CHOOSING THE BEST

Vascular Surgeon

WHEN SELECTING YOUR VASCULAR SURGEON, CONSIDER THEIR TRAINING AND THE MEDICAL STAFF SUPPORTING THEM.

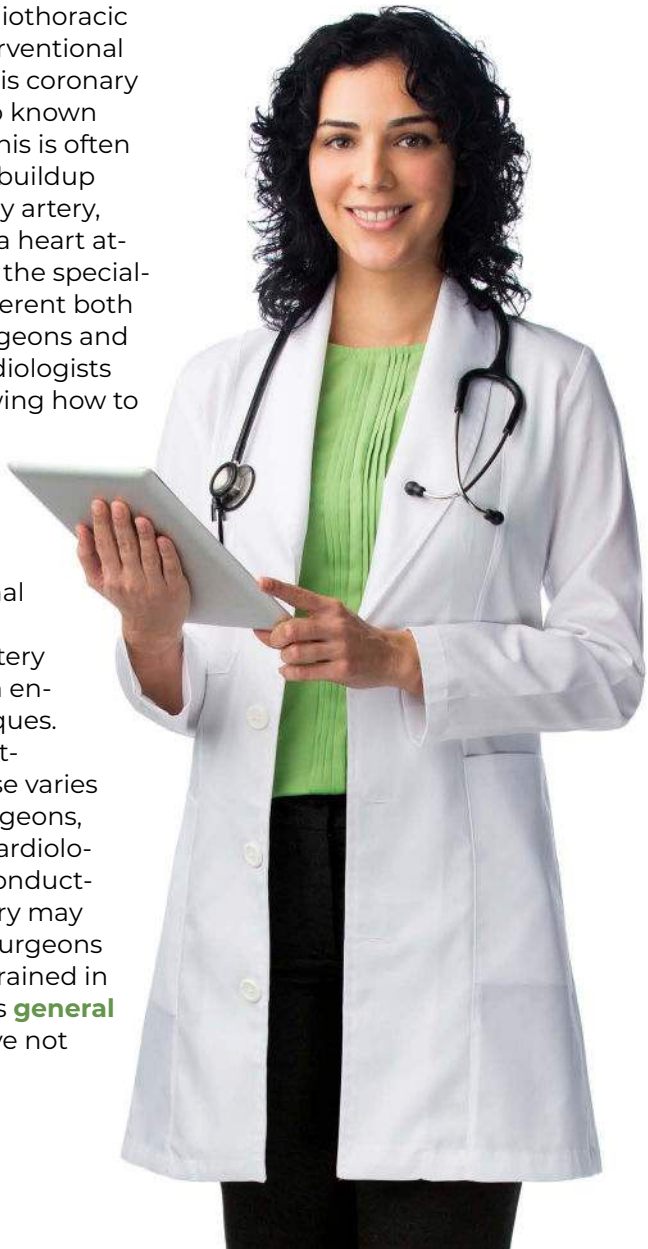
A **vascular surgeon**, sometimes referred to as a vascular specialist, manages as well as treats veins and arteries in every part of the body except the brain or heart. A vascular surgeon can treat conditions like deep vein thrombosis (DVT) and other blood clots, vein disease and venous insufficiency, atherosclerosis like peripheral artery disease (PAD), critical limb ischemia, diabetic vascular disease for limb salvage, aneurysm of the aorta, dialysis graft and fistula management for the kidney patient, and non-healing wounds caused by vascular disease. Procedures can be performed by open surgical techniques or by the new endovascular procedures repairing blood vessels from the inside.

Vascular surgeons and interventional radiologists perform many of the same types of endovascular procedures. **Interventional radiologists** (IR) are classified by their ability to diagnose and treat diseases with image-guided tools such as a fluoroscopy, a live X-ray. By utilizing image-guided tools and techniques, IR doctors can perform a wide variety of nonsurgical treatments and tests such as: angiography, stent angioplasty, chemoembolization, uterine fibroid embolization (UFE), thrombolysis, biopsy, and ablations. Through minimally invasive, nonsurgical techniques, IR doctors and vascular surgeons can treat conditions through a tiny incision and live image guidance. This enables them to avoid long, risky surgical procedures and complete endovascular surgeries with a less invasive procedure to treat problems affecting blood vessels.

