HONG KONG COLLEGE OF RADIOLOGISTS

SUBSPECIALTY TRAINING: INTERVENTIONAL RADIOLOGY

1. Introduction

1.1 Interventional Radiology (IR) is a clinical subspecialty under Radiology that utilises image guidance to diagnose, treat and clinically manage patients in a minimally invasive means across a wide spectrum of clinical conditions and procedures in adults and/or children.

1.2 The range of diseases and body systems amenable to image-guided diagnostic and therapeutic procedures is extensive and constantly evolving, and includes but is not limited to diseases and elements of the vascular, thoracic, gastrointestinal, hepatobiliary, genitourinary, gynaecological, musculoskeletal, and neurological systems.

1.3 Subspecialty practice in Interventional Radiology requires advanced clinical knowledge, behaviours and skills with image interpretation and technical competencies across all imaging modalities (including angiography, fluoroscopy, ultrasound, computed tomography and magnetic resonance) to manage a wide range of clinical conditions and to perform complex image-guided interventions.

1.4 The following interpretation applies in this document:

- *"Interventional Radiology Subspecialty Training (IR subspecialty training)"* - A two-year training programme covering advanced clinical knowledge, behaviour and skills required to attain subspecialty accreditation of Interventional Radiology
- "*Interventional Radiology Fellow-in-training (IR Fellow)"* - A Fellow of Hong Kong College of Radiologists (or equivalent) who is undergoing IR Subspecialty Training
- *"Interventional Radiology Specialist (IR Specialist)"* - A Fellow of Hong Kong College of Radiologists (or equivalent) who have attained subspecialty accreditation in Interventional Radiology. An IR Specialist is eligible to supervise an IR Fellow in an accredited IR subspecialty training centre to undergo IR subspecialty training.
- *"Interventional Radiology Subspecialty Training Coordinator (IR subspecialty training coordinator)"* – An IR specialist who is responsible for coordinating and monitoring the training progress of IR Fellows in an accredited IR subspecialty training centre.

2. Objectives of training

2.1 Upon completion of Interventional Radiology subspecialty training, an accredited IR specialist should have (a) advanced clinical knowledge, behaviours and skills above the level acquired in General Radiology, Vascular & Interventional Radiology (VIR) and/or Interventional Neuroradiology (INR) under Higher Specialist Training (Radiology); (b) capabilities to provide patient evaluation and management, including but not limited to preprocedural assessment, informed consent process, postprocedural follow up and management of complications, relevant to image-guided interventions

independently or in collaboration with other clinical specialties as multidisciplinary teams; (c) competence to perform a wide range of advanced vascular and non-vascular image-guided interventions as the primary operator.

2.2 An IR Fellow should be exposed to a wide range of emergent and elective clinical conditions requiring image-guided interventions in different body systems in adults and children. This should be achieved by rotation or attachment to different training centres.

2.3 Regular assessment of the competence level of the IR Fellow would determine the level of supervision required to ensure optimal patient care and safety.

2.4 Special emphasis should be placed on clinic-based and ward-based patient consultations, especially for newly-introduced and complex or high risk procedures.

2.5 An accredited IR specialist should be competent in the following attributes:

(a) To provide longitudinal care of patients who need image-guided procedures-from preprocedural assessment, during, and after image-guided procedures with appropriate follow-up.
(b) To have an in-depth knowledge of the anatomy, epidemiology, pathophysiology, clinical presentation, diagnostic and therapeutic options of a wide range of clinical conditions or disease elements that can managed by interventional radiology.
(c) To understand the indications, contraindications, limitations and expected outcome (including complications and medicolegal implications) of interventional radiology procedures.
(d) To be up-to-date and can critically appraise current evidence in interventional radiology and offer an evidence-based practice.
(e) To have technical competence in using various imaging modalities (DSA, fluoroscopy, US, CT and MR) to diagnose and guide interventions in a wide range of clinical conditions.
(f) To have technical competence to handle and deploy a wide range of equipment and devices used in interventional radiology.
(g) To be able to manage an acutely unwell patient in interventional radiology suite, including prioritisation of patients according to their clinical needs, resuscitation protocol and emergency contact for advanced life support.
(h) To understand and optimise safety issues related to different imaging modalities, including radiation protection to patient and staff and safety in magnetic resonance environment.
(i) To be able to safely prescribe and withhold medications in patients under care of interventional radiology, including but not limited to contrast agents, sedatives, antibiotics, antiplatelets, anticoagulants and vasodilators.
(j) To demonstrate effective communication skills to patients, their carers and other clinical team members.
(k) To inform patients various diagnostic and therapeutic options that may be provided by interventional radiology during consent process; and to offer alternative treatment options to patients when appropriate.

