

# Cardiac/Thoracic Surgery

**Institution:** Nashville VA Medical Center

**Duration:** 5 weeks

**Supervising Physician:** Eric L. Grogan, M.D.

**Contact Information:** 615-300-2900

**Year of Training:** PGY-2

## **Educational Objectives:**

Residents will spend 5 weeks on this service, becoming proficient in the indications for operation, workup, and postoperative care of common cardiac and thoracic conditions. Residents will learn basic surgical and endoscopic skills, including sternotomy, wound closure, bronchoscopy/endoscopy, chest tubes placement, and handling of tissues. Finally, residents may have the opportunity to practice procedures and situations in the simulation laboratory.

Evaluation of the resident's understanding of the patient and disease process will be reviewed (in part) at the time of operation and through resident-faculty interaction. Feedback will be verbal and timely; residents are encouraged to establish a dialogue with the faculty to facilitate feedback.

Residents are expected to notify Dr. Grogan and meet with him when starting the service.

## **Other Comments and Responsibilities**

Daily rounds will include the General Care Wards and the Intensive Care Unit at the VA.

## **Medical Knowledge**

- ✓ Anatomy, embryology, physiology and pathology of the trachea, lungs, esophagus, pleura, and mediastinum.
- ✓ The pharmacology, indications, complications of drugs commonly used, including anti-arrhythmic therapy, diuretics, anticoagulants, bronchodilators, and pain medications.
- ✓ The general principles of preoperative assessment and postoperative management of thoracic surgical patients.
- ✓ The natural history of treated and untreated diseases, including lung and esophageal cancer, emphysema/COPD, interstitial lung diseases, esophageal dysmotility, and Barretts esophagitis, pleural effusions/empyema, emphysema, and pneumothorax.
- ✓ Principles of surgery, including hemostasis, wound healing, wound complications, electrolyte and fluid replacement, surgical nutrition, and oncology.
- ✓ Understand common postoperative care issues in the thoracic surgery patient, including pain management, exercise expectations/limitations, need for home oxygen, and indications for SNF/rehab facility.
- ✓ The technology, interpretation and complications of invasive and noninvasive diagnostic methods, including CT and MRI scanning, respiratory function tests, PET scan, and echocardiography, ABGs, ventilation-perfusion tests, MVO2 studies, and esophageal manometry studies.

## **Patient Care**

Expected:

- ✓ Perform an appropriate relevant history and physical exam in the ward, ambulatory and emergency department settings.
- ✓ Arrive at a management plan for the disease process, including differential diagnosis.
- ✓ Order appropriate laboratory, radiological, and other diagnostic procedures; demonstrate proper interpretation of the results
- ✓ Formulate a plan of management, demonstrating knowledge in the operative and non-operative management of the disease process.
- ✓ Management of the patient throughout the hospital stay, including management in an intensive care unit setting, demonstrating knowledge and ability to anticipate, recognize, and manage potential complications of the disease processes and operative procedures.
- ✓ Management of post-operative bleeding (medical and surgical).
- ✓ Assessment and treatment of post-operative arrhythmias.

- ✓ Identification of critically ill and major complications of patients on the ward with appropriate acute management.
- ✓ Demonstrate ability to perform daily resident work rounds efficiently, including dictation of operative cases, daily progress notes, and dictation of discharge summary, prescription writing.
- ✓ Provide a plan for patient follow-up.
- ✓ As the operating surgeon or first assistant, demonstrate an ability to anticipate surgical maneuvers, to take direction well, to make reasonable suggestions, and to contribute to a positive operating room atmosphere.
- ✓ Insertion of central lines, arterial lines, insertion/removal chest tubes, and thoracentesis in the operative and ICU setting.
- ✓ Observe and assist with common thoracic surgical procedures, including lobectomy, esophagectomy, and VATS lung wedge resection/biopsy.
- ✓ Demonstrate ability to recognize errors in technique and possible consequences of specific technical mistakes.

Recommended:

- ✓ As the operating surgeon, perform thoracotomy and closure of thoracotomies.
- ✓ As the operating surgeon, perform flexible bronchoscopy, demonstrating knowledge of hilar, lobar and segmental anatomy.
- ✓ As the operating surgeon, perform VATS lung wedge resection/biopsy.
- ✓ As the operating surgeon, perform sternotomy and learn to close sternotomies.

