Conjoint Committee Guidelines for Recognition of Training in Interventional Neuroradiology (INR)

1. INTRODUCTION

1.1. Interventional Neuroradiology (INR) uses percutaneous and endovascular procedures to treat patients with diseases of the brain, sensory organs, head and neck, spinal cord, vertebral column and adjacent structures and the peripheral nervous system in adults and children.

1.2. The Conjoint Committee for Recognition of Training in INR (Conjoint Committee) 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).

1.3. The Conjoint Committee has responsibility for the provision of these Guidelines 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 these Guidelines. The Conjoint Committee is not an accrediting or credentialing body, but rather recognises training and experience.

1.4. These Guidelines provide a benchmark for the training that is required to safely perform INR. Although percutaneous spinal procedures are usually included in interventional neuroradiology, these procedures will not be dealt with in these Guidelines. In these Guidelines the term INR refers to endovascular interventional neuro radiology only. Endovascular approaches represent the most complex and potentially high-risk aspects of interventional neuroradiology.

2. APPLICATION ELIGIBILITY REQUIREMENTS

2.1. The Conjoint Committee recognises training of INR specialists who are, or are about to commence, practising in INR in Australia or New Zealand.

2.2. The applicant must be admitted to Fellowship of the Royal Australian and New Zealand College of Radiologists, the Royal Australasian College of Surgeons (Neurosurgery) or the Royal Australasian College of Physicians (Neurology).

2.3. Applicants who completed an INR training program in the three years prior to application must satisfy the requirements in sections 3 to 5 inclusive.

2.4. Applicants who completed an INR training program more than three years prior to application must satisfy the requirements in section 6.

2.5. All applicants must submit their application, with the appropriate fee, in accordance with any published instructions of the Conjoint Committee. Incomplete applications will not be considered.

2.6. All applicants must have a current radiation license or equivalent as required in the jurisdiction in which they practice.

3. TRAINING SERVICE REQUIREMENTS

3.1. The INR training program must have been completed in a single training centre, or a network of training centres (the Training Service) with appropriately credentialed INR teams and appropriate neuroscience support services. To ensure appropriate standards of clinical governance and patient safety and quality, the Conjoint Committee recommends that INR services do not operate under solo practitioner arrangements.
3.2. The applicant must demonstrate the Training Service has been performing a minimum of 100 neurointerventional procedures per year, including a minimum of 50 aneurysms, and a comprehensive mix of procedures, including the endovascular management of ischaemic stroke, cranial and spinal vascular malformations and arteriovenous fistulas.

3.3. The applicant must demonstrate that their training position was an integral part of the Training Service. This includes participation in emergency department assessment, preoperative clinic and postoperative clinic follow up, as well as in patient care.

3.4. The applicant must demonstrate that the Training Service has regular audit and morbidity and mortality meetings, with all members of the INR team actively participating.

4. TRAINING AND EXPERIENCE REQUIREMENTS

4.1. The applicant must have undertaken a formal INR training program of not less than 2 years’ duration.

4.2. The applicant must provide evidence of formal teaching sessions attended as part of the INR training program. The Conjoint Committee would expect the formal teaching program to include as a minimum:

(a) the anatomy and physiology of the brain, head and neck and spine;
(b) pathology and clinical management of disorders amenable to neuroendovascular techniques;
(c) coagulation pathophysiology and the use of anticoagulant, antiplatelet and procoagulant medications in the clinical setting;
(d) complication assessment, avoidance and management in the neurointerventional setting;
(e) attitude and ethics in INR; and
(f) research in INR.

4.3. The applicant must provide a supervisor-certified logbook of procedural experience. The Conjoint Committee expects the logbook to demonstrate that the INR training program provided the applicant with exposure to and participation in:

(a) selective intra and extracranial vessel cannulation with microcatheters;
(b) deployment of detachable coils in intracranial aneurysms;
(c) embolisation with particulate and non-particulate material of the head, neck, brain and spine;
(d) extracranial and intracranial balloon angioplasty, remodelling and stenting;
(e) neurophysiological testing, either through chemical means or temporary occlusion;
(f) 20 cases of vascular reconstruction or angioplasty using balloons or stents for ischaemic disease or vasospasm, including 10 as primary operator;
(g) 20 cases of the use of particulate embolisation material, including 10 as primary operator;
(h) 10 cases of liquid embolisation, including 5 as primary operator
(i) 60 cases of coil embolisation of aneurysm including 20 cases of advanced aneurysm embolisation techniques either with remodelling or stenting, including 30 as primary operator;
(j) knowledge of the practice of neurophysiological testing (Wada, temporary balloon occlusion, superselective lignocaine or amytal infusion;
(k)
(l) acute endovascular treatment of schaemic stroke.
5. SUPERVISOR CONFIRMATION OF TRAINING AND EXPERIENCE

5.1. The applicant must provide reports on INR Training and Experience from two Supervisor (Reports), in such a form as required by the Conjoint Committee.

5.2. The Supervisors must be appropriately credentialed senior INR specialists (ie on the Conjoint Committee register of INR specialists, or adjudged by the Conjoint Committee to be substantially equivalent) in the Training Service where the INR training program was undertaken and must have had direct personal supervision of the applicant during their INR training program.

5.3. The Supervisors, in completing the Reports, must confirm that:
   
   (a) the Training Service satisfies the requirements in section 3 of these Guidelines;
   
   (b) the applicant satisfies the requirements in section 4 of these Guidelines;
   
   (c) the applicant competently performs the procedures safely and expeditiously;
   
   (d) the applicant competently integrates indications for other procedures and therapy into patient management;
   
   (e) the applicant recognises and manages complications appropriately; and
   
   (f) the applicant understands risk factors and is able to recognise personal and procedural limits.