(l) To be an effective team member in interdisciplinary patient management and to facilitate referral to other clinical teams when appropriate.
(m) To contribute to the development, dissemination, and translation of new knowledge and practices in interventional radiology.
(n) To facilitate learning of patients, medical and other healthcare professionals.
(o) To be able to recognise the limitation and reflect upon on one's own practice.

3. Training requirements

3.1 Training centre requirements

3.1.1 Training centre accreditation is generally considered on the basis of standalone training hospital and its satellite facilities. The standalone training hospital should be a HKCR-accredited training center for Basic Specialist Training (Radiology), Higher Specialist Training (Radiology) and Higher Specialist Training (Vascular & Interventional Radiology [with minimum 6 months recognition]).

3.1.2 For training hospital which provide specialised and advanced services in certain specialties, i.e. Centre for Designated Training under HKCR, such as Hong Kong Children's Hospital, it is understood that these centres may not be able to fulfil all the requirements as ordinary training centres in Basic and Higher Specialist Training (Radiology) and certain exemptions may be made after careful considerations.

3.1.3 A minimum of two IR specialists are required in each training centre to ensure adequate supervision of the IR Fellow. The supervising IR specialist may not be a full-time staff member of that training centre but should have regular IR duty sessions in that centre, provided that this arrangement is pre-approved by the administrative head. Such supervising IR specialist should be designated as an "Affiliated IR specialist" and the College should be notified of such arrangements.

3.1.4 The training centre shall appoint an IR specialist as IR subspecialty training coordinator to be in charge of the centre's IR subspecialty training program. He/she should be a staff member of the training centre. He/she is responsible for the educational content of the training program, coordination of rotation or attachment and supervision of the training progress of IR Fellows.

3.1.5 IR specialists to IR Fellow ratio should be no less than 1:2, i.e., the training centre must maintain a ratio of no less than one IR specialists for every two IR Fellows.

3.1.6 The training centre should be able to provide a sufficient spectrum and number of cases and interventional radiology procedures for training purposes.

3.1.7 The training centre must be equipped with modern imaging equipment including fluoroscopy, digital subtraction angiography, computed tomography, ultrasound and magnetic resonance imaging.

3.1.8 Common equipment and devices used in urgent and life-saving image guided

interventions must be readily available.

3.1.9 Rooms in which image-guided interventions are performed must be equipped with physiological monitoring and resuscitative equipment.

3.1.10 24-hour emergency medical and surgical support must be available.

3.1.11 24-hour on call interventional radiology service must be available.

3.1.12 An interventional radiology clinic or outpatient office is available for patient consultations and non-procedural follow up visits.

3.2 IR Subspecialty Training Coordinator requirement

3.2.1 Accredited IR specialist under this set of guidelines and registered under Medical Council Hong Kong as a Specialist in Interventional Radiology.

3.2.2 At least four years of continuous experience in IR subspecialty after award of the Fellowship of HKCR, or equivalent.

3.2.3 Prior or concurrent experience as trainer or co-trainer in Higher Subspecialty Training in Vascular & Interventional Radiology.

3.2.4 Staff member of the training centre.

3.2.5 Major portion of clinical practice in IR.

3.2.6 IR-related publications.

3.2.7 IR-related lectures/presentations.

3.2.8 Regular attendance of IR-related meetings, courses or conferences in recent years.

3.4 Supervision requirement

3.4.1 The IR Fellow may be entrusted to

(a) observe only;
(b) to act with direct supervision;
(c) to act with indirect/minimal supervision;
(d) to act unsupervised.

3.4.2 Regular assessment of the competence level of the IR Fellow by his/her supervising IR specialist would determine the level of supervision required to ensure optimal patient care and safety.

3.4.3 A baseline assessment of competence level of the IR Fellow upon entry to the programme would be made by the IR subspecialty training coordinator in his/her

training centre. This would determine the level of supervision required for the IR Fellow for common interventional procedures, especially emergency procedures to be performed during on-call period.