**Practice-Based Learning and Improvement**

**Residents must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. Residents are expected to develop skills and habits to be able to meet the following goals:**

- ✓ Write an accurate, detailed, and legible preoperative assessment and counseling note on all patients for which he/she serves as surgeon of record.
- ✓ Utilize assigned journal articles as well as available textbook chapters and information technology (including PubMed search and literature review)
- ✓ Participate in the education of patients, families, students, residents, and other health professionals.
- ✓ Incorporate formative evaluation feedback into daily practice.

**Interpersonal and Communication Skills**

- ✓ The resident should ensure that the attending is aware of the progress of all patients on the service.
- ✓ The resident should clearly, accurately, and respectfully communicate with nurses and other Hospital employees.
- ✓ The resident should clearly, accurately, and respectfully communicate with referring and consulting physicians, including residents.
- ✓ The resident should clearly, accurately, and respectfully communicate with patients and appropriate members with their families about identified disease processes (including complications), the expected courses, operative findings, and operative procedures.
- ✓ The resident should ensure that clear, concise, accurate, and timely medical records are maintained on all patients.
- ✓ The resident should be able to clearly and accurately teach medical students and junior residents about the procedures performed on this rotation when qualified to do so by hospital and program policy.

**Professionalism**

**Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. Residents must:**

- ✓ Demonstrate compassion, integrity, and respect for others.
- ✓ Demonstrate sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation.
- ✓ Demonstrate sensitivity to issues of age, race, gender, and religion with patients, family, and members of the healthcare team.
- ✓ Demonstrate respect for patient privacy and autonomy.
- ✓ Remain honest with all individuals at all times in conveying issues of patient care.
- ✓ Respond to the needs of the patient above one's own needs and desires.
- ✓ Maintain high standards of ethical behavior in all professional activities.
- ✓ Demonstrate a commitment to the continuity of patient care to carrying out professional responsibilities or through assuring that those responsibilities are fully and accurately conveyed others acting in his/her stead.

- ✓ Understand the institutional policy on duty hours and remain compliant with all duty hour regulations. Residents must enter the number of hours spent in the hospital into the tracking system within 24 hours of duty.
- ✓ Be properly and professionally attired at all times while engaged in patient care.
- ✓ Be properly and professionally groomed at all times when engaged in patient care.
- ✓ At all times treat patients, families, and all members of the healthcare team with respect.
- ✓ Reliably be present in prearranged places at prearranged times except when actively engaged in the treatment of a medical or surgical emergency. The resident must notify the appropriate supervisor if he or she will be unable to be present.
- ✓ Remain compliant with all required training designated by the institution.

**Systems-based practice**

- ✓ The resident should be able to assess the risks and benefits of all options for treating patients with surgical illness.
- ✓ The resident should be able to summarize the financial costs, potential complications, and long-term expectations for planned procedures.
- ✓ The resident should recognize the differences between the three hospital systems in which he or she will participate: federal, university, and private.
- ✓ The resident should be able to determine the benefit of additional treatment by other services such as plastic surgery, interventional radiology, and orthopedics.
- ✓ The resident should be able to determine and convey to appropriate individuals the instruments and other materials necessary for all procedures.

**Description of Clinical Experiences:**

- ✓ Refer to General Surgery Residency Orientation Manual

**Description of Didactic Experiences:**

Refer to General Surgery Residency Orientation Manual

Please see the Thoracic Surgery website for exact times and locations of conferences:  
<https://ww2.mc.vanderbilt.edu/thoracic/49739>

**Evaluation Process:**

Faculty will evaluate residents based upon the ACGME core competencies. Faculty will evaluate residents at the end of the rotation in writing. Residents will evaluate faculty teaching and education efforts as well as each rotation at its conclusion.

**Other Important Rotation Information:**

- ✓ Daily rounds will include the General Care Wards and the Intensive Care Unit at the VA and the Vanderbilt University Hospital.
- ✓ Surgery residents are expected to achieve at least 1 full clinic day each week