers and practitioners, December 2015.](#)
3. [Standard for Credentialling and Defining the Scope of Clinical Practice - A National Standard for credentialling and defining the scope of clinical practice of medical practitioners, for use in public and private hospitals, Australian Council for Safety and Quality in Health Care, 2004](#)
4. [The Australian and New Zealand Society of Neuroradiology – website](#)
5. [Training Guidelines for Endovascular Ischemic Stroke Intervention: An International Multi-Society Consensus Document](#)

Interventional Neuroradiology Scope of Clinical Practice Clinical Guideline

20. Document Ownership and History

Developed by: South Australia Medical Imaging
Contact: Assoc. Prof. Marc Agzarian – Clinical Director, SA Medical Imaging
Endorsed by: Domain Custodian, Clinical Governance, Safety and Quality
Next review due: December 2027
ISBN number: 978-1-76083-609-2
CGSQ reference: CD080
CG history: Is this a new clinical guideline (V1)? **N**
 Does this clinical guideline amend or update an existing clinical guideline?
Y
 If so, which version? **V1**
 Does this clinical guideline replace another clinical guideline with a different title? **N**
 If so, which clinical guideline (title)?

Approval Date	Version	Who approved New/Revised Version	Reason for Change
14/03/2023	V1.2	Domain Custodians, Clinical Governance, Safety and Quality. Assoc Prof Marc Agzarian – Clinical Director, SA Medical Imaging	Reviewed – updated information, new template
2018	V1	Assoc Prof Marc Agzarian – Clinical Director, SA Medical Imaging	Original