3.4.4 As a general rule, an IR Fellow should not attempt new procedures, i.e., procedures in which he/she has not been exposed to before, independently.

3.4.5 It is expected as training progresses, an IR Fellow would be increasingly entrusted to act independently and, upon completion of training, to act at the level of IR specialist.

3.4.6 For procedures in which the IR Fellows are entrusted to act unsupervised, he/she may perform the procedure independently; or supervise trainees in Basic and/or Higher Specialist Training (Radiology), as long as the IR Fellow has fulfilled criteria as trainer or co-trainer as stipulated in Guidelines on Basic and/or Higher Specialist Training (Radiology) and been vetted as such by the College.

3.5 Training programme entry requirement

3.5.1 A radiologist is eligible to enter the training programme as an IR Fellow when below criteria are fulfilled:

(a) Fellowship of HKCR, or qualifications other than FHKCR but approved by IR subspecialty board.

(b) Prior training or exposure in IR, i.e., at least 3 months of training period of Vascular & Interventional Radiology under Higher Specialist Training (Radiology), or equivalent.

3.5.2 Radiologists who would like to enter the training programme should submit their applications to the IR subspecialty board. The board will consider the applications twice a year (usually in March and September).

3.6 Duration of training

3.6.1 The interventional radiology subspecialty training consists of a 2-year programme, of which:

(a) at least one year must be taken in Hong Kong after obtaining the Fellowship of HKCR (FHKCR).

(b) **Early Subspecialisation in IR**: IR Fellows who underwent 6 or more months of VIR or INR training during their Higher Specialist Training can have certain components of their training recognised and hence their post-FHKCR IR subspecialty training duration shortened. For details, please refer to Appendix II.

(c) Prior IR training of less than 6 months, for example 3 months of VIR during Higher Specialist Training, will not be recognised.

3.7 Duty sessions

3.7.1 50% or more of the IR Fellows' workload should be related to interventional radiology.

3.7.2 IR Fellows should have regular on-call duties covering emergency IR procedures.

3.8 Minimum number of procedures required

3.8.1 For a 2-year training period, an IR Fellow should have performed and endorsed 360 Tier A procedures and 240 Tier B procedures.

Tier A procedures:

Procedures
Vascular: Diagnostic angiography and venography Non-tunnelled central venous catheter placement
Non-vascular: Image-guided fine needle aspiration/biopsy Image-guided drainage Percutaneous cholecystostomy Catheter revisions Image-guided lumbar puncture Arthrogram

Tier B procedures:

Categories	Examples
Neurointerventional procedures	- All intracranial and extracranial neurointerventional procedures
Arterial interventional procedures	- Embolisation - Angioplasty and/or stenting - Thrombectomy - Thrombolysis - Intravascular ultrasound - Intravascular foreign body retrieval - Endovascular aortic repair
Venous and dialysis access interventions	- Venous sampling - IVC filter placement/removal - Tunneled central venous catheter placement - Venoplasty and/or stenting - Fibrin sheath stripping
Lymphatic imaging and interventions	- Conventional lymphangiography - MR lymphangiography - Thoracic duct interventions
Hepatobiliary interventions	- Percutaneous transhepatic biliary drainage - Biliary stenting - Transjugular liver biopsy

	- Transjugular intrahepatic portosystemic shunts - Portal vein embolisation - Liver tumour ablation
Thoracic interventions	- Thoracic endovascular aortic repair - Pre-operative localisation - Lung tumour ablation - Airway stenting - Bronchial artery embolisation - Endovascular management of pulmonary embolism
Gastro-intestinal intervention	- Gastrostomy - Gastrointestinal tract dilatation and/or stenting, - Embolisation for acute GI bleed
Urogenital interventions	- Percutaneous nephrostomy - Internal ureteric stent - Endovascular management of varicocele or pelvic congestion syndrome - Prostate artery embolisation - Post-partum haemorrhage embolization - Uterine fibroid embolization
Musculoskeletal interventions	- Therapeutic joint/soft tissue injections (exclude diagnostic arthrogram) - Percutaneous bone biopsy - Percutaneous vertebroplasty - Bone or soft tissue tumour ablation - Facet joint injection - Nerve blocks/neurolysis
Paediatric interventions	- All procedures with patient age ≤ 18 years, except diagnostic angiography/venography, image-guided FNA or biopsy.
Interventional Oncology	- TACE - Radioembolisation - Ablation - Pre-operative embolisation - Pre-operative localisation
Vascular anomalies	- Sclerotherapy for venous and lymphatic malformation - Embolisation of arteriovenous malformation
MR guided interventions	- Biopsies, ablations or catheterisation performed under MR guidance

(Note: The examples included above are by no means exhaustive but illustrate the breadth of range of practice of an accredited IR specialist.)

