Vascular Interventional Radiography

Candidates for certification and registration are required to meet the Professional Requirements specified in the *ARRT Rules and Regulations*. ARRT's *Vascular Interventional Radiography Clinical Experience Requirements* describe the specific eligibility requirements that must be documented as part of the application for certification and registration process.

The purpose of the clinical experience requirements is to document that candidates have performed a subset of the clinical procedures within a discipline. Successful performance of these fundamental procedures, in combination with mastery of the cognitive knowledge and skills as documented by the examination requirement, provides the basis for the acquisition of the full range of clinical skills required in a variety of settings.

The requirements are periodically updated based upon a practice analysis which is a systematic process to delineate the job responsibilities typically required of vascular interventional radiographers. An advisory committee then determines the number of clinical procedures required to demonstrate adequate candidate experience in performing the tasks on the inventory.

Candidates for vascular interventional radiography certification and registration must document performance of at least 200 repetitions of vascular interventional radiography procedures according to the criteria noted below. Procedures are documented, verified, and submitted when complete via an online worksheet accessible through your account on arrt.org. ARRT encourages individuals to obtain education and experience beyond these minimum requirements.

A maximum of 10 procedures may be logged each day on your ARRT online worksheet. To qualify as a complete imaging procedure, you must demonstrate active participation in a primary role throughout the entire procedure. Examples of primary roles include scrubbing and circulating.

Completion of each procedure must be verified by an ARRT certified and registered technologist (postprimary certification not required), supervisor or an interpreting physician. The verification process is described within the online tool.

Remote scanning is not acceptable for completion of ARRT Clinical Requirements. The candidate must complete the examination or procedure at the facility where the patient and equipment are located. The candidate must be physically present during the examination or procedure.

For postprimary clinical experience requirement procedures, clinical verifiers are responsible for verifying the candidate's completion of procedures in accordance with ARRT requirements. Clinical verifiers are not required to directly observe the candidate performing the procedure and may perform their verification responsibilities remotely.

In addition, to ensure the highest level of patient care, candidates must document current basic life support (BLS) certification provided by an organization recognized by ARRT.

Specific Procedural Requirements

The clinical experience requirements for Vascular Interventional Radiography consist of 72 procedures in three main categories. The categories include:

A. Vascular Diagnostic
B. Vascular Interventional
C. Nonvascular

Candidates must document the performance of these procedures according to the following rules:

- Each candidate must complete a total of 200 repetitions from the list of procedures provided.
- Each selected procedure must be performed a minimum of 5 times (repetitions) in order for the candidate to receive credit for that procedure.
- Each procedure may be counted a maximum of 10 times.
- At least 50 exams must be in Vascular Diagnostic, at least 50 exams must be in Vascular Interventional, at least 50 exams must be in Nonvascular, and the remaining exams can be from any of the categories.
- For any given patient, you may count only 1 diagnostic procedure but may count additional different interventional procedures per day (*e.g., angioplasty, stent).

General Guidelines

To qualify as a complete imaging procedure, the candidate must demonstrate active participation as a circulator or scrub technologist with appropriate:

- preparation of supplies and maintenance of equipment
- evaluation of order and patient identification, patient preparation, and administration of contrast as requested
- patient monitoring during procedure
- postprocedure patient care
- image processing, including evaluation of images to ensure they demonstrate correct anatomy, radiographic techniques, and identification/labeling

Examples:

The following hypothetical candidates illustrate three ways of satisfying the clinical experience requirements. Numerous other combinations are possible.

Candidate A: This person identified 5 Diagnostic, 5 Interventional, 5 Nonvascular, and 5 other procedures from the list and performed each of those procedures 10 times (20 x 10 = 200).

Candidate B: This person identified 10 Diagnostic, 10 Interventional, 10 Nonvascular, and 10 other procedures from the list. This applicant performed each of those procedures 5 times (40 x 5 = 200).

Candidate C: This person identified 6 Diagnostic, 7 Interventional, and 7 Nonvascular procedures from the list and performed each of those procedures 10 times (20 x 10 = 200).

*e.g., is used to indicate examples of the topics covered, but not a complete list.

Procedures

1. Vascular Diagnostic Procedures

A. Neurologic Angiography
   1. intracranial arteriography
   2. carotid/vertebral arteriography
   3. spinal arteriography

B. Thoracic Angiography
   1. thoracic aortography
   2. pulmonary arteriography
   3. bronchial arteriography

C. Abdominal Angiography
   1. abdominal aortography
   2. pelvic arteriography
   3. renal arteriography
   4. adrenal arteriography
   5. celiac arteriography
   6. superior mesenteric artery (SMA) arteriography
   7. inferior mesenteric artery (IMA) arteriography

D. Peripheral Angiography
   1. upper extremity arteriography
   2. lower extremity arteriography

E. Venography
   1. pelvic venography
   2. superior vena cavagram
   3. inferior vena cavagram
   4. renal venography
   5. adrenal venography
   6. gonadal venography
   7. hepatic venography
   8. portal venography
   9. upper extremity venography
   10. lower extremity venography
   11. venous sampling

F. Miscellaneous Studies
   1. hemodialysis graft/fistula study
   2. physiologic pressure measurements
   3. central venous device check (e.g., port, PICC, hemodialysis catheter)
   4. lymphangiography (general mapping)

2. Vascular Interventional Procedures

A. Angioplasty
   1. neurologic
   2. body

B. Stent Placement
   1. neurologic
   2. body

C. Embolization
   1. neurologic
   2. body

D. Thrombolysis
   1. neurologic
   2. body

E. Thrombectomy
   1. neurologic
   2. body

F. Atherectomy

G. Percutaneous Thrombin Injection

H. Distal Protection Device Placement

I. Foreign Body Retrieval (e.g., broken catheter, bullet, guidewire, filter piece)

J. Endograft Placement

K. Caval Filter Placement/Removal

L. Transjugular Intrahepatic Portosystemic Shunt (TIPS) Placement or Revision

M. Transvenous Biopsy

N. Chemoembolization

O. Radioembolization

P. Venous Access (e.g., tunneled catheter, nontunneled catheter, port placement, port removal, PICC line placement, peripheral IV)

3. Nonvascular Procedures

A. Nephrostomy
B. Ureteral Dilation/Stents
C. Antegrade Urography Through an Existing Catheter
D. Suprapubic Catheter Placement
E. Percutaneous Ablation (e.g., radiofrequency [RFA], thermal, cryo)
F. Percutaneous Transhepatic Cholangiogram
G. Biliary Internal/External Drainage
H. Cholecystostomy
I. Gastrostomy/Gastrojejunostomy Placement
J. Percutaneous Enteric Tube Evaluation (verification with contrast)
K. Vertebroplasty/Kyphoplasty
L. Epidural Steroid Injection/Lumbar Puncture/Myelogram
M. Chest Tube/Drain Placement
N. Thoracentesis
O. Percutaneous Biopsy
P. Paracentesis
Q. Abscess, Fistula, or Sinus Tract Study
R. Percutaneous Drainage With or Without Placement of Catheter (excluding thoracentesis or paracentesis)
S. Removal of Percutaneous Drainage Catheter (e.g., tunneled, nontunneled)
T. Change of Percutaneous Tube or Drainage Catheter
U. Tunneled Drainage Catheter Placement (e.g., thoracic, abdominal)