Department of Vascular Surgery Resident Clinical Roles and Responsibilities

PURPOSE
The Accreditation Council for Graduate Medical Education (ACGME) Program Requirements for Graduate Medical Education in Vascular Surgery state:

For the resident, the essential learning activity is interaction with patients under the guidance and supervision of faculty members who give value, context, and meaning to those interactions. As residents gain experience and demonstrate growth in their ability to care for patients, they assume roles that permit them to exercise those skills with greater independence. This concept—graded and progressive responsibility—is one of the core tenets of American graduate medical education.

Residents in the integrated vascular surgery program are provided graded and progressive roles and responsibilities with direct supervision, indirect supervision, and oversight by the faculty, in accordance with the policies of the residency’s sponsoring institution, the UC Davis Health System, and in accordance with the policies and procedures of the participating institutions where they participate in patient care.

Information about the vascular surgery residency’s supervision requirements and policies is in the vascular surgery residency policy document, Resident Supervision Policy.

Expectations for residents at the completion of training are specified in Skills and Competencies of Program Graduates, Residency in Vascular Surgery, UC Davis Health System.

It is expected that residents will gain knowledge, skills, and judgment during each training year and as they progress, a great degree of independent professional activity is safe and appropriate. In every circumstance, it is the responsibility of the supervising attending surgeon to determine the level of supervision needed. The attending surgeon is expected to provide appropriate supervision. For complex procedures, the level of supervision provided may vary, depending on the skills and experience of the resident. Supervision expectations may be different in various parts of complex procedures. Some aspects of cases may not require direct supervision.

POLICY
In general, the roles, responsibilities and responsibilities assumed by vascular surgery residents, by training year, are as follows:

PGY-1
1. Responsible for the evaluation, diagnostic studies, and therapeutic plan of the patients on their service, under supervision of senior residents and attending staff.
2. Emphasis is on quality and thoroughness of patient evaluations and care.
3. Residents are taught vascular laboratory and x-ray imaging techniques.
4. Participates in team learning activities, but has only limited role in directing decisions of other residents or supervision of medical students.
5. Evaluates patients in clinic, develop assessment and management plan and present findings to the attending.
6. Will have experience with basic surgical instruments and techniques.
7. Allowed to suture the subcutaneous tissue after demonstrating adequate technical ability.
8. All surgical procedures to the deep subcutaneous tissue require supervision by senior residents or attending staff.
9. May place intravenous lines and draw arterial and venous blood gases independently. Placement of central lines, arterial catheters, and chest tubes are done under direct supervision until expertise has been demonstrated.
10. Responsible for maintaining medical records.
11. Common procedures for PGY-1 level of training (without continuous direct supervision):
   a. Wound management
   b. Debridement

PGY-II

1. Continue with responsibility for the evaluation, diagnostic studies, and therapeutic plan of the patients on their service under supervision of senior residents or attending staff.
2. Technical procedures are the same as for PGY-1, with the addition of carrying out procedures for cardiopulmonary resuscitation, trauma resuscitation, and perioperative care, including insertion of Swan-Ganz catheters (under supervision until proficiency has been demonstrated).
3. Responsible for being familiar with patients and serves as a resource for provide patient data to the health care team and sharing information with patients and families.
4. Emphasis on gaining experience with full spectrum of procedures, honing proficiency, and balancing quality of patient evaluation and care with improved overall efficiency.
5. Decisions regarding invasive procedures, change in plans, discharge or problems are discussed in-depth with the attending, chief resident or fellow). Specialized diagnostic studies, uncommon therapeutic interventions, and requests for consultation, must be discussed with the attending or chief resident prior to initiation.
6. All procedures must be done with attending surgeon authorization.
7. The resident must understand procedure rationale, anatomy, surgical steps, and crisis management.

8. Typical procedures include amputations, procedures to create or revise arteriovenous fistula/graft, varicose vein procedures, diabetic foot and wound management, percutaneous vascular access, first and second-order catheterizations, placement of an inferior vena cava filter.

9. Responsible for maintaining medical records.

10. Common procedures for PGY-2 level of training (without continuous direct supervision):
   a. Wound management
   b. Toe amputation
   c. Varicose vein procedures such as phlebectomy or sclerotherapy
   d. Angiography and balloon angioplasty

PGY-III and PGY-IV

1. Practice supervisory roles with increased teaching, consulting and patient safety/quality improvement activities.

2. Discussed care plans with the team and keeps team members updates on care plans. May carry out diagnostic bedside procedures without direct supervision.

3. The resident must understand procedure rationale, anatomy, surgical steps, and crisis management. In addition to the technical procedures for PGY-2, will now also participate in procedures for IVC filter removal, femoral and carotid endarterectomy, femoral-popliteal bypass, thromboembolectomy, ilio-femoral transluminal angioplasty/stent placement, infrarenal endovascular aneurysm repair, non-truncal vascular trauma.

4. May initiate procedures with attending approval.

5. May assist with initiation of procedures by more junior level residents, with attending approval.

6. Responsible for being familiar with patients and serve as the attending’s principal resource for updates on patient conditions.

7. Responsible for maintaining medical records.

8. Common procedures for PGY-3 level of training (without continuous direct supervision):
   a. Thromboembolectomy
   b. Ilio-femoral transluminal angioplasty/stent placement
   c. Trans-tibial or transfemoral amputation
   d. Arteriovenous fistula/graft procedures
e. IVC filter placement and removal

9. Common procedures for PGY-4 level of training (without continuous direct supervision):
   a. Femoral-popliteal bypass grafting
   b. Femoral endarterectomy
   c. Thromboembolectomy
   d. Infragenicular artery angioplasty/stent placement

PGY-V

1. May carry out major non-life-threatening surgical procedures with substantial level of surgical independence (i.e. with moderate to minimal supervision).

2. Assumes overall leadership of the team responsible to the patients while seeking and valuing input from all members of the team.

3. Responsible for supervising junior residents. Engages in constructive educational dialogue to teach junior residents in the operating room, clinic, and on patient care rounds.

4. Responsible for maintaining medical records.

5. Exhibits on-going self-evaluation and improvement reflecting on patient outcomes, integrating evidence-based practice guidelines, and identifying areas for improvement within the health care team.

6. The resident must understand procedure rationale, anatomy, surgical steps, and crisis management.

7. Common procedures performed by the PGY-5 level residents, in addition to the previously listed procedures, include: mesenteric and renal artery interventions, open aortic surgery, infragenicular interventions, re-operative vascular surgery, carotid stent, complex EVAR/TEVAR, and treatment for graft infection.

8. Common procedures for PGY-5 level of training (without continuous direct supervision):
   a. Femoral-tibial grafting, popliteal/infragenicular anastomosis
   b. Carotid endarterectomy
   c. Uncomplicated EVAR/TEVAR
   d.