3.8.2 During the training period, an IR Fellow may choose to focus on one or a few particular area(s) in IR (e.g. Interventional Neuroradiology, Interventional Oncology, Paediatric IR etc.). However, in order to ensure a well-rounded exposure in IR subspecialty training, an IR Fellow should have performed **at least five categories of Tier B procedures of a wide range of complexities*** and meet the core training requirements stated below*:

(a) To perform and endorse 20 paediatric interventional procedures (patient's age ≤ 18 years, except diagnostic angiography/venography, image-guided FNA or biopsy.)
(b) To perform and endorse 20 neurointerventional procedures
(c) To perform and endorse 50 Tier B non-neurointerventional procedures in adult (patient's age >18 years)
(d) To perform and endorse 50 Tier B procedures during on call period
(e) Attended 100 IR consultations as either outpatient clinic visit or in-patient consultations
(f) Attended 100 post-procedural (Tier B procedures) in-patient follow up

**These requirements should be completed during post-FHKCR period of IR subspecialty training.*

3.9 Rotation or attachment during training

3.9.1 Rotation of IR fellows amongst IR Subspecialty Training Centres are essential. The IR subspecialty board should oversee the coordination of the rotation. In general, 50% of recognised training time should be allocated to the IR Fellow's parent training centre.

3.9.2 An IR Fellow should be exposed to four different IR specialists in two different training centres during his/her post-FHKCR period of IR subspecialty training.

3.9.3 Rotation to centres which specialise in neuro-interventions and paediatric IR is mandatory if these interventions are not available in the parent training centre.

3.10 IR-related dissertation and active CME/CPD

3.10.1 An IR fellow is required to submit an IR-related dissertation which must be published or accepted in publication in a local or international peer-reviewed indexed journal.

3.10.1 In addition, an IR Fellow is required to have undertaken at least 3 of the following 4 IR-related active CME/CPD activities:

(a) Oral presentation (presenter) in an IR conference OR other radiology conference on an IR topic
(b) Poster presentation (first author) in an IR conference OR other radiology conference on an IR topic
(c) Invited speaker of a lecture in an IR conference OR other radiology conference on an IR topic

(d) Invited speaker or instructor in an IR workshop

3.11 Passive CME/CPD

3.11.1 An IR Fellow should participate in IR-related passive CME/CPD activities:

(a) 20 CME/CPD points related to IR, of which 5 of the points should be from participation of local IR conferences, courses or meetings

3.12 Clinico-radiological meetings

3.12.1 IR Fellows should chair/present at least two clinic-radiological meetings related to interventional radiology every month during the training period.

3.13 Sedation-related training

3.13.1 IR Fellows should undergo sedation-related training, including mandatory attendance of Procedural sedation safety course organised by Hong Kong Academy of Medicine.

3.14 Training record

3.14.1 The record of the experience of examinations, procedures, educational experience and regular appraisals should be documented in the logbook prescribed by the IR subspecialty board. Additional information can be supplied as appended sheets in the logbook where appropriate.

3.14.2 Procedural reports can be endorsed by IR Fellow if he/she is deemed able to act unsupervised or under indirect/minimal supervision for such procedures.

3.14.3 Procedural reports should be endorsed by IR Fellow and supervising IR specialist if the IR Fellow required direct supervision or remained as observer for such procedures.

3.15 Formative training assessment

3.15.1 Regular workplace-based assessment (WPBA) of an IR Fellow's performances, in form of IR-Direct Observation of Procedural Skills (IR-DOPS), should be made by his/her supervising IR specialist, either at 3-monthly intervals or upon completion of rotation/attachment to another centre. These IR-DOPS assessment forms should be submitted to the IR subspecialty coordinator in his/her centre every three monthly for review.

3.15.2 IR Fellows should complete at least three IR-DOPS assessment forms for every three months during his/her training period. These assessment aim to identify the strength and areas of further development of the IR Fellow. This also serves as an opportunity of reflection for the IR Fellow to enhance and drive learning.