6. EXPERIENCED APPLICANT RECOGNITION

6.1. Applicants who completed an INR training program more than three years prior to application may apply for recognition of INR training and experience under the Experienced Applicant pathway, as outlined in Appendix A.

7. INCLUSION IN THE REGISTER

7.1. The Register is a list of members who have been certified by the Conjoint Committee as having appropriate training and experience in INR, as indicated by these guidelines.

7.2. To remain on the Register, an INR specialist with recognition from the Conjoint Committee must perform no fewer than 100 INR procedures every three years as primary operator or trainer, including at least 20 cases in the preceding year.

7.3. The INR specialist must work in a health care facility, hospital or network that has access to:
   
   (a) multidisciplinary care with neurosurgery/vascular surgery/neurology/ICU cover;
   
   (b) readily accessible CT, MRI and ultrasound facilities; and
   
   (c) ongoing evidence of audit.

7.4. The INR specialist must participate in INR continuing professional development activities and satisfy the continuing professional development program of the Royal Australian and New Zealand College of Radiologists, the Royal Australasian College of Surgeons (Neurosurgery) or the Royal Australasian College of Physicians (Neurology).

7.5. The Conjoint Committee will write to each member in the Register after two and a half years, or at any time where an issue of sufficient concern is raised, requesting documentation to substantiate satisfaction of the requirements in this section. The onus is on the member to provide the requested documentation.

7.6. Where a member in the Register fails to provide this information, or is unable to substantiate satisfaction of the requirements in this section their name will be removed from the Register.
7.7. The ANZSNR, ANZAN and NSA will publish the Register on their respective websites.

8. FEES

8.1. An initial application fee is payable at the time of application as determined by the Conjoint Committee.

8.2. An administration fee is payable at the time of reassessment (every three years) as determined by the Conjoint Committee.

8.3. The fees will be used to cover administrative costs associated with these Guidelines.

9. CONDUCT OF THE CONJOINT COMMITTEE MEETINGS

9.1. ANZSNR, ANZAN and NSA will each nominate three representatives for inclusion in the membership of the Conjoint Committee.

9.2. The Conjoint Committee will meet twice yearly to assess applications for recognition and continuation in the Register. The Conjoint Committee may meet more frequently at their discretion as required.

9.3. The Conjoint Committee will elect, from amongst their membership, the Chair. The Chair will serve for a term of three years.

9.4. Decisions will be made by majority vote.

9.5. Agendas will be circulated at least 5 business days prior to meetings. Minutes will be circulated within 5 business days of meetings.

9.6. A quorum will be four members, provided this includes at least one member from each of ANZSNR, ANZAN and NSA.

9.7. The Conjoint Committee will have responsibility for:

   (a) the provision and maintenance of these Guidelines relevant to certification of training in INR;

   (b) the assessment of applicants from the ANZSNR, ANZAN and NSA seeking recognition of relevant training and experience; and

   (c) the maintenance of the Register of members who have been certified under these Guidelines.

9.8. The Conjoint Committee will release minutes of meetings and the updated Register to ANZSNR, ANZAN and NSA within one month of each meeting.

9.9. Administrative support will be provided by one of the three member groups on behalf of the Conjoint Committee. Fees paid in accordance with section 8 will be invoiced by, and paid directly to the body providing administrative support (currently ANZSNR). These fees should cover all administrative costs associated with these Guidelines.

9.10. ANZSNR, ANZAN and NSA will cover any travel costs for their representatives associated with attendance at meetings.

9.11. ANZSNR, ANZAN and NSA will cover in equal shares the cost of any teleconferencing, venue hire and catering required for meetings of the Conjoint Committee.

10. POLICY REVIEW

10.1. The Conjoint Committee will review this document six months after initial publication, and annually thereafter.
APPENDIX A – EXPERIENCED APPLICANT PATHWAY

To be recognised via the Experienced Applicant pathway, applicants must be able to demonstrate and provide evidence of sufficient INR training and experience as outlined below:

A.1 The applicant must provide a logbook of procedural experience. The Conjoint Committee expects the logbook to demonstrate:

(a) the performance of a minimum of 100 INR procedures in the three years prior to application as primary operator or trainer including at least 20 cases in the preceding year; and

(b) the procedures to include a comprehensive INR case mix, which includes stroke, aneurysms, AVM’s, and DAVF’s.

A.2 The applicant must have obtained the procedural experience working in a health care facility, hospital or network that has access to:

(c) multidisciplinary care with neurosurgery/vascular surgery/neurology/ICU cover;

(d) readily accessible CT, MRI and ultrasound facilities; and

(e) ongoing evidence of audit.

A.3 The applicant must provide ONE written references from a practising senior INR specialist (a) who has already met the criteria for admission to the Register of recognised INR practitioners or (b) who would, in the view of a majority of the Conjoint Committee, meet the requirements for senior INR practitioner status (if their application is pending). If the referee does not work at the same institution as the applicant, the referee should indicate how they have verified the information supplied. The reference should indicate that:

(f) the applicant competently performs INR procedures safely and expeditiously;

(g) the applicant competently integrates indications for other procedures and therapy into patient management;

(h) the applicant recognises and manages complications appropriately; and

(i) the applicant understands risk factors and is able to recognise personal and procedural limits.

A.4 The Conjoint Committee will be responsible for considering all of the evidence submitted in A1-A3 above and making the final decision on whether an applicant has satisfied the criteria for admission to the Register.