A **cardiothoracic surgeon** is a physician who specializes in surgical procedures of the heart, lungs, and other organs within the chest (also known as the thoracic cavity). Think of vascular specialists as a general title. Some vascular specialists may also be cardiothoracic surgeons, but some may not be.

One of the most common diseases cardiothoracic surgeons and Interventional cardiologists treat is coronary artery disease, also known as heart disease. This is often caused by plaque buildup within the coronary artery, which can lead to a heart attack. Even though the specialized training is different both cardiothoracic surgeons and Interventional cardiologists are versed in knowing how to successfully unclog blocked arteries to restore blood flow to the heart. Some Interventional cardiologists also treat peripheral artery disease (PAD) with endovascular techniques.

Training for treating vascular disease varies greatly among surgeons, radiologists, and cardiologists. Physicians conducting vascular surgery may be performed by surgeons often specifically trained in this field, as well as **general surgeons** who have not had specialized training in the specific field of vascular surgery. General surgeons complete four years of medical school, and then a minimum of five years of additional training in surgical residency, which can include a number of vascular procedures. Cardiothoracic surgeons receive specialized training for operating on organs within the human chest cavity.



Once physician surgeons have completed their residency, they are required to successfully complete the General Surgery Qualifying and Certifying Exams to be board certified in general surgery by the American Board of Surgery (ABS). When certified, these general surgeons are able to perform a broad range of surgical procedures on soft tissues (not bones) such as small skin lesions and cysts up to larger cases such as colectomies (removal of some or all of the colon) and procedures on the bowel and liver, including gallbladder removal and complex hernia repairs. They are also certified to perform some vascular surgeries, as vascular surgery is traditionally considered a component of general surgery. The ABS considers vascular surgery to be one of the nine "essential content areas" of general surgery.

Despite this level of training, there is evidence that patient outcomes are much better when the physician is a **board-certified vascular surgeon** and has also achieved fellowship training in the field of vascular care and has a higher level of experience with vascular surgeries.

Subsequently, physicians can specialize in vascular surgery by pursuing a 5+2 fellowship for certification in vascular and general surgery. In a 5+2 program, physicians spend the first five years following medical school completing a clinical residency for general surgery. After that, they spend two years in a fellowship program focused on vascular surgery practices to gain experience in the field.

Another even more specialized training is the 0+5 integrated fellowship that focuses only on vascular surgery following medical school. Integrated fellowships usually have two years of general surgery training immediately followed by three years of training for vascular surgery. However, an integrated fellowship does not allow physicians to be certified for general surgery. In many cases, those pursuing the 0+5 integrated fellowship will also pursue an additional two-year fellowship in vascular surgery.

Once these physicians have completed their clinical residency, they can be board certified as vascular surgeons by completing the **Vascular Surgery Qualifying and Certifying Exams**.

Medical fellowship programs can be challenging to get into, and often difficult to complete. The purpose of a medical fellowship is to produce expert physicians in sub-specialties. These doctors earn the title of "fellowship trained," which indicates the highest level of dedication to their field.

Becoming a **fellowship-trained vascular surgeon** is among the most difficult programs to be accepted into. Most often, only those physicians scoring the highest on the United States Medical Licensing Examination (USMLE) are accepted into ACGME (Accreditation Council for Graduate Medical Education)-approved vascular surgery fellowships.

The letters **F.A.C.S.** (Fellow of the American College of Surgeons) after a surgeon's name are an additional indication to the patient that the surgeon is not only board certified to practice in their field but has completed specialized training for their profession. It also indicates that the surgeon has been recognized by the American College of Surgeons as a colleague surgeon dedicated to improving the care of the surgical patient and safeguarding standards of care in an optimal and ethical practice of surgery.