3.15.3 Regular appraisal meeting should be conducted between the IR Fellow and the IR subspecialty coordinator, at least 3 monthly or upon completion of rotation/attachment to another centre.

3.15.4 Particular attention should also be made to an IR Fellow's degree of professional maturity and procedural competence in order to attain independent specialist practice.

3.16 Overseas training

3.16.1 A maximum of 6 months of overseas hands-on IR training after the commencement of IR subspecialty training could be counted towards the total required duration of the training programme.

3.16.2 The IR Fellow is required to submit the overseas training centre and program to the IR subspecialty board for pre-approval at least three months prior to the start of overseas training.

3.16.3 The training supervisor of the overseas centre should provide a letter commenting on the IR Fellow's performance upon completion of his/her overseas training. The IR subspecialty board would formally approve the IR Fellow's overseas training period if his/her experience is deemed satisfactory.

3.17 Absence from Training

3.17.1 Prolonged leave will reduce the time spent in training. IR Fellows absent from their training post for any period in excess of culmination of 60 calendar days during the 2-year period of IR subspecialty training, apart from annual leave, study leave and prospectively approved oversea training, should notify the IR subspecialty board for corresponding adjustment of the training period requirement.

3.18 *Fractional Work Arrangement (FWA)/Part-time Training (PTT)*

3.18.1 FWA/PTT is accepted on an individual basis. Application should be submitted to the IR Subspecialty Board for consideration in accordance with the prevailing arrangement of HKCR General Training Regulation Section 10.

3.18.2 The IR Fellow should notify the IR Subspecialty Board of his/her FWA/PTT application as soon as reasonably possible. Retrospective endorsement prior to the approval by HKCR Education Committee may be sought in case of acute situation with special consideration.

3.18.3 Before commencement of FWA/PTT, the IR Fellow and his/her parent training centre are required to submit a training plan outlining how the overall training activities during the entire period will be equivalent to full-time training. Corresponding adjustment of training period requirement would be made accordingly.

3.18.4 The IR Fellow under FWA/PTT is required to reach the minimum number of procedures needed, in addition to other mandatory training requirements, before being eligible to sit for the IR Subspecialty Board Examination.

3.18.5 Training will be suspended if the expected working hours are <20% of full-time.

4. Examination format

4.1 Application Requirement

4.1.1 After completion of the required period of IR subspecialty training, an IR Fellow can apply for consideration of IR subspecialty accreditation.

4.1.2 Three months before the Board Examination, the candidate should submit the following to the Interventional Radiology Subspecialty Board under the Hong Kong College of Radiologists:

(i) A completed training logbook (including at least 12 IR-DOPS forms).
(ii) A letter from his/her IR subspecialty trainer commenting on the performance during the two years IR subspecialty training.
(iii) An IR-related dissertation IR-related dissertation which has been published or accepted in publication in a local or international peer-reviewed indexed journal.

4.1.3 The IR Subspecialty Board will review the above documents to assess whether the candidate has completed adequate training in IR and has completed a minimum of 2 years subspecialty training in IR before endorsing the candidate to sit for the Board Examination.

4.2 The Format

4.2.1 The IR Subspecialty Board Examination consists of the following components:

(i) Assessment of the IR Fellow's training records for completeness of training
(ii) Review of formative workplace-based assessment, in form of IR-DOPS
(iii) Summative assessment in form of Viva Voce examination: The IR Fellow will be examined by a panel of assessors to evaluate his/her professional maturity, understanding in important concepts and knowledge in Interventional Radiology, ability in communication skill and appraisal of IR-related literature

4.2.2 The panel of assessors comprising the following members would carry out the summative assessment of the IR Fellow's Viva Voce examination:

(i) An overseas expert in the field of Interventional Radiology
(ii) Two other experienced IR specialists
(iii) The Warden of HKCR

4.3 Subsequent attempts

4.3.1 After an unsuccessful attempt at Board Examination, a candidate's performance will be reviewed by one of the assessors of the Panel together with the IR Fellow and his/her IR subspecialty training coordinator, to advise on the required improvement areas and remedial actions.

4.3.2 There is no limit in the number of attempts of examination.

4.4 Appeal policy for the IR Subspecialty Board Examination

4.4.1 Any appeal about the conduct of the examination must be made in writing within 30 days of the publication of the result of the examination. The letter should be addressed to the Warden of the Hong Kong College of Radiologists.

