



Vascular Sonography

Candidates for certification and registration are required to meet the Professional Requirements specified in the *ARRT Rules and Regulations*. *ARRT's Vascular Sonography 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 verify that candidates have completed 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 covered by the examination provides the basis for the acquisition of the full range of clinical skills required in a variety of settings.

The job responsibilities typically required of vascular sonographers are delineated through a periodic practice analysis. This results in a "task inventory." 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 sonography certification and registration must document performance of a minimum of 1,120 repetitions of vascular sonography procedures according to the criteria noted below. Procedures are documented, verified, and submitted when complete via an online tool accessible through your online account at arrt.org. ARRT encourages individuals to obtain education and experience beyond these minimum requirements.

Completion of each procedure must be verified by a certified and registered technologist, certified sonographer, supervisor, or licensed physician. The verification process is described within the online tool.

Specific Procedural Requirements

A. Mandatory Procedures

- Candidates must demonstrate experience in all 39 mandatory procedures by completing the specified number of repetitions.
- At least 50% of the repetitions on each of the mandatory procedures must be demonstrated on patients, while the remainder can be performed using volunteers for simulation as long as your institution has a policy that assures the protection of both the volunteer's and institution's interest.

B. Elective Procedures

- Candidates must demonstrate experience in at least 19 of the 36 elective procedures by completing the specified number of repetitions.
- At least 50% of the repetitions on each of the elective procedures must be demonstrated on patients, while the remainder can be performed using volunteers for simulation as long as your institution has a policy that assures the protection of both the volunteer's and institution's interest.



General Guidelines

An examination on one patient may be used for documentation of several procedures. To qualify as a complete procedure, the candidate must demonstrate appropriate:

- evaluation of requisition and/or medical record
- preparation of examination room
- CDC Standard Precautions
- identification of patient
- patient assessment and education concerning the procedure
- patient positioning
- Doppler mode selection
- image optimization (*e.g., transducer selection, focal zone, field of view, Doppler angle, pulse repetition frequency)
- image archiving
- documentation of procedure and patient data in appropriate record
- evaluation of image quality (e.g., artifacts) and optimal demonstration of anatomic region and pathology
- assurance of exam completeness

Abdominal/Pelvic Vasculature	Mandatory	Elective
Arterial		
Aorta	35	
Celiac		5
Hepatic		15
Splenic		5
Superior/inferior mesenteric		5
Renal	35	
Common iliac	30	
Internal iliac		5
External iliac	30	
Venous		
Inferior vena cava	20	
Hepatic	30	
Portal	30	
Splenic		5
Superior mesenteric		5
Renal	35	
Common iliac	20	
Internal iliac		5
External iliac	20	
Transplant Vasculature	Mandatory	Elective
Liver		10
Kidney		10

* The abbreviation "e.g.," is used to indicate that examples are listed in parenthesis, but that it is not a complete list of all possibilities.



Upper Extremity Vasculature	Mandatory	Elective
Arterial		
Brachiocephalic		5
Subclavian	20	
Axillary	20	
Brachial	20	
Radial	20	
Ulnar		5
Palmar arch (with Allen test)		5
Venous		
Internal jugular	15	
Brachiocephalic		10
Subclavian	15	
Axillary	15	
Brachial	15	
Cephalic	15	
Basilic	15	
Radial		5
Ulnar		5
Vein mapping		5
Lower Extremity Vasculature	Mandatory	Elective
Arterial		
External iliac	30	
Common femoral	30	
Superficial femoral	30	
Deep femoral	30	
Popliteal	30	
Tibioperoneal trunk	30	
Posterior tibial	30	
Anterior tibial	30	
Peroneal	30	
Dorsalis pedis	30	
Venous		
External iliac	25	
Common femoral	25	
Femoral	25	
Deep femoral	25	
Popliteal	25	
Great saphenous	25	



Lower Extremity Vasculature	Mandatory	Elective
Venous		
Small saphenous		5
Calf veins	20	
Vein mapping		5
Reflux assessment		10
Neck Vasculature	Mandatory	Elective
Carotid artery (includes CCA, ICA, ECA)	50	
Vertebral artery	50	
Stress/Pressure Testing	Mandatory	Elective
Segmental pressure (upper extremities)		5
Segmental pressure (lower extremities)		15
Ankle-Brachial Index (ABI)		10
Toe-Brachial Index (TBI)		5
Pulse Volume Recording (PVR)		10
Post-exercise testing		5
Photoplethysmography (PPG)		5
Post Intervention Procedures	Mandatory	Elective
Bypass grafts		10
Post catheterization complications*		5
Endografts*		5
Dialysis access grafts/fistulae*		15
Stents*		5
TIPS*		10
Post endarterectomy*		5
Interventional Procedures	Mandatory	Elective
Vein ablations*		10
Pseudoaneurysm treatment (compression or guided thrombin injection)*		10

* Simulations may not be used for procedures marked with an asterisk