In addition to achieving a fellowship in vascular disease care, training in the use of vascular ultrasound is a cornerstone for treating patients with vascular disease. Today vascular surgeons are among the most frequent users of ultrasound apart from radiologists. The **Registered Physician in Vascular Interpretation® (RPVI®)** and the **Registered Vascular Technologist® (RVT®)** credential certifications document the highest standards in vascular ultrasound interpretation. By earning the RPVI® or RVT® certification, physicians have the skills and knowledge required for making consistent and reliable diagnoses in vascular disease. Both the RPVI® and RVT® certifications are awarded by ARDMS (American Registry for Diagnostic Medical Sonography). In 2014, the Vascular Surgery Board (VSB) of the American Board of Surgery (ABS) established that all physicians applying for the Vascular Surgery Qualifying Exam must hold the RPVI® credential.

Accreditation bodies can assure the public in the quality and proficiency of a medical practice's ability in preforming diagnostic vascular imaging. The **International Accreditation Commission (IAC)** is the accreditation body for Vascular Testing and Vascular Interventional Testing. The IAC is a nonprofit organization that evaluates and accredits facilities that provide diagnostic imaging and surgeries to ensure quality patient care. It requires that all technical staff in an IAC-accredited facility are ARDMS-certified RVTs® and uphold high standards of testing and care.

Other titles that you may see that are noteworthy, but not specific to training for vascular care include:

- **FACC (Fellow, American College of Cardiology)** is an insignia for physicians skilled in cardiovascular care.
- **AOA (American Osteopathic Association)** signifies that a physician is in good standing among others who practice osteopathic medicine. As the professional home for more than 168,000 osteopathic physicians and medical students, the AOA works to advance the distinctive philosophy and practice of osteopathic medicine. A Doctor of Osteopathic Medicine (D.O.) is a fully trained and licensed doctor who has attended and graduated from a United States osteopathic medical school. A Doctor of Medicine (M.D.) has attended and graduated from a conventional medical school. The major difference between osteopathic and allopathic doctors is that some osteopathic doctors provide manual medicine therapies, such as spinal manipulation or massage therapy, as part of their treatment.
- **RCPSC (Royal College of Physicians and Surgeons of Canada)** signifies that a physician is in good standing within this regulatory college, which is a national, nonprofit organization to oversee the medical education of specialists in Canada.
- **ACGME (Accreditation Council of Graduate Medical Education)** is a private, nonprofit council that evaluates and accredits medical residency programs in the United States. It is the body responsible for accrediting all graduate medical training programs (i.e., internships, residencies, and fellowships) for physicians in the United States.
- **USMLE (United States Medical Licensing Examination)** is a three-step examination program for medical licensure in the United States sponsored by the Federation of State Medical Boards and the National Board of Medical Examiners.

Beyond the vascular surgeons or interventional radiologists, there is a team consisting of skilled certified nurse practitioners, wound care specialists, or nurses who care for patients. Like physicians, each has a certain level and type of training that is important for the successful treatment and care of patients suffering from vascular disease. As a rule, nurse practitioners have a higher level of training than a registered nurse.

Below are the credentials and training for these very important caregivers. In addition to learning more about a doctor, you want to familiarize yourself with the doctor's team.

- **DNP** stands for Doctor of Nursing Practice. DNP is the highest level of education available for practice-based training in nursing. Nurses who have their DNP are sought-after for positions in nursing leadership focused on clinical applications and are considered key players in the future of healthcare in the United States.
- **ARNP** is an advanced registered nurse practitioner. This person has completed either a master's or doctoral degree program and has received advanced clinical training beyond that of a registered nurse. ARNPs also complete national certification, periodic peer review, clinical outcome evaluations, and adhere to a strict code for ethical practices.
- **NP** is a nurse practitioner who works directly with patients and is typically responsible for providing urgent, primary, and specialty care to patients. Becoming an NP involves a rigorous educational process, followed by evidence-based coursework and clinical rotations. To become an NP, one must be a registered nurse (RN), hold a Bachelor of Science in Nursing (BSN), complete an NP-focused graduate, master's, or doctoral nursing program, and successfully pass a national NP board-certification exam. NPs can specialize in different areas. For example, an **ANP-C** is an adult nurse practitioner certified by the **American Academy of Nurse Practitioners (AANPBC)**. An **ANVP** is an advanced neurovascular practitioner. An **AOCNP** is an advanced oncology certified nurse practitioner.
- **FNP-BC** is a family nurse practitioner who is board certified by the **American Nurses Credentialing Center (ANCC)** and provides clinical care to patients of all ages. The FNP-BC certification covers traditional nursing practices, including assessment and diagnostics, but it also covers topics of research and theory.
- **FNP-C** is a family nurse practitioner certified by the **American Academy of Nurse Practitioners (AANP)**. The FNP-C is certified to provide clinical care to patients of all ages through the AANP.