4.4.2 Appeals will only be deemed valid for consideration when based on procedural irregularities in the conduct ,or determination of the result, of the examination.

Version endorsed by HKAM Council Meeting on 26 October 2023 with effective from 1 February 2024

APPENDIX I

Pathway for Subspecialty Accreditation for Interventional Radiology for Specialists in Radiology

The commencement date of the Interventional Radiology Subspecialty training of the Hong Kong College of the Radiologists is on 1st October 2024.

Existing Specialists in Radiology with substantial experience in Interventional Radiology may apply for subspecialty accreditation via the following pathways, in accordance with the guidelines laid down by Hong Kong Academy of Medicine.

Please note that Pathways A & B are a **one-off exercise** and shall cease when the formal Interventional Radiology subspecialty training programme commences.
(*Cut-off dates for application for pathway A will be 23rd March 2024 and pathway B will be 30th April 2024.*)

Pathway A ("First Fellows/First batch specialists")
Criteria for IR Subspecialty accreditation as "First Fellows/First batch specialists"

The applicant should:

i. be a Fellow of the Hong Kong Academy of Medicine (Radiology), or a Specialist in Radiology certified by the Academy and his / her name currently included in the Specialist Register.
ii. have satisfied the College that his/her training and/or clinical competence is comparable in quality and standard to be required for an accredited Subspecialty Fellow in Interventional Radiology.
iii. have satisfied the College that he/she had **at least four years of proven good practice*** in Interventional Radiology. The standard of such practice or supervision must be assessed as satisfactory by the College for the purpose of accreditation, with the following procedural requirements:
    a. *performed or endorsed at least 480 Tier B procedures* in Hong Kong

**** Remarks:***

1. *6 months of supervised training in "Vascular & Interventional Radiology" = 1 year of good practice. Less than 6 months of Higher Specialist Training in "Vascular & Interventional Radiology" would not be counted.*

2. *As a general rule, for a Fellow of Hong Kong College of Radiologists (or equivalent), the calculation of period of good practice commences from the date of passing of Exit Assessment.*

3. For applicant holding a Certificate of Specialist Registration (CSR), the calculation *of period of good practice commences from the point which the applicant has obtained his/her non-local qualification as Specialist in Radiology, during which the applicant needs to have at least two years of Radiology practice in Hong Kong*

All applications will be assessed by a panel appointed by the IR subspecialty Board. Additional interview may be arranged with the applicant if necessary.

Pathway B ("Transition Fellows")

This pathway will apply to applicants who have substantial IR subspecialty experience but have not met the admission criteria of "First Fellows/First batch specialists" at the cut-off date.

Criteria for IR Subspecialty accreditation as "Transition Fellows"

The applicant should:

i. be a Fellow of the Hong Kong Academy of Medicine (Radiology), or a Specialist in Radiology certified by the Academy and his / her name currently included in the Specialist Register.

ii. have satisfied the College that his/her training and/or clinical competence is comparable in quality and standard to be required for an accredited Subspecialty Fellow in Interventional Radiology.

iii. have satisfied the College that he/she had **at least three years of proven good practice*** in Interventional Radiology. The standard of such practice or supervision must be assessed as satisfactory by the College for the purpose of accreditation, with the following procedural requirements:
    a. *performed or endorsed at least 360 Tier B procedures*

iv. undergo additional 6-month supervised full time training programme in IR subspecialty at an accredited IR Subspecialty Training Centre to make up for the shortage in experience/procedural requirements. All additional training programme should be completed prior to the First IR Subspecialty Board Examination.

v. pass a specially arranged Viva Voce examination upon completion of additional training.

**** Remarks:***

1. *6 months of supervised training in "Vascular & Interventional Radiology" = 1 year of good practice. Less than 6 months of Higher Specialist Training in "Vascular & Interventional Radiology" would not be counted.*

2. *As a general rule, for a Fellow of Hong Kong College of Radiologists (or equivalent), the calculation of period of good practice commences from the date of passing of Exit Assessment.*

3. For applicant holding a Certificate of Specialist Registration, the calculation *of period of good practice commences from the point which the applicant has obtained his/her non-local qualification as Specialist in Radiology, during which the applicant needs to have at least two years of Radiology practice in Hong Kong*

Pathway C ("IR Fellow")

This pathway will apply to candidates who do not meet the admission criteria of "First Fellows/First batch specialists" at the cut-off date.

Criteria for IR Subspecialty accreditation as "IR Fellow":

The applicant should:

i. be a Fellow of the Hong Kong Academy of Medicine (Radiology), or a Specialist in Radiology certified by the Academy and his / her name currently included in the Specialist Register.
ii. complete the IR Subspecialty training programme.
iii. pass the IR Subspecialty Board Examination upon completion of training.

APPENDIX II

Early Subspecialisation in IR during Higher Subspecialty Training (Radiology)

IR Fellows who completed 6 months or more VIR or INR training during their Higher Specialist Training (Radiology) have acquired and consolidated core clinical knowledge, behaviours and skills as foundation to IR Subspecialty Training. Therefore, certain components of their VIR & INR training can be recognised as "Early Subspecialisation in IR" and hence their post FHKCR IR subspecialty training duration can be shortened correspondingly.

At the same time, it is evident that IR subspecialty training operates at an advanced level beyond that of VIR and INR programs in Higher Specialist Training. Hence IR Fellows are still required to complete certain components of the post-FHKCR programme unique to IR subspecialty training.

These components are listed in the table below:

	Retrospective recognition of components in **pre-FHKCR VIR and INR training under Higher Specialist Training (Radiology)**	Mandatory requirements to be completed **during post-FHKCR IR subspecialty training**
Duration	Up to 12 months of VIR or INR training can be recognised and count towards the training period of IR subspecialty training. Below training combinations are listed as possible examples: - 6 – 12 months of VIR training - 6 months of INR training - 6 months of VIR and 6 months of INR training, i.e., 12 months in total	At least 1 year of IR subspecialty training should be completed after attainment of Fellowship of HKCR (or equivalent)
Rotation	Any rotation which occurred during VIR or INR training will not be recognised	IR Fellows are required to exposure to at least 4 different IR specialists in at least 2 different training centres
Workload	The case number of Tier A and Tier B procedures performed during VIR and INR training period can be recognised and count towards minimum number of examinations required in IR subspecialty training	IR Fellows must perform at least 5 categories of Tier B procedures and fulfil core training requirements as stated in 3.8 during their post FHKCR IR subspecialty training

APPENDIX III

Frequently Asked Questions on the Subspecialty of Interventional Radiology (IR)

Specialist Status

1. What is the Interventional Radiology Subspecialty?

Interventional Radiology (IR) is a clinical subspecialty under Radiology that utilises image guidance to diagnose, treat and clinically manage patients in a minimally invasive means across a wide spectrum of clinical conditions and procedures in adults and/or children.

2. What is the timeline of commencement of IR Subspecialty Training after successful accreditation by Hong Kong Academy of Medicine (HKAM)?

The tentative training commencement date for initial batch of IR Fellow is 1st October 2024. The first IR Subspecialty Board examination will be scheduled in around April to June 2026.

There will be pathways for existing Specialists in Radiology with substantial experience in IR to become First Fellows/First batch specialists in IR (Grandfathering) or Transition Fellows. Details for such pathways can be found in Appendix I. The College will call for such applications as a ***one-off arrangement***, all admissions via pathway A & B will cease after 30th September 2024.

3. Will there be a change to my Specialist Status?

HKAM Fellows can only register with the Medical Council of Hong Kong (MCHK) under one Specialty. After successful accreditation as IR specialist, the Fellow's name will not be automatically transferred to "Interventional Radiology" in the MCHK Specialist Register. They will remain as a "Specialist in Radiology".

For IR specialists who would like to use the designation "Specialist in Interventional Radiology", they would need to submit a separate application to the MCHK to change their Specialty. For these IR specialists who successfully transferred their name under "Interventional Radiology" in MCHK Specialist Register, they will cease to be a "Specialist in Radiology".

4. Can I change back to the Radiology Specialist Register later?

Yes, you can apply to the MCHK for changing back of your specialty to "Radiology" in the Specialist Register.

5. Is there a change in my quotable qualification in the College/Academy if I become an accredited IR specialist?

No, currently Hong Kong College of Radiologists and the Hong Kong Academy of Medicine do not have separate qualifications for its Specialties/Subspecialties. FHKCR and FHKAM (Radiology) remain as your quotable qualification. The only change is in the Specialist Register in MCHK if you decide to transfer your quotable designation to "Specialist in Interventional Radiology". For details, please refer to FAQ Q3 above.