The main difference between an FNP and NP is that an FNP program is more flexible, enabling graduates to treat people of all ages, from infants to geriatrics. The other NP specialties are much narrower in scope and focus on a specific age group, branch of medicine, or medical setting.

- **CNN-NP** stands for certified nephrology nurse - nurse practitioner. To be certified as a CNN-NP, the individual must hold a full and unrestricted license as a registered nurse in the United States or its territories and be nationally certified as a nurse practitioner. Additionally, the applicant must have a minimum of 2,000 hours and two years as a nurse practitioner practicing in nephrology. The applicant must also have completed 20 contact hours of approved continuing education in nephrology and possess a minimum of a master's degree in nursing.
- **MSN** stands for Master of Science in Nursing. MSN-degreed nurses often take on the responsibilities traditionally assigned to physicians. They can diagnose and treat acute and chronic illnesses, prescribe medications, and create patient treatment plans. This type of degree allows Registered Nurses (RNs) or BSNs (Bachelor of Science in Nursing) to specialize in various areas and further develop their knowledge and skills through intense practice and theoretical classes. An MSN degree is also necessary if you want to apply for doctorate studies in nursing. Most postgraduate nursing degrees take between one to two years to complete. Some MSN courses will require three years to finish. MSN degree specializations include, among others, nurse midwife, disability studies, mental health, nursing education, and nurse anesthesia.
- **CCRN** is a certified acute or critical care nurse. The CCRN certification is granted by AACN Certification Corporation worldwide for adult, pediatric, or neonatal nursing. A CCRN certification validates the knowledge of nursing care for acutely/critically ill patients to hospital administrators, peers, and patients.
- **CWCN** is awarded to general practice nurses who have past examinations and continued education for wound care. The Certified Wound Care Nurse (CWCN®) is developed and maintained by the Wound, Ostomy, and Continence Nursing Certification Board (WOCNCB).
- **RN** is a registered nurse who has completed a nursing program and holds a nursing license. The role of an RN may vary depending on their work environment, level of experience, and the area of specialty in which they work. Unlike nurse practitioners, an RN is not permitted to prescribe treatments, order tests, and diagnose patients.
- **ARDMS (American Registry for Diagnostic Medical Sonography)** provides certifications in a variety of sonography specialties. The ARDMS offers ultrasound certificates in abdomen, breast, echocardiography, neurosonology, OB/GYN, vascular technology, and musculoskeletal sonography.

NOW YOU HAVE ALL YOU NEED TO SELECT THE BEST CARE.

VIC VASCULAR INSTITUTE AND Vein Clinic

The Vascular Institute and The VIC Vein Clinic have the only medical team in the Chattanooga area that is fully trained to address vein and vascular issues. Our doctors are all board certified and fellowship trained in vascular surgery, and also credentialed in the use of vascular sonography imaging and interpretation. Our elite team of nurses are all certified DNPs and NPs and receive additional training in vascular surgery.

SCHEDULE A VEIN SCREENING TODAY!

Accredited Facility – IAC Intersocietal Accreditation Commission – Vascular Testing

ARDMS – Registered Vascular Technologist – RVT

The American Board of Surgery – Vascular Surgery

SVS Society for Vascular Surgery

APCA – Registered Physician in Vascular Interpretation – RPVI

Fellow American College of Surgeons – FACS – Committed to Excellence