6. Will there be any restrictions in my practice if I become a Specialist in Interventional Radiology or choose to remain as a Specialist in Radiology?

With the establishment of Interventional Radiology subspecialty, the College wishes to formalise recognition of specialist practice for IR to uphold quality patient care in image-guided interventions.

In line with other recognised Specialties in Hong Kong, it is the prevailing credentialing guidelines but not the establishment of subspecialty that governs the practice of performing complex and high-risk procedures. The College supports ongoing effort in development of credentialing work to recognise professional competence and ensure patient safety.

IR Subspecialty Training

7. I had previous training in VIR and/or INR during my Higher Specialist Training in Radiology, how would that affect my post-FHKCR IR subspecialty training?

If you have completed less than 6 months training in VIR, you would need to complete a minimum of 2 years of post-FHKCR IR subspecialty training.

If you trained 6 months or more VIR or INR, certain components of their VIR & INR training can be recognised as "Early Subspecialisation in IR" and hence their post-FHKCR IR subspecialty training duration can be shortened correspondingly as listed in the table below:

Duration of VIR or INR Training under Higher Specialist Training (Radiology)	Minimum duration required for post-FHKCR IR subspecialty training
6 months	1 years and 6 months
9 months	1 years and 3 months
12 months	1 year

It is important to note that IR Fellows who underwent "Early Subspecialisation in IR" would still be required to complete certain mandatory components in their post-FHKCR IR subspecialty training. For details, please refer to Appendix II.

8. **I did not have previous VIR or INR training during my Higher Specialist Training in Radiology before, will I be allowed to join IR subspecialty training?**

   No. Prior training or exposure in IR, i.e. at least 3 months of training period of Vascular & Interventional Radiology in Higher Specialist Training (Radiology) (or equivalent), is essential for entry into the IR subspecialty training programme.

9. **As an IR Fellow, what kind of procedures can I perform independently?**

   The level of supervision required of an IR Fellow is determined by your procedural competence, which would be assessed by your IR subspecialty training coordinator upon entry of programme and by your supervising IR specialists in at least 3-monthly intervals.

   For procedures in which the IR Fellows are entrusted to act unsupervised, you may perform the procedure independently.

   As a general rule, an IR Fellow should not attempt new procedures, i.e. procedures in which he/she has not been exposed to before, independently.

10. **As an IR Fellow, can I supervise Radiology trainees in Basic or Higher Specialist Training to perform procedures?**

    For procedures in which an IR Fellow is entrusted to act unsupervised, you may supervise trainees in Basic and/or Higher Specialist Training (Radiology), as long as you have fulfilled additional criteria as trainer or co-trainer as stipulated in Guidelines on Basic and/or Higher Specialist Training (Radiology) and have been vetted as such by the College.

11. **My training centre and its satellite facilities are currently accredited for Higher Subspecialty training for Vascular & Interventional Radiology/Interventional Neuroradiology. Does that mean it is automatically accredited as an IR subspecialty training centre?**

    No. IR subspecialty training is a post-FHKCR training program and has separate accreditation considerations from VIR or INR training during Higher Specialist Training in Radiology.

    If a training centre and its satellite facilities would like to be accredited as an IR subspecialty training centre, separate application would have to be submitted to the College for consideration.

12. **Who can provide supervision to IR Fellows during IR Subspecialty Training?**

    IR specialists should provide supervision and training to IR Fellows during their IR subspecialty training.

    It is recognised that many specialists in Radiology (non-IR specialists) have expertise in certain categories of Tier B procedures and IR Fellows are encouraged to learn the

procedures from them. While these procedures performed under supervision of non-IR specialists would not be counted towards the minimum number of examinations required in their IR Subspecialty Training, these procedures should be appended separately in the logbook for assessment purposes.

13. My accredited IR subspecialty training centre covers a wider range of procedures than the examples of Tier B procedures listed in this set of guidelines. Would these procedures count towards the minimum number of examinations required in the IR subspecialty training?

Yes, the examples listed in the Tier B categories are by no means exhaustive but illustrate the breadth of range of practice of an accredited IR specialist. Any comprehensive attempts to list all interventional procedures would be extensive, but inevitably incomplete, and would rapidly become out of date. Our approach is to provide general guidance and not exhaustive detail. These examples should be viewed as a guide and interpreted